



CURRENT AFFAIRS, 27TH SEPTEMBER TO 10TH OCTOBER, 2020



DreamIAS



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INTERNATIONAL

THE COST OF POLITICAL POSTURING

U.S. President Donald Trump has done it again, and this time only a few weeks before a Presidential election — the 45th Commander-in-Chief has put another turn in the screws of his country's immigration system by announcing a hike in the salaries for those arriving in the U.S. on H-1B or skilled-worker visas. This is expected to cut visa applications by around 33%, according to experts, and it comes as only the latest White House rule following executive actions that earlier banned the issuance of new skilled worker visas and new green cards. The question that these policy changes beg is, how much of the motivation for them is pure economic rationale versus political value for the incumbent's final stages of election campaigning? It would not be unreasonable to expect that the visa issuance ban, combined with the mandatory salary floor soon to be instituted, will seriously hit U.S. imports of services from India, estimated to be at \$29.6 billion in 2018, 4.9% more than in 2017, and 134% more than 2008 levels. The skilled visa issuance picture has been a positive one to date: *the U.S. Citizenship and Immigration Services has been issuing 85,000 H-1B visas annually, of which 20,000 are given to graduate students and 65,000 to private sector applicants, approximately 70% of which are granted to Indian nationals.* The Migration Policy Institute has predicted that Mr. Trump's June 22, 2020 ban on new H-1B visa issuance could impact up to 219,000 workers, who would effectively be blocked from taking up any potential jobs on offer in the U.S. going forward. But how likely are firms, including the Silicon Valley tech giants, to embark on recruitment drives at this economically depressed time in the wake of the COVID-19 pandemic? Although unemployment in the U.S. peaked in the summer and has fallen for the fifth consecutive month since then, the latest figures suggest that both the unemployment rate and the number of unemployed people remain substantially higher than the pre-pandemic values in February 2020. Even so, it is important to distinguish between the ban on new visa issuance and the Labour Department rule that would insist on higher salaries being paid to all H-1B visa workers in the U.S. Under the latter rule, assuming it stands the test of time and inevitable litigation, *companies would be required to pay entry-level staff in the 45th percentile of their industry's salary instead of the 17th percentile; for high-skilled workers, the rise would be from the 67th to the 95th percentile.*

Staunch criticism

Speaking of litigation, it is telling that days before the Trump administration's announcement of the proposed salary hike that makes H-1B hiring significantly more expensive to potential employers, a federal judge in the Northern District of California blocked the enforcement of the new visa ban, ruling that the President "exceeded his authority" under the U.S. Constitution. Driving that legal challenge to the White House proclamation was a swathe of U.S. manufacturing and industry associations, including the U.S. Chamber of Commerce, the National Association of Manufacturers, the National Retail Federation, TechNet, a technology industry group, and Intrax Inc., which sponsors cultural exchanges. In a similar vein, Google CEO Sundar Pichai hit out at the ban, saying, "Immigration has contributed immensely to America's economic success, making it a global leader in tech, and also Google the company it is today. Disappointed by today's proclamation — we'll continue to stand with immigrants and work to expand opportunity for all." Tesla CEO Elon Musk and Apple CEO Tim Cook echoed similar sentiments. This goes to the heart of the issue, the question of why Mr. Trump is willing to risk damage to corporate America's



bottom lines, all to garner some campaign ammunition for his familiar plank of nativist populism. The answer is a simple one: people vote, while companies do not. What might happen after the election is an entirely different story.

THE HISTORY OF WALTER REED MILITARY HOSPITAL WHERE TRUMP IS BEING TREATED FOR COVID-19

Soon after announcing that he had tested positive for the novel coronavirus on Friday, US President Donald Trump was moved to the prestigious Walter Reed National Military Medical Centre in Bethesda, Maryland for treatment. The Walter Reed National Military Medical Centre first opened in Bethesda, Maryland during the fall of 2011 after Congress ordered the consolidation of the Walter Reed Army Medical Center and the National Naval Medical Centre. But the history of the Army medical facility dates back to 1909. For nearly a century, the Walter Reed Army Medical Center — originally located in Washington DC — treated tens of thousands of soldiers wounded during World War II, the Korean War, the Vietnam War, as well as the more recent wars in Afghanistan and Iraq. *The facility is named after an Army doctor who was behind the research that first identified yellow fever, the potentially deadly flu-like disease spread by mosquitoes.*

WHAT IS COURT-PACKING AND WHY ARE SOME DEMOCRATS CONSIDERING IT?

After the death of Ruth Bader Ginsburg, who served as the Justice of the Supreme Court of the United States (SCOTUS) for over 27 years, Democrats are seriously considering court-packing, or expanding the bench of the highest court in the country. The idea is to ensure that the court does not remain strongly to the right for the next 30-40 years or so, since judges serve for life. Under Trump, the court is already considered to be one of the most conservative-leaning courts in US history. Last week, Representative Jim Jordan of Ohio, a close ally of US president Donald Trump, submitted a resolution to Congress demanding that the number of Justices of the Supreme Court remain the same. In the resolution, Jordan wrote, “any attempt to increase the number of Justices of the Supreme Court of the United States or ‘pack the court’ would undermine our democratic institutions and destroy the credibility of our Nation’s highest Court”.

So what is court-packing?

Court-packing simply means increasing the size of the bench of the Supreme Court of the United States and can be done by passing a law. The strength has remained at nine justices for about 151 years from when the Judiciary Act was approved in 1869.

Has it been attempted before?

The idea of expanding the court is associated with Franklin D Roosevelt, who is credited with one of the most famous attempts to do it. After winning the 1936 presidential elections, Roosevelt proposed a Bill called the “Judicial Procedures Reform Bill of 1937” to expand the membership of SCOTUS. If passed, the law would have added one justice to the court for each justice above the age of 70 years, with a maximum of six additional justices. In other words, the legislation would have increased the strength of the SCOTUS bench to a maximum of 15 justices. At the time, Roosevelt pushed the legislation to shape the ideological balance of the Court such that it would



stop his New Deal legislation from being struck down. He was criticised by both parties and even his vice-president John Nance Garner at the time.

How are SCOTUS judges appointed?

Judges to the Supreme Court of the United States are nominated by the president and confirmed by the Senate (the upper chamber of the US Congress). Currently, the Republicans control both the Senate and the presidency, which is what some Democrats are bothered by. An article in The Washington Post says some Democrats are “frustrated” because of how the newest two justices were nominated by a “president who lost the popular vote” and approved by a “bare majority of the Senate”. While in India, judges have a fixed retirement age, this is not the case in the US, where federal judges can serve for life. Their terms end only if they resign, pass away or are impeached and convicted by Congress. Because there are no term limits, the liberal-conservative divide in the federal judiciary becomes highly consequential for decades. The US Supreme Court’s oldest member in history, Justice Oliver Wendell Holmes, Jr., retired in 1932 at the age of 90 after serving for 30 years. Justice Ginsburg was 87, and had been on the bench for 27 years.

But why are some Democrats considering court-packing now?

The Democrats are worried that SCOTUS could get even more conservative after Trump nominated Amy Coney Barrett to fill Ginsburg’s seat. With Ginsburg’s death, SCOTUS now has five justices that were nominated by a Republican president and three that were nominated by a Democratic president. This means that the court already has a conservative majority and if the Senate were to approve Trump’s nomination to fill Ginsburg’s seat—which would be Trump’s third justice appointment during his tenure—it would make the conservative-liberal split even starker. This is important since decisions taken by the court affect the life of the citizens, ranging from issues such as abortion to immigration and gun control. Trump’s nominee Barrett identifies as a devout catholic and has a judicial record of being against abortion access, making her popular among religious conservatives who are pushing to overturn the 1973 decision that legalised abortion across the US. She has also voted in favour of several of Trump’s extreme immigration policies and has indicated her support for extensive gun rights. Significantly, Trump has been pushing to nominate the ninth justice before the election. Democrats have called out Trump for pushing the vote for the nomination during an election year. Their objections are in light of the fact that the Republicans in the Senate refused to consider former US President Barack Obama’s nominee for the court, Merrick Garland, after Justice Scalia passed away in 2016. Garland’s nomination had come 237 days before the election that year and was successfully blocked by the Republicans in the Senate. They argued that the decision should not be made during an election year.

What has Joe Biden and others said about court-packing?

Democratic presidential nominee Joe Biden has not yet acknowledged the Democratic calls for expanding SCOTUS. In July 2019, Biden said he was not prepared to pack the court, “because we’ll live to rue the day”. “I would not get into court packing. We add three justices. Next time around we lose control, they add three justices. We begin to lose any credibility the court has at all,” Biden told Iowa Starting Line. *From Biden’s point of view, expanding the court can backfire on the Democrats when they are out of power.* Further, during the first presidential debate, Biden dodged the question about court-packing, which might be an implication that the issue is not central to the Democratic campaign. Rich Lowry, the editor of conservative news and opinion website National Review wrote in Politico that if Biden was to make court-packing the major initiative of



his presidency it would validate the critique against him that he is “weak and prone to getting pushed around by the left.” Significantly, the Democratic vice presidential nominee Kamala Harris told CNN in an interview recently that the question of court-packing can be dealt with “later”. Ginsburg herself was opposed to the idea of court-packing and in 2019 said, “I think it was a bad idea when President Franklin Roosevelt tried to pack the court”, and that “(i)f anything would make the court look partisan, it would be that”.

WIKILEAKS

On April 5, 2010, a 39-minute video was released by a website, called wikileaks.org, that showed gun-sight footage of two U.S. AH-64 Apache helicopters in action during the Iraqi insurgency against the U.S. occupation in 2007. *The video showed the helicopter crew firing indiscriminately and killing civilians and two Reuters war correspondents.* The release of the video by WikiLeaks was made possible by the *leak of nearly 400,000 documents called the Iraq War Logs from the U.S. Department of Defense databases by the intelligence analyst Bradley Manning (who later referred herself as Chelsea), who acted as a whistle-blower. Ms. Manning had copied these files into a CD-ROM and uploaded them onto a WikiLeaks dropbox. The War Logs’ release was followed by the publication of several news stories based on thousands of leaked diplomatic cables that were also released by Ms. Manning, leading to significant public exposure of the ways, lifestyles and attitudes of the elite in various countries.* The WikiLeaks model — using cryptographic tools to protect sources and allowing for anonymous “leaks” of sensitive information (that could also be in public interest) to be published — suddenly bought forth a new model of extensive investigative journalism into areas that were relatively shielded from the public eye. *It is difficult not to associate WikiLeaks with the efforts of one individual — Julian Assange, the 49-year-old Australian by birth and who personified and organised it, even if the portal was maintained and sustained by hundreds of volunteers across the globe.*

Asylum in Embassy

Ten years since the release of the Iraq War Logs, Mr. Assange is undergoing trial in the U.K. on whether he should be extradited to the U.S. to face charges related to the leaking of classified documents that exposed U.S. war crimes. Seven of those years were spent in asylum in the small Ecuador Embassy in London, after Mr. Assange refused extradition to Sweden to face charges of rape, which were later dismissed by Swedish prosecutors. The then Ecuador President Rafael Correa had extended asylum to Mr. Assange, but he could not guarantee safe passage for travel as British authorities threatened arrest as soon as he left the Embassy premises. Mr. Assange had always indicated that extradition to Sweden was a ploy for him to be handed over to the U.S., where Ms. Manning was convicted by court martial in July 2013 for violating the Espionage Act and underwent rigorous imprisonment before her sentence was commuted by President Barack Obama in January 2017. Mr. Assange continued to front the activities of WikiLeaks even during his refuge in the Ecuador Embassy. WikiLeaks published emails sent and received by U.S. presidential candidate Hillary Clinton and went on to release Democratic National Committee (DNC) emails that were obtained allegedly by Russian intelligence agency hackers. The DNC email releases hinted at bias by the committee against Bernie Sanders. Mr. Assange denied that the source of the hack was Russian agencies. In April 2017, the Trump administration’s Justice Department had charged him in a sealed indictment. On May 23, 2019, 18 federal criminal charges under the Espionage Age of 1917 were brought by the Justice Department against Mr. Assange for his involvement in “computer intrusion” and leaking of classified information. In June 2020, the charges were further expanded



for conspiracy with hacker groups. *Mr. Assange, in his younger days, was a prodigious teenage hacker who was charged and later let off for activities related to invasion into private computers. He later went onto become a “cypherpunk” — an activist who uses cryptography and privacy-enhancing technologies to promote social and political change — a path that led him to found WikiLeaks.* The site went on to become a key outlet for whistle-blowers. This propelled him into becoming a “global hacktivist” of sorts but his ploy to use WikiLeaks as a means to influence the bipolar U.S. politics has complicated his public image. It remains to be seen whether the U.K. court will consider his plea not to be extradited on merits of his role as a publisher of sensitive information, something that has been performed by news organisations the world over.

WHAT IS THE 25TH AMENDMENT THAT CAN BE INVOKED IF PRESIDENT DONALD TRUMP FALLS SERIOUSLY ILL?

But what happens if Donald Trump becomes seriously ill?

The 25th amendment of the US constitution lays down a clear succession plan if a president suddenly dies, resigns or is incapacitated while still in office. The amendment was ratified by Congress in 1963 following the assassination of former President John F Kennedy. As per Section 3 of the 25th amendment, if Trump’s condition were to deteriorate to a point where he is unable to carry out his responsibilities as President, his Vice President Mike Pence can temporarily assume office. Once Trump recovers, he can then reclaim his position. In order to hand over power to the vice president while he is recovering, Trump will have to send a written declaration stating that he is “unable to discharge the powers and duties of his office” to the Senate’s President Pro Tempore, Iowa Republican Chuck Grassley, as well as to Nancy Pelosi, the current speaker of the House of Representatives. Under Section 4 of the 25th amendment, the Vice President and a majority of either the Cabinet or any other body established by law, can also declare the president as “unable to discharge the powers and duties of his office” by sending a written declaration to Grassley and Pelosi. In such a situation, Pence will immediately assume the powers of the president until Trump responds in writing that he is not, in fact, disabled. The Vice President and the Cabinet or review body then has four days to respond.

Has the 25th amendment been invoked by US Presidents in the past?

The 25th amendment has been invoked only three times in US history by two different presidents but for the same reason — a colonoscopy. In 1985, former Vice President George Bush briefly assumed presidential responsibilities while then-President Ronald Reagan underwent the invasive procedure. More recently, President George W Bush invoked the amendment twice during colonoscopies in 2002 and 2007, temporarily turning over power to then-Vice President Dick Cheney.

But, what if the President and Vice President are both unable to serve?

In a highly unlikely scenario where both the President and Vice President were to contract the illness and pass away, the constitution also lays down a clear line of succession. *According to the Presidential Succession Act of 1947, if both Trump and Pence are suddenly incapacitated, US House of Representatives Speaker and California Democrat Nancy Peolosi will take over as commander-in-chief of the United States.*

What happens if a presidential candidate falls ill or dies before an election?



Soon after testing positive for Covid-19, Trump cancelled all campaign fundraisers and rallies scheduled to take place in the coming weeks. He will have to withdraw from all in-person events and remain isolated until his condition improves, creating a scenario that is far from ideal with just a month to go before polling day on November 3. However, what would happen if his condition were to worsen before the election? If Donald Trump or any other candidate were to pass away before the election then it would be up to their political party to choose their successor. While the party is highly likely to choose the vice presidential candidate as the new presidential nominee, the procedure is not set in stone and the party also has the option of choosing someone else entirely.

How many presidents have died while still in office?

So far, a total of *eight* Presidents have died while still occupying the Oval Office at the White House. Of these, *William Henry Harrison, Zachary Taylor, Warren G. Harding and Franklin D. Roosevelt* passed away due to natural causes, while *Abraham Lincoln, James A. Garfield, William McKinley and John F. Kennedy* were all assassinated while still in office. In each of these instances, the Vice President has assumed the presidency.

WHO ARE THE PROUD BOYS, THE FAR-RIGHT GROUP THAT DONALD TRUMP MENTIONED IN THE PRESIDENTIAL DEBATE?

A US-based far-right group called the **Proud Boys** was brought to the world's attention after President Donald Trump urged the group to "stand back and stand by" during his first presidential debate against Democratic contender Joe Biden.

Who are the Proud Boys?

The all-male neo-fascist group was founded in 2016 by Vice Media co-founder and Canadian-British right-wing activist Gavin McInnes. According to the Southern Poverty Law Centre, the Proud Boys are known for their "*anti-Muslim and misogynistic rhetoric*" and have been classified as an '*extremist group*' by the FBI. To be inducted into the fold, *a Proud Boy must first proclaim that he is a "a Western chauvinist who refuses to apologise for creating the modern world"*. According to the Anti-Defamation League (ADL), the group is also known for *anti-transgender, anti-immigration and anti-Semitic* views. However, members of the group insist that they are not, in fact, racist.

They claim that they do not support white supremacists, and merely banded together to oppose the activities of the anti-fascist movement known as Antifa. But members of the group are often seen at rallies carrying guns and bats and a few have even been convicted of violent crimes against left-wing groups and activists. The group is known to show up bearing arms at right-wing and liberal leaning protests across the United States. *The name of the group was inspired by a song from the musical version of the Disney film 'Aladdin'.* Members usually *don a fixed uniform of red 'Make America Great Again' caps* from Trump's 2016 presidential campaign and *black and yellow polo shirts by the apparel brand Fred Perry.* *Incidentally, the brand recently withdrew the design after it came to be associated with the far-right group.*

How did the Proud Boys react to Trump's comments?

Members of the Proud Boys began sharing memes and posts celebrating Trump's comments within minutes of the debate. The group's leader Enrique Tarrio, however, told CNN, that while he



was happy about the president's comments, he didn't see them as an endorsement. Tarrío said he saw *Trump's message to "stand back and stand by" merely as encouragement to keep doing what they have been doing for the last four years.* Shortly after the debate, the group began selling merchandise with the message printed on it, CNN reported. Some even added the phrase to their official logo. One social media user, who claimed to be a member of the group, posted, "Standing down and standing by sir."

The Proud Boys' history of violence

Amid nationwide anti-racism protests triggered by the custodial killing of African American George Floyd earlier this year, the Proud Boys have become a regular feature at protest marches across the country. They have been known to intimidate anti-racism protesters and in some places have incited violence and fighting. Even before the recent spate of protests across the United States, the group has been known to show up wherever they may be able to confront far-left activists. Last year, two Proud Boys were jailed for assaulting anti-fascist activists in New York. *The Proud Boys have also been associated with other far-right gatherings and protest marches that have turned violent, such as the infamous 'Unite the Right' rally in Charlottesville, North Carolina in 2017. A former member of the group, named Jason Kessler, helped bring together members of groups like the Ku Klux Klan and other neo-Nazi and militia groups for the event.* The protest resulted in the death of Heather Heyer, a 32-year-old civil rights activist, after a car rammed into a group of counter-protesters.

US ELECTIONS 2020: HOW DO ASTRONAUTS CAST THEIR VOTES FROM SPACE?

NASA astronaut Kate Rubins, who will be aboard the International Space Station (ISS) on the day of the US presidential elections, will cast her vote from space, the Associated Press reported. The ISS is located over 200 miles away and orbits the Earth at 17,000 miles an hour. Aboard the ISS, missions can last for over six months, and American astronauts have been able to cast their vote via a special absentee ballot system.

How is this possible?

In 1997, a bill passed by the Texas legislatures established the technical voting process for astronauts, all of whom live in Texas and gave them the ability to vote remotely from space. In the 2016 presidential elections, astronauts Edward Michael Fincke and Greg Chamitoff, who were living and working onboard the ISS, cast their vote by accessing a secure secret ballot. In 1997, NASA's David Wolf became the first astronaut to cast his using this provision while he was aboard the Russian Space Station Mir.

How does the system work?

The rule states that a person who is on a space flight during the early-voting period or on election day can vote by this method provided they apply by a Federal Postcard Application (FPCA). "The National Aeronautics and Space Administration ("NASA") shall submit in writing to the Secretary of State a method of transmitting and receiving a secret ballot for persons on a space flight during an election period," the rule states. According to a blog post published by NASA, the voting process starts a year before launch, when the astronauts are supposed to select which elections (local/state/federal) they want to take part in while in space. Following this, six months before the elections, astronauts are provided with a standard form called the, "Voter Registration and



Absentee Ballot Request – Federal Post Card Application”. A day before US Election Day, an encrypted electronic ballot is uplinked to the astronauts, who then use a set of unique credentials that are sent to them individually by e-mail. In this way, they can access their ballots and after casting their vote, they downlink them back to Earth to the county clerk’s office.

PAYING JUST \$750 A YEAR, HOW PRESIDENT DONALD TRUMP AVOIDED, EVADED TAXES

The New York Times has obtained US President Donald Trump’s tax information extending over more than two decades, “revealing struggling properties, vast write-offs, an audit battle and hundreds of millions in debt coming due”. The NYT report says *Trump paid as little as \$750 a year as federal income tax in the first two years of his presidency (2016 and 2017)*. That is just over ₹50,000 a year. *It has also revealed that he managed to evade paying any income tax in 10 of the previous 15 years*. Trump’s tax payments were a hot-button issue when he contested for the presidency in 2016. However, he has successfully avoided revealing his tax details — the first for any US President — even after becoming President. Ahead of the election on November 3 — Trump is seeking re-election — his tax records had become possibly the most sought after documents in recent times.

Trump is the wealthiest US President in history but his income tax payment is lower than some of his most recent predecessors such as George W Bush (2000-09) and Barack Obama (2009-17), who routinely paid federal income taxes in excess of \$100,000 a year — roughly 140 times what Trump paid.

How did Trump manage to do it?

He seems to have used various ways to either reduce his tax liability or get a refund on tax paid. Towards reducing his liability, he reportedly did the following things: Classifying personal expenses as the cost of business: Doing so brings down the taxable income. Trump has categorised everything from his residence to his golf course to his aircraft as business expenses. Even his hairstyling expenses — \$70,000 (roughly 50 lakh) — as well as those of his daughter Ivanka Trump — \$100,000 (roughly Rs 70 lakh) — have been shown as business expense, The NYT said. The NYT said the treatment of Seven Springs, Trump’s estate in New York, “typifies his aggressive definition of business expenses”. The over 200-acre estate, bought in 1996, is openly called “a retreat for the Trump family”, yet for tax purposes, it is an “investment property” and not a personal residence. As a result, Trump “has been able to write off \$2.2 million in property taxes since 2014,” The NYT wrote. Paying high consultation fees: The NYT found that across nearly all of his projects, Trump’s companies set aside about 20% of income for unexplained “consulting fees”. For instance, when he collected \$5 million on a hotel deal in Azerbaijan, he reported paying \$1.1 million in consulting fees — bringing down the final profit before being subjected to taxation. Also, the report said, this fee is collected by Ivanka or an organisation that he heads. Showing businesses make heavy losses: Some of Trump’s most high-profile business ventures make heavy losses on paper. For instance, his golf courses, the centre of his business empire, have lost more than \$315 million (over Rs 2,000 crore) in the last two decades. “The Trump Organization — a collection of more than 500 entities, virtually all of them wholly owned by Mr Trump — has used the losses to offset the rich profits from the licensing of the Trump brand and other profitable pieces of its business,” The NYT wrote.

What about refunds?



Trump sought massive refunds. As a result, while he paid almost \$95 million in taxes over the 18 years, he managed to “recoup most of that money, with interest, by applying for and receiving a \$72.9 million tax refund, starting in 2010”. This refund is the subject of a long-running battle with the tax authorities.

BREAKING THE LAW OVER BREXIT (AMIR ALI TEACHES AT THE CENTRE FOR POLITICAL STUDIES, JNU, NEW DELHI)

The latest spectacular development in the Brexit saga is the Internal Market Bill that was passed in the House of Commons. The Bill has caused uproar in the U.K. and across the world as it breaks international law by going back on the Withdrawal Agreement Bill signed by the Boris Johnson government in January 2020. That a country that considers itself home of the rule of law would break international law is ironic. Brandon Lewis, Secretary of State for Northern Ireland in the U.K. government, admitted in the House of Commons that the Bill would break international law in “a very specific and limited way”. The European Union (EU) has initiated legal action against the U.K. over the Bill.

The possibility of destabilisation

More dramatic is the possibility that Brexit could bring about the Balkanisation of the U.K. into its constituent nations of England, Scotland, Wales and Northern Ireland. The term “tukde tukde”, coined in noisy news debates in India and translated for the British as fragments of the nation, could actually be applicable to Britain, which stares at the possibility of destabilisation. *Among the nations that constitute the U.K., Scotland and Northern Ireland would become the major lines of fracture. While the Brexit process and Mr. Johnson’s hard Brexit stance have been believed to be the catalyst for the current situation in the U.K., Mr. Johnson has suggested that the threat to the territorial integrity of the U.K. comes from the EU.* The unfolding of the Brexit process has revealed the likelihood of a hard border between Northern Ireland, which is part of the U.K., and the Republic of Ireland, which is part of the EU. To prevent such a possibility, the EU had negotiated an earlier **backstop arrangement** with the previous Theresa May-led British government. The backstop arrangement was akin to an insurance policy to prevent the possibility of a restrictive hard border that would impede the flow of goods and people. Mr. Johnson had always balked at the idea of a backstop. *In the Withdrawal Agreement Bill that he had signed with the EU, the Northern Ireland protocol was introduced to eliminate the possibility of a hard border and achieve the aims of the earlier backstop.* It is the provisions of the protocol that he himself signed that Mr. Johnson is now backtracking on with the new Bill. Mr. Johnson’s Brexit position completely overlooks constitutional developments in the U.K. since the late 1990s, beginning with the 1998 Good Friday Agreement. A major achievement of the Tony Blair government, the Agreement ended violent decades of troubles in Northern Ireland and brought peace and stability in the region in the last two decades. It is this stability that the Brexit process threatens to undo. *Following closely on the heels of the Good Friday Agreement, significant devolution of powers was effected with the nations that constitute the U.K., resulting in regional parliaments in Northern Ireland, Scotland and Wales. Ostensibly, the Johnson government’s Internal Market Bill seeks to create a single uniform market across the four nations of the U.K. A measure taken by one of the parliaments would have to be accepted across all four nations to maintain the viability of the unified internal market. The reality could actually be a significant undermining of the rigorous food, health and safety regulations that have been hitherto upheld by the EU.* The example that has most often



been used is the *possibility of chlorine washed chicken imported from the U.S. filling up shelves in U.K. supermarkets.*

On a decline

Since the end of World War II, the U.K. has been on a decline. Yet, on account of a fortuitous combination of soft power through the reach of its cultural exports, the prestige of its university system, and the vast scale of London as a leading financial centre, it has maintained its position somewhere near the top in the league table of nations. Ardent Brexiteers in the true spirit of 'Rule, Britannia!' seek to restore the glory days of Britain's dominance. For this to happen, in their view, Britain has to stop being a more or less equal partner with Germany and France in the EU and ride subordinate on the coat-tails of the U.S.

FRENCH PACIFIC OUTPOST DECIDES ON INDEPENDENCE

The French South Pacific territory of *New Caledonia* votes in a referendum on independence on Sunday, with voters expected to reject breaking away from France after almost 170 years despite rising support for the move. The referendum is part of a carefully negotiated de-colonisation plan agreed in 1998, known as the *Noumea Accord*, designed to put an end to a deadly conflict between the mostly pro-independence *indigenous Kanak population*, and the *descendants of European settlers known as "Caldoches"*. Violence in the 1980s culminated in a drawn-out hostage crisis in 1988 that saw 19 separatists killed on one side, and six police and special forces on the other. It will be the second time the archipelago goes to the polls to decide on its fate in two years, after a first referendum in 2018 resulted in status quo with 56.7% of the vote. But the result still marked a shift towards pro-independence sympathies, raising campaigners' hopes that this time it could manage to break free. Political observers say a majority "Yes" to independence is unlikely.

WHY ARE AZERBAIJAN AND ARMENIA FIGHTING AGAIN?

Over the last one week, military action in Nagorno-Karabakh, a region disputed between Armenia and Azerbaijan, has resulted in the death of at least 100 civilians and Armenian combatants. While the two countries have fought over the region for decades, the current conflict is being seen as one of the most serious in recent years. Azerbaijan has not released information on its casualties.

It began on the morning of September 27, since when each country has claimed to have inflicted serious loss on its opponent. What's different about the current flare-up is that *this is the first time that both countries have proclaimed martial law. According to the Warsaw-based Centre for Eastern Studies (OSW), the current escalation was "most likely" initiated by Azerbaijan.* Media reports have noted that the clashes were possibly a fallout of *Azerbaijan's bid to reclaim some territories occupied by separatist Armenians.*

Roots of the conflict

Once a part of the Armenian Kingdom, Nagorno-Karabakh (literal meaning, mountainous black garden) has seen all empires — the Romans, the Persians, the Ottomans, the Russians and the Soviets — that came to Transcaucasia establishing their rule over itself. Nagorno-Karabakh, located between the southern part of the Lesser Caucasus range and the eastern edge of the Armenian Highlands, and largely populated by ethnic Armenians, was left within the borders of



Azerbaijan, igniting a protracted conflict that's still raging. *The largely mountainous and forested Nagorno-Karabakh, home for some 150,000 people, is at the centre of the conflict.*

After the 1917 revolution, the Russian influence receded in the South Caucasus, which allowed the formation of an independent *Transcaucasian Democratic Federative Republic*. Karabakh became a part of this republic. But the federation crumbled under its own contradictions and then emerged three separate republics — *Armenia, Azerbaijan and Georgia. Nagorno-Karabakh was incorporated into Azerbaijan by the Azeri authorities.* This was also the time when the Ottomans were attacking the region, mainly targeting Armenian militias, in an alliance with Azerbaijan. When the Ottomans, in the face of defeat in the First World War, withdrew from the South Caucasus, the British temporarily filled the vacuum. But they, too, failed to calm the ethnic tensions, which led to *an open war between Armenia and Azerbaijan in 1920. The war was disastrous, especially for the ethnic Armenians in Nagorno-Karabakh. Azerbaijani forces, after repelling an Armenian offensive, burnt down parts of Shusha, Nagorno-Karabakh's capital. When the war was raging, the Bolshevik revolutionaries took over Azerbaijan and Armenia. Nagorno-Karabakh at that time was 90% Armenian. But the Soviet leaders (Joseph Stalin was the acting Commissar of Nationalities for the Soviet Union under which the Caucasian Bureau, or the Kavburo, was created) decided to give Nagorno-Karabakh Autonomous Oblast (province) to Azerbaijan, despite protests from Armenia.* The Soviets also redrew the map between Azerbaijan and Armenia, which left the Nagorno-Karabakh Oblast within the boundaries of Azerbaijan.

As long as the Soviet Union remained strong, the region had been relatively peaceful. But with the Soviet power receding in the late 1980s, the ethnic frictions started resurfacing. *In 1988, the national assembly voted to dissolve the region's autonomous status and join Armenia. When Armenia and Azerbaijan became independent after the collapse of the Soviet Union in 1991, the clashes led to an open war in which tens of thousands were killed. The war lasted till 1994 when both sides reached a ceasefire. When a ceasefire was reached in 1994, the rebels had not only ensured their rule over what was the Nagorno-Karabakh Oblast, they had also extended their control to the Armenian borders, re-establishing territorial continuity with Armenia. The rebels have declared independence, but have not won recognition from any country. It is today governed by separatist Armenians who have declared it a republic called the "Nagorno-Karabakh Autonomous Oblast". The region is still treated as a part of Azerbaijan by the international community, and Baku wants to take it back. The energy-rich Azerbaijan has built several gas and oil pipelines across the Caucasus to Turkey and Europe.* This includes the *Baku-Tblisi-Ceyhan oil pipeline*, the Western Route Export oil pipeline, the Trans-Anatolian gas pipeline and the South Caucasus gas pipeline. Some of these pipelines pass close to the conflict zone. In an open war between the two countries, the pipelines could be targeted, which would impact energy supplies.

The conflict is getting worldwide attention because of the *involvement of regional rivals Turkey and Russia. Muslim-majority Turkey backs Azerbaijan, and recently condemned Christian-majority Armenia for not resolving the issue through peaceful negotiations. Turkey recently declared unconditional support to Muslim-majority Azerbaijan. Russia and Turkey also back opposite sides in the civil wars playing out in Syria and Libya and Turkey's support for Azerbaijan may be seen as an attempt to counter Russia's influence in the region of South Caucasus. Russia's role is somewhat opaque since it supplies arms to both countries and is in a military alliance with Armenia called the Collective Security Treaty Organisation.*



Turkey has historically supported Azerbaijan and has had a troublesome relationship with Armenia. In the 1990s, during the war, Turkey closed its border with Armenia and it has no diplomatic relations with the country. *On the other end, the Azeris and Turks share strong cultural and historical links. Azerbaijanis are a Turkic ethnic group and their language is from the Turkic family. After Azerbaijan became independent, Turkey established strong relations with the country, which has been ruled by a dynastic dictatorship.* In July, after the border clashes, Turkey held a joint military exercise with Azerbaijan. On September 28, Turkish President Recep Tayyip Erdogan



blamed Armenia for the most recent clashes and offered support to Azerbaijan. There were reports that Turkey was recruiting mercenaries from West Asia to fight for Azerbaijan in the Caucasus. This fits well into Ankara's aggressive foreign policy, which seeks to expand Turkish interests to the former Ottoman territories.

Moscow sees the Caucasus and Central Asian region as its backyard. But the current clashes put President Vladimir Putin in a difficult spot. *Russia enjoys good ties with both Azerbaijan and Armenia and supplies weapons to both. But Armenia is more dependent on Russia than the energy-rich, ambitious Azerbaijan.* Russia also has a military base in Armenia.

Nagorno-Karabakh is dependent on Armenia for security. Armenia, in turn, is dependent on Moscow, which enjoys good relationships with both Baku and Yerevan. That's why Russia has called for a ceasefire. Moscow, at least publicly, is trying to strike a balance between the two. Like in the 1990s, its best interest would be in mediating a ceasefire between the warring sides.

What next?

As of now, both sides are standing their ground. The Russian state news agency TASS quoted *Azerbaijan President Ikhram Aliyev as saying that for the fighting to stop, Armenia must unconditionally leave Nagorno-Karabakh.* The Armenian government lodged a request with the European Court of Human Rights (ECHR) for an interim measure (applicable only when there is imminent risk of irreparable harm) against Azerbaijan. It requested the court to indicate to the Azerbaijani government to "cease the military attacks towards the civilian settlements along the entire line of contact of the armed forces of Armenia and Artsakh".



KYRGYZSTAN PROTESTS

Street protests erupted in Kyrgyzstan earlier this week following Sunday's parliamentary election. The opposition alleged that the vote was rigged as protesters captured several government buildings in the capital Bishkek, forcing the President, Sooronbay Jeenbekov, to flee the White House, the presidential palace.



Disputed election

Kyrgyzstan, often referred to as '*Central Asia's only democracy*', had seen violent anti-government protests in the past. In **2005 and 2010**, sitting presidents were forced out of office in the '*Tulip*' and '*Melon*' revolutions. The current protests began after early results of the October 4 parliamentary election were announced. *Political parties in Kyrgyzstan should win at least 7% of the popular vote to enter Parliament.* The results showed that only four parties managed to cross the threshold and of which, three were pro-government parties. The newly formed Birimdik (Unity) party emerged the biggest winner with 24.5% of the vote, while the Mekenim (My Homeland) Kyrgyzstan party got 23.88% and the Kyrgyzstan party 8.76%. The only opposition party that crossed the threshold was the nationalist Butun Kyrgyzstan, which won 7.13%. The remaining 12 parties received only around one-third of the votes.

Behind the protests

Even before the election, political fault lines were sharpening. *The country's main political party, the Social Democratic Party of Kyrgyzstan (SDPK), which had the most number of seats in the outgoing Parliament, stayed out of the election due to infighting between its founder and former President Almazbek Atambayev and the incumbent, Mr. Jeenbekov. Mr. Atambayev, the one-time mentor of Mr. Jeenbekov, had clashed with the President publicly quite often after they fell out. Mr. Atambayev was jailed last year and sentenced on corruption charges. The former President's sons*



had split with the SDPK and formed another party, the Social Democrats of Kyrgyzstan (SDK), a few months before the election. When most parties failed to make it to Parliament in Sunday's election, the opposition, including the SDK, came together and launched the protests, accusing the government of vote buying. The protesters raided the prison where Mr. Atambayev was kept and freed him. They formed a Coordination Council to lead the "revolution". The country's Election Commission annulled the results, but the protesters continued.

Who is in charge?

The protesters have captured key government buildings, including the Parliament house and the presidential office. President Jeenbekov's whereabouts are unknown. In a video message from an undeclared location, he has accused the opposition of plotting a coup against his government. *Prime Minister Kubatbek Boronov resigned* on October 5 amid the upheaval. *The Mekenchil party has nominated its leader Sadyr Japarov, who was also released from prison by the protesters, to the post of Prime Minister. President Jeenbekov assumed office in November 2017. Constitutionally, he has three more years left in office. He has offered to resign as part of a settlement with the rival parties, but has also declared state of emergency and ordered troops deployment to establish order.*

Strategic importance

This landlocked Central Asian country that shares a long border with China has been key to the strategic plans of both Russia and China. *Moscow sees the region as its backyard and plays hard politics to retain its influence. For China, the country, located at the centre of Eurasia, is a vital link in its Belt and Road Initiative. China has built road and rail networks with Kyrgyzstan and Uzbekistan. During the early stages of the Afghan war, the U.S. had used Kyrgyzstan for refuelling and other logistical purposes. The U.S. base was shut down in 2014 by Parliament.*

Russia's role

Kyrgyzstan is a member of the Russia-led Collective Security Treaty Organisation and hosts a Russian air base. While Russia has cultivated strong ties with all political factions in Kyrgyzstan, radical political changes could throw up opportunities for its rivals. While it is to be seen whether President Jeenbekov would be able to mobilise his authority, what's evident is that the crisis poses an immediate foreign policy challenge to Russia's Vladimir Putin. Belarus, another country in Russia's backyard with a pro-Moscow President, is already witnessing political turmoil after August's Presidential election. In the South Caucasus, the conflict between Armenia and Azerbaijan, both former Soviet Republics, over Nagorno-Karabakh, risks dragging Russia into a conflict it doesn't want. All three combined, Moscow's attempts to build stronger political and economic integration with the former Soviet region are suddenly facing critical challenges.

UN

The United Nations commemorated its 75th anniversary on September 21, 2020 by adopting a Declaration. The anniversary comes at a time when the world is witnessing a retreat from multilateralism. It also faces an unprecedented pandemic. In his address to the UN on September 22, the UN Secretary-General called the pandemic "the fifth horseman". No one could have predicted it. It has also brought in its wake the deepest recession the world has seen since the 1930s. This has made it more difficult to achieve the Sustainable Development Goals (SDGs) the



UN had adopted. The Secretary-General said the world is “careening off track” in achieving the SDGs.

Challenge to multilateralism

The challenge to multilateralism is coming not from the have-nots, but the main stakeholders of the system. The U.S. is not alone in withdrawing from multilateralism. Brexit has shown that nationalism remains strong in Europe. It has delivered a blow to the idea of Europe, united and whole. Nevertheless, the most important development is the position of the U.S. As French President Emmanuel Macron remarked in his speech at the UN General Assembly, the U.S., which created the international system as we know today, is no longer willing to be its “guarantor of last resort”. U.S. President Donald Trump stressed “America First” in his speech, and suggested that others too should put their countries first. China has stepped in to take advantage of the West’s retreat from multilateralism. But China’s assertion of a role on the world stage is not an embrace of the idea of multilateralism. Its flagship Belt and Road Initiative consists of a series of bilateral credit agreements with recipient countries with no mechanism for multilateral consultation or oversight. Curiously, President Xi Jinping’s speech at the UN General Assembly did not mention it. The European Union’s and U.S.’s sanctions against Russia have driven it closer to China. The rift between the permanent members of the Security Council has already started affecting the work of the UN Security Council. The speeches at the regular session of the UN General Assembly on September 22 brought out the clashing perspectives of the U.S. and China. President Trump highlighted China’s culpability in the spread of the pandemic. He pointed out that China had banned internal flights but allowed international flights from Wuhan to continue. This set the stage for the spread of COVID-19. The World Health Organization also failed to provide early warnings. President Xi’s speech sought to project the fight against COVID-19 as a matter of collective responsibility of the international community. He said China will “honour” its commitment to provide \$2 billion assistance to the developing countries over two years. This was clearly a reference to existing pledges without bringing additional resources to tackle a crisis which has tipped the world economy into recession. This is not a large amount considering the scale. The actual assistance committed to the UN COVID-19 response fund was a paltry \$50 million in addition to a similar amount pledged earlier. President Macron pointed out that while the U.S. is withdrawing, the world faces China’s projection beyond its frontiers. He also highlighted problems nearer home posed by Turkey’s intervention in Syria, Libya, and the Eastern Mediterranean, which is a breach of international law. The last was a reference to Turkey sending a drilling ship in Greek and Cypriot exclusive economic zones. Turkish President Recep Tayyip Erdogan made a detailed reference to the Jammu and Kashmir issue. Though otherwise Mr. Erdogan’s statements may not matter, Turkey has assumed the position of UN General Assembly President.

Several hurdles

The UN Secretary-General’s report on the work of the organisation highlights some of the achievements and challenges the world body faces. Over 40 UN political missions and peacekeeping operations engage 95,000 troops, police, and civil personnel. To be effective, they have to be put on a sound financial basis. The UN peacekeeping budget, a little over \$8 billion, is a small fraction of the \$1.9 trillion military expenditure governments made in 2019. Yet it suffers from a paucity of resources. There was an outstanding assessed contribution of \$1.7 billion for peacekeeping activities by the end of the financial year. Similarly, there was an outstanding \$711



million in the assessed contribution for the general budget. Most of the humanitarian assistance, developmental work, and budgets of the specialised agencies are based on voluntary contributions. There are calls for increasing public-private partnerships. This is not a satisfactory arrangement. The UN provides 'public goods' in terms of peace and development often in remote parts of the world. There may not be enough appetite on the part of corporations. The UN remains an inter-governmental body. Most world leaders spoke of climate change. President Trump mentioned that China's emissions are nearly twice of those of the U.S., and despite its withdrawal from the Paris Agreement, the U.S. has reduced its carbon emissions by more than any country in the world. President Xi said that after peaking emissions by 2030, China will achieve carbon neutrality before 2060. President Macron said that he was determined to see the EU agree on a target of achieving carbon neutrality by 2050. The Prime Minister of Pakistan, Imran Khan, in his speech made an extensive reference to Jammu and Kashmir. Though this is customary for Pakistani leaders, he brought a particularly uncivil tone to the discourse. Meanwhile, his country has slid to the 134th rank in the UN SDG index, the lowest for any country in South Asia. Prime Minister Narendra Modi focused on UN reforms and India's contribution to UN Peacekeeping for which we can be justly proud. What does the UN bring to the developing countries? It gives them greater political space. We need to support reform not only to expand the permanent members' category of the Security Council but also to revitalise the role of the General Assembly. The retreat from multilateralism would undermine the UN's capacity to face diverse challenges.

PATHWAYS TO DIVERSITY

The UN Summit on Biodiversity convened on September 30 in the midst of a global crisis caused by the novel coronavirus that is thought to have spilled over to humans from an animal reservoir. In New York, member-nations of the Convention on Biological Diversity (CBD) took note of the link between biodiversity loss and the spread of animal pathogens, calling for an end to destructive industrial and commercial practices. *There is consensus that conservation targets set a decade ago in Aichi, Japan, to be achieved by 2020*, have spectacularly failed. Evidence is presented by the latest UN Global Biodiversity Outlook 5 report: none of the 20 targets has been fully met. Many countries have chosen to ignore the connection between biodiversity and well-being, and depleted ecological capital in pursuit of financial prosperity. Among the Aichi targets that fell by the wayside are those on reform or phasing out of subsidies that erode biodiversity, steps for resource use within safe ecological limits, preventing industrial fisheries from destroying threatened species and vulnerable ecosystems, and an end to pollution, including growing plastic waste. A bright spot is the partial progress made on protecting surface and subsurface water, inland, coastal and marine areas. But the losses appear even more stark from WWF's Living Planet Index, which points to precipitous declines in vertebrate populations, a key indicator, by 68% over 1970 levels. Faced with fast-eroding ecosystem health, the 196 CBD member-countries must chart a greener course, aligning it with the Paris Agreement, which has a significant impact on the health of flora and fauna.

At Wednesday's summit, India's message was one of pride in an ancient conservation tradition, as one of the few megadiverse countries, and one that recognised the value of nature as much as the destructive impact of unregulated resources exploitation. National laws of the 1970s and 1980s have indeed shielded islands of biodiversity, particularly in about 5% of the country's land designated as protected areas, but they are today seen as irritants to speedy extraction of natural resources. In this unseemly hurry, due process is sought to be dispensed with, as envisaged by the



new EIA norms proposed by the NDA government. There is little concern for indigenous communities that have fostered biodiversity, and no effort to make them strong partners in improving the health of forests and buffer zones. Now that CBD members are set to draw up fresh conservation targets to be finalised next year, India too has the opportunity to plan a trajectory of green growth after COVID-19, around clean energy, ecological agriculture, a freeze on expansion of mining and dam-building, resource recovery from waste, and regeneration of arid lands. It should join the coalition of the enlightened.

AFGHANS FEAR RETURN OF TALIBAN

Almost two decades after the United States launched air strikes against Afghanistan's ruling Taliban regime and started what would become America's longest-ever war, the hardline group is in a stronger position than ever. The invasion that followed those October 7, 2001 strikes quickly toppled the militants, who had harboured the Al-Qaeda, the group behind the September 11 attacks that killed nearly 3,000 people in America just weeks earlier. Now, 19 years since the collapse of their brutal Islamist regime, the Taliban is pushing for a return to power, having signed a landmark troop withdrawal deal with Washington in February and currently holding peace talks with the Afghan government. *Fearful that the Taliban has changed little since the darkest days of its regime — when it killed women accused of adultery, attacked minority religious groups and barred girls from going to school — many Afghans worry about a new era of Taliban influence. "I remember the Taliban regime like a nightmare.* We are scared for our future and my daughter's future," said Kabul resident Katayoun Ahmadi, a 26-year-old mother. She recalled seeing severed hands and fingers on Kabul's streets following amputations for petty crimes under the Taliban's strict interpretation of Sharia law.

Enduring improvements

The 2001 invasion heralded some enduring improvements for young Afghans — particularly girls — and ushered in a Constitution guaranteeing certain freedoms, including the right to education. But so far in peace talks in Doha, which started last month, the Taliban has said little about issues such as women's rights or freedom of expression. Ms. Ahmadi's husband Farzad Farnood, 35, a researcher for the Afghanistan Institute for Strategic Studies, said a rise in Taliban violence since a deal was signed between the hardline group and Washington shows the militants have not changed. "Is this creating hope for Afghans? No, it is not," he said. As a teenager, he witnessed the *Taliban stoning a woman to death and public executions and floggings in Kabul's football stadium. His family had to hide their black-and-white television's antenna in a tree when the Taliban banned music and entertainment.* "All the achievements we have made in the last 18 years did not exist in the Taliban era." Zia-ul-Rahman, a former insurgent, said the *Taliban was pushing for "the establishment of an Islamic system", even though the Constitution already gives primacy to the religion.*

AUSTRALIA-CHINA TIES

Australia and China's cordial economic ties, established over the last three decades, have been soured this year over several points of friction. China has been unhappy with Australia becoming more vocal about its handling of Uighur Muslims and the protests in Hong Kong. But it was Canberra's appeal for an independent global inquiry into the origins and initial response of Covid-19, that really riled up Beijing. Australia's staunch stances in recent months exposes a latent fear



of China's growing influence in the country's domestic space, ranging from politics to educational institutions to real estate. China's rising presence in the Indo-Pacific region despite the pandemic has only added to this distrust. But despite the economic cost, Australia has made one thing clear: it will stand for its "values" and not be "intimidated." China is Australia's largest trading partner in terms of both exports and imports. China's share in Australia's exports reached a record A\$117 billion, or 38 per cent, in 2019, more than any other country. Australian sectors like mining, tourism, education benefit from trade with China. China even imports products such as milk, cheese, wine and meat. The Asian superpower's investment in the mining and agriculture sector also plays a big part in this. Over the years, it has been increasing its investment in Australian infrastructure and real estate products too. The maximum number of foreign students in Australian universities and tourists also originate from China. So far the Chinese economic aggression over tariffs has been limited to agriculture and food production. The spat has not touched the one industry that contributes heavily to their economic relationship: heavy metals. Perhaps the two sides know that going into this area will leave a heavier impact, one that would be too hard to reverse.

Points of friction

This year, at least two issues have dominated the deteriorating relationship between the two countries.

Australia's Covid-19 inquiry: In April 2020, Australia's Minister of Home Affairs Peter Dutton suggested the start of an inquiry into the origins and the initial handling of the coronavirus. To this, China's response was multi-pronged. The first reaction came from the Chinese Ambassador to Australia Cheng Jingye, who alleged that Australia was teaming up with the US to spread "anti-China propaganda". Jingye further called for boycotting Australia as a tourist and higher education destination and banning Australian products like wine and beef. In May, Chinese authorities announced imposing an 80 per cent tariff on barley imports coming from Australia. China is the most important market for Australia barley. Days after the announcement China imposed tariffs totalling 80.5 per cent. China also began a trade probe into Australian wine and suspended import permits for four large beef processing plants.

Tension over journalists: The second diplomatic spat began with the detention of Cheng Lei, an Australian news anchor based in Beijing by the Chinese authorities after she was suspected of "criminal activities" that endangered China's national security. Australian government said the journalist was held under "residential surveillance" at an unknown location. After this, two more Australian journalists working in China were questioned and declared persons of interest in the Cheng Lee detention case. Both the journalists were visited by Chinese police after midnight and were asked to report for questioning by the Ministry of State Security. Following their house searches, the journalists sought refuge in Australian diplomatic missions, as they were not allowed to leave the country. The tensions were on full display for five days after which China finally agreed to allow them to fly back to Australia. After their departure, there are no more Chinese reporters employed by the Australian media left in the country, a first since the 1970s. Few days after their departure, China's state news agency Xinhua released a report that claimed the Australian intelligence had raided an unspecified number of Chinese journalists stationed in Australia and that this "grossly violated" their rights. The Australian authorities had no response to this allegation.



Ideological issues: The two countries have also been at loggerheads on other ideological issues previously too. After reports of China keeping Uighur Muslims in state-run detention camps surfaced, Australia was swift to respond and expressed “deep concern” over the “human rights situation.” Similarly, after China imposed the National Security Law in Hong Kong, Australia suspended its extradition treaty with Hong Kong and said the law undermines Hong Kong’s autonomy and suppresses opposition to Mainland China. Australia also decided to extend visas for Hong Kong residents. In both instances China responded staunchly and asked Australia to not meddle in its “internal matters.”

A search for ‘like minded’ allies

Canberra has started looking for way to wean itself away from this excessive Chinese dependence and is keen to strengthen its ties with more ideologically compatible allies like India, Japan and the United States. In fact, Prime Minister Scott Morrison expressed the need to connect with more “like-minded democracies” to counter the Chinese aggression and expansion. At the Quadrilateral Initiative, or the “Quad” with counterparts from India, United States and Japan, Australian Foreign Minister Marise Payne highlighted the need for an “open, resilient and inclusive Indo-Pacific region, that is governed by rules and not power.” Australia also focussed on vital sectors of its economy like minerals, for which it is heavily depends on its trade with China.

Since its inception in 2007, the Quad has been labelled by analysts as an attempt to counter China’s growing footprint in the Indo-pacific region. The meeting comes at a time when three out of four participant countries are at loggerheads with China on some issue or another. India has been involved in a border standoff with China that has now lasted for over five months. Despite several rounds of “disengagement” between the two sides, the conflict has not died out. Similarly, under the Trump administration, US-China ties have been at their worst in decades. At the Quad meeting, US Secretary of State Mike Pompeo accused China’s governing party of “exploitation, corruption and coercion”.

DreamIAS



FOREIGN AFFAIRS

QUAD

With the second meeting of the Australia-India-Japan-United States Quadrilateral Strategic Dialogue of Foreign Ministers in Tokyo on Tuesday, the Quad has entered a decisive phase. The Ministers, who had last met at the UN General Assembly, made a considered push to hold the meeting, despite the COVID-19 pandemic. In a departure from the earlier secrecy, they made public a large part of their deliberations, including the decision to make the FM meeting an annual event, to cooperate on combating the pandemic, and on building infrastructure, connectivity and a supply chain initiative in the region. As the host, Japan's Prime Minister Yoshihide Suga dispelled any notion that he might not be as proactive as his predecessor, Shinzō Abe, who originally conceived the idea in 2007. Australia's Foreign Minister Marise Payne attended despite the two-week quarantine that she faces on return, and India's External Affairs Minister S. Jaishankar undertook the journey despite the government's preoccupation with the LAC stand-off. But it is probably the U.S. that displayed the most eagerness to hold the meeting, just weeks before the Presidential election. Mr. Trump's COVID-19 illness and sudden hospitalisation prompted U.S. Secretary of State Mike Pompeo to cancel other scheduled stops, in South Korea and Mongolia. But in Tokyo, he made it clear that his mission was to direct the Quad towards building a coalition to counter Beijing's aggression in the region, saying that their partnership was not "multilateralism for the sake of it". He called on the entire Quad to "collaborate to protect" the region from what he called the "CCP's exploitation, corruption, and coercion", pointing to the LAC stand-off, as well as Chinese aggression in the South and East China Seas. What he seemed to propose was not just a coalition of democracies committed to a free and open Indo-Pacific, as the Quad's informal charter has thus far stated. Instead, the U.S. seems keen on turning the Quadrilateral into a full-fledged military alliance of countries facing tensions with China.

The government should not downplay the import of such openly stated intentions. While Japan and Australia are bound by alliance treaties to the U.S., New Delhi has thus far charted its course on strategic autonomy. Mr. Pompeo's words could well be bluster borne of politics ahead of the U.S. elections, but they point to an interest in bringing India into bilateral tensions in the Indo-Pacific, while inviting the Quad to take a role in India-China tensions as well. The Modi government has rebuffed such suggestions, and any shift would be unwise now. India has much to gain strategically and in terms of capacity building from the Quadrilateral dialogue, but little from the impression it is being led by Washington on an important initiative for the region in which India is an equal and important stake-holder.

INDIA REJECTS CHINA'S 'UNILATERAL' CLAIMS ON LAC

India and China on Tuesday exchanged sharp statements, blaming each other for the continuing border tensions, with New Delhi describing China's Line of Actual Control (LAC) claims as "untenable", and Beijing saying it "did not recognise" the Union Territory of Ladakh. "India has never accepted the so-called unilaterally defined 1959 Line of Actual Control (LAC)," the Ministry of External Affairs (MEA) said in response to a statement from China's Foreign Ministry that the LAC was "clear" and that "it is the LAC of November 7, 1959". The LAC of 1959 was first referenced in a letter from then Chinese Premier Zhou Enlai to Jawaharlal Nehru — an idea rejected by Nehru and subsequently never accepted by India. A South Block official said China had, this summer,



gone even beyond this 1959 claim line. “While we don’t recognise the 1959 claim line, even going by their own 1959 line which runs near Patrolling Point (PP)14, the clash in Galwan Valley happened approximately 800 metres west of PP14,” the official said. “So they are violating their own claims.” India’s position that it never accepted the 1959 line was “consistent and well known, including to the Chinese side,” the MEA said, adding that both sides had, in previous bilateral border agreements, including the 1993 Agreement on Maintenance of Peace and Tranquillity along the LAC, the 1996 Agreement on Confidence Building Measures in the military field and the 2005 Agreement on Political Parameters and Guiding Principles, “committed to clarification and confirmation of the LAC to reach a common understanding of the alignment of the LAC”. The MEA said, “In fact, the two sides had engaged in an exercise to clarify and confirm the LAC up to 2003, but this process could not proceed further as the Chinese side did not show a willingness to pursue it.” It stated, “Therefore, the insistence now of the Chinese side that there is only one LAC is contrary to the solemn commitments made by China in these agreements... It is the Chinese side which by its attempts to transgress the LAC in various parts of the Western Sector, has tried to unilaterally alter the status quo... We, therefore, expect that the Chinese side will sincerely and faithfully abide by all agreements and understandings in their entirety and refrain from advancing an untenable unilateral interpretation of the LAC.” The Chinese Foreign Ministry, to a question on India’s border infrastructure projects in Ladakh, said it did not “recognise” Ladakh, reiterating its statements from last year that described the creation of the Union Territory as “illegal”.

THE INDIAN AIR FORCE’S ROLE IN EASTERN LADAKH

With a resolution to the standoff on the LAC still elusive, the Indian Army is preparing for extended deployment of troops in the region through the winter months. This leaves the IAF with a key role in providing support to the troops. What are the challenges to meet in the harsh winter and tough terrain?

Can the IAF support the logistics of such a large force?

One part of the logistics for the Army requires land transportation, which would have been planned for before winter sets in and the passes close. The IAF will be doing very urgent missions, for which it is well prepared with a very good transport fleet consisting of *C-17 Globemasters, Il-76s, and many An-32s*. If it comes to the crunch, the *C-130 Super Hercules* can also be used for logistics support, although these are meant for special operations. We also have *Mi-17 helicopters* and *Cheetal light helicopters* to cater to forward posts. In addition, the Chinook heavy-lift helicopters will be used for carrying bulky stores, either within the fuselage, or slung under it.

What are the topographical challenges of flying into Leh or other advanced landing grounds (ALGs) in Eastern Ladakh?

The biggest challenge is the altitude of the two airfields of *Leh and Thoise*, but since we have been flying there for decades, the air crew are well aware of the peculiarities of these fields. *The landing grounds at high altitude have their own challenges, which result in reduction of load-bearing capacity of the planes/choppers*. Additionally, the air crew have to call upon their skills to navigate the hills and land on the small, matchbox-like helipads — there is just no place on these hills to make bigger ones!



What additional hazards will winter bring?

Bad weather that accompanies the *western disturbances* that strike northern India in the winter months is a challenge, as it reduces visibility and results in a low cloud base. So the crew have to be on the ball to make sure they can find a way to circumvent bad weather. This is not always possible, and we have long periods when flying has to be curtailed.

And what effect does extreme cold have on weight-carrying aircraft?

The lower the temperature, the better the payload because the higher air density increases the lift-carrying capability of flying machines. So the loads that can be carried during winter are higher than during summer. This is a big advantage. For instance, an *Il-76, which in summer can carry hardly any load from Leh, can fly out around 20 tonnes in the winter.* It is the same with helicopters, whose load-carrying ability to extremely high helipads at altitudes of 17,000 to 20,000 feet increases substantially in winter. And it reduces drastically in summer.

Do the high altitude and topography pose a challenge to navigation and night flying?

The modern navigation equipment available now overcome most of the challenges. But mission accomplishment is not merely flying from place A to B. The aircraft has to land to complete a mission. That is where temperature and altitude plus weather become the final arbiters. Navigation is not a problem, but take-offs and landings are tricky. As for night flying, it has its own unique challenges because of the shadows cast by hills, as well as the state and position of the moon relative to the hills and the aircraft. A dark, moonless night poses its own challenges, and a full moon has its own. In the hills, air crew are specially cleared to carry out operations at night.

What is the threat to aircraft when the ground forces are eyeball to eyeball?

The airfields of Leh and Thoise that support fixed wing operations (helicopters are rotary wing aircraft) are relatively in the interiors, hence not vulnerable to any ground action. They can of course be attacked by the Air Force and other aerial assets of the adversary, but there are standard operating protocols in place to deal with such threats. However, in ALGs such as Daulat Beg Oldie (DBO), where choppers fly close to the LAC, the air crew are well adept at taking tactical action to meet any threat from ground fire or shoulder-fired missiles. In this, the aids on board the helicopters also play an important role.

Are there any special challenges for fighter aircraft?

Fighters flying in those altitudes have special challenges of their own because of their high speeds, reduced air density, the closeness of the hill tops, and the fact that targets are very small comprising bunkers having limited numbers of troops. Hitting those targets requires special weapons and air crew capability. Luckily, we have experienced this during Kargil, and I am sure the lessons would have been passed on to the present band of fighter pilots.

Where does Rafale fit in?

The Rafale comes with its unique flying characteristics and weapons delivery payload, but one must remember that present-day combat is between systems, and not generally between one aircraft and the other. The Rafale would have been dovetailed into the air campaign plan made by the IAF to operate with other systems like Airborne Warning And Control System (AWACS) and



electronic warfare (EW) assets. In the present day, an individual weapon system is only as good as the overall war fighting architecture that the force designs.

THE LAND OF PEAKS, STREAMS AND DISPUTES

Seven decades after it took control of the region, Pakistan is moving to grant full statehood to Gilgit-Baltistan, which appears as the northernmost part of the country in its official map. The scenic region, which was featured in Hollywood thrillers like Vertical Limit (2000), was part of the erstwhile princely state of Jammu and Kashmir and is claimed by India. During the first Indo-Pak war of October 1947, Pakistan occupied 78,114 sq km of the land of Jammu and Kashmir, including the 'Northern Areas'. *The Northern Areas is the other name of Gilgit-Baltistan that Pakistan has used for administrative reasons because it was a disputed territory.* But that is likely to change *as an assembly election on November 15 will pave the way for fuller political rights for the roughly 1.2 million residents of the region, which will become the fifth State of Pakistan after Sindh, Punjab, Balochistan and Khyber Pakhtunkhwa.* The political nature of Gilgit-Baltistan has been directionless from the beginning. *Pakistan initially governed the region directly from the central authority after it was separated from 'Azad Jammu and Kashmir' on April 28, 1949. On March 2, 1963, Pakistan gave away 5,180 sq km of the region to China, despite local protests. Under Prime Minister Zulfikar Ali Bhutto, the name of the region was changed to the Federally Administered Northern Areas (FANA). Pakistan passed the Gilgit-Baltistan Empowerment and Self Governance Order in 2009, which granted "self-rule" to the 'Northern Areas'.* There were protests in the area at that time from people who demanded an executive form of government based on international resolutions. *The local situation altered considerably with Pakistan signing an agreement with China for mega infrastructure and hydel power projects in September 2009. With the agreements arrived Chinese investments and heavy machinery, which found both support and opposition from the locals.* On January 17, 2019, a seven-judge bench of the Supreme Court of Pakistan, led by Chief Justice Mian Saqib Nisar, took up the constitutional status of Gilgit-Baltistan. The purpose of the court's intervention was to determine the extent of political rights that could be enjoyed by the people of the 'Northern Areas'. *Over the years, the region has acquired a government and a council, which gave it a de facto status of a province of Pakistan, but the constitutional status of the region remained vague without explicit statehood. The Supreme Court allowed Islamabad to amend a 2018 administrative order to hold general elections in the region. The Gilgit-Baltistan Order of 2018 provided for administrative changes, including empowering the Prime Minister of Pakistan to legislate on an array of subjects.*

Sense of alienation

One of the main reasons for the rebellion in the region in 1947 was the sense of alienation that the population felt towards the Dogra rulers of Srinagar, who operated under the protection of the British government. Under the post-1947 special administrative arrangement, local councils worked to meet economic, social and educational development of the region. Irrigation channels, protective bunds, roads and pony tracks were built during the early years of Pakistan. According to Banat Gul Afridi, a bureaucrat who wrote an authoritative account of life in Baltistan, a post office was added between 1948 and 1958 when the bloodless coup of General Ayub Khan took place in Pakistan. Radio, telegraph and telephone stations were added in the next decade. *One of the most mountainous regions in the world that is rich with mines of gold, emerald and strategically important minerals, and is known for its extraordinary scenic beauty, diversity and ancient communities and languages, Gilgit-Baltistan is largely an underdeveloped region. It's home to K-2,*



the second tallest mountain in the world. Tourism remains restricted by many factors, including military hostility, though the region has some of the *ancient Buddhist sculptures and rock edicts*. It is also home to an old Shia community, which often finds itself subjected to persecution in Pakistan's urban centres. At present, a Governor and an elected Chief Minister rule the region, which is divided into Gilgit, Skardu, Diamer, Astore, Ghanche, Ghizer and Hunza-Nagar. The region is known for high altitude dams because of both local and Islamabad-driven initiatives. Mountain streams and rivers are often harvested for local community needs. The tradition of building dams and bunds dates back to the reign of Balti King Ali Sher Khan Anchan of 1580-1624, who built the famous bund at Satpara Lake, which helps in watering Skardu. The water-rich region's biggest hydroelectricity project is the *Diamer-Bhasha dam*, which was launched in July 2020.

Indian protest

Following Pakistan's announcement of holding the legislative election in Gilgit-Baltistan, India reiterated its territorial sovereignty over the region with the Ministry of External Affairs stating that the Pakistani move to change the status of the region will "have no legal basis whatsoever". India has consistently opposed Pakistan's activities in Gilgit-Baltistan. *It also opposed the announcement of the commencement of the Diamer-Bhasha dam in July.* There have been local and international concerns as reports suggest *priceless Buddhist heritage will be lost once the dam is built.* India has *objected to the use of Gilgit-Baltistan to build and operate the China Pakistan Economic Corridor (CPEC), which cuts through the region before heading to the Arabian Sea coastline of Balochistan's Gwadar port.* Beginning with the August 5, 2019 decision by India to withdraw the special status of Jammu and Kashmir, a number of developments have taken place on both sides of the Line of Control. Senior leaders like Defence Minister Rajnath Singh declared that the decision will pave the way for reclaiming Pakistan-occupied Kashmir (including Gilgit-Baltistan). *India launched a new political map last November, which showed the Gilgit-Baltistan region as part of the new Union Territory of Ladakh. In response, Pakistan laid claim to Ladakh and the whole of Jammu and Kashmir in its map.* An election and full statehood for Gilgit-Baltistan will likely infuriate India, which will perceive it as a step to deny reclaiming PoK ever in the future. *Gilgit-Baltistan is important for Pakistan as it is the gateway for the CPEC. But for India, the region represents the continuity with the past of Jammu and Kashmir, which included Gilgit-Baltistan at the time of Partition of 1947.* Significantly, the ongoing stand-off with China at the Line of Actual Control in Eastern Ladakh has a Gilgit-Baltistan connection as the *Darbuk-Shyok-DBO road of India is viewed as a tactical roadway to access the Karakoram Pass, which provides China crucial access to Gilgit-Baltistan and Pakistan.* Full statehood for the region may give Pakistan a political and legal upper hand and strengthen China's position in the region, but Gilgit-Baltistan will continue to remain one of the hotspots in the tense India-Pakistan relations.

INDIA, JAPAN NAVIES MATCH SKILLS IN NORTHERN ARABIAN SEA

The 4th edition of the biennial India and Japan naval exercise is under way in the North Arabian Sea, the Navy said. This is the first exercise following the conclusion of the mutual logistics support agreement early this month. The maritime cooperation has significantly increased between the two sides with focus on information sharing and Maritime Domain Awareness (MDA) in the Indian Ocean Region (IOR) and Indo-Pacific. "JIMEX-20 will showcase high degree of inter-operability and joint operational skills through conduct of a multitude of advanced exercises, across the spectrum of maritime operations," the Navy said in a statement. Multi-faceted tactical exercises involving weapon firings, cross-deck helicopter operations and complex surface, anti-submarine



and air warfare drills will consolidate coordination developed by the two navies, it said. Stating that naval cooperation has increased in scope and complexity over the years, the Navy said advanced level of operations and exercises planned during JIMEX-20 are indicative of “the continued upswing in Indo-Japanese defence relations and continued efforts by both governments to work closely for a more secure, open and inclusive global commons, in accordance with international regulations.” The three-day war games which began on Saturday are being conducted in a “non-contact at-sea-only format”, in view of the COVID-19 restrictions. The Navy has deployed indigenous stealth destroyer INS Chennai, stealth frigate INS Tarkash and fleet Tanker Deepak while the Japanese Maritime Self-Defense Force (JMSDF) has deployed Kaga, an Izumo Class Helicopter Destroyer and Ikazuchi, a guided missile destroyer. The P8I long-range maritime patrol aircraft, integral helicopters and fighter aircraft will also participate, the Navy said. The two countries have made steady progress in MDA based on the implementing arrangement for deeper cooperation signed between the two navies.

5 REASONS WHY INDIA’S CLOUT IN THE NEIGHBOURHOOD HAS ALWAYS BEEN IFFY

The idea that India is losing clout in the neighbourhood has recently become a special cause for anxiety among Delhi’s commentariat.

Is this concern really new?

According to C Raja Mohan, contributing editor for The Indian Express, a longer look at India’s regional diplomacy suggests that Delhi has been losing some and winning some at any time in the region. *The notion of regional primacy certainly persisted in the Nehru era — recall the three security treaties that the first prime minister signed with Bhutan, Sikkim and Nepal during 1949-50.* But primacy was hard to sustain after Independence even within the immediate neighbourhood. Five reasons stand out according to Mohan. One is the Partition of the Subcontinent. The problems generated by the great division of the Subcontinent on religious lines continue to animate the region. “No amount of virtue signalling in the name of good neighbourly policy can help fix the challenges of settling boundaries, sharing river-waters, protecting the rights of minorities, and easing the flow of goods and people,” writes Mohan. Second, the arrival of China at the Indo-Tibetan frontier during 1950-51. “The unification of China amidst the Partition of India had profoundly transformed the geopolitical condition of India,” he writes. Beyond the bilateral territorial dispute in the Himalayas, the emergence of a large and purposeful state on India’s frontiers was going to be a problem given the ease with which it could constrain Delhi within the Subcontinent. Third was independent India’s conscious choice in favour of de-globalisation, which led to a steady dissipation of commercial connectivity with the neighbours. Fourth is the persistent fallacy in Delhi that the neighbourhood is India’s to will. It ignores the rise of political agency among neighbourhood elites and mass politics that they need to manage. The fifth factor is the role of domestic politics in India’s regional policy. Here is an important question that Delhi’s foreign policy debate avoids. Can India persistently champion Tamil minority rights in Sri Lanka without incurring any costs with the Sinhala majority? But asking that question takes us to India’s own domestic politics. Can Delhi ignore sentiments in India’s Tamil Nadu in making its Sri Lanka policy? “There is no happy end-state in India’s relations with its neighbours...Timely responses to emerging problems, preventing small issues from becoming big, and aligning Delhi’s regional economic policy with India’s natural geographic advantages are some important elements of any successful management of India’s perennial neighbourhood challenges,” writes Mohan.



NATION

WHAT ARE DEFENCE OFFSETS?

The Defence Ministry came up with its latest Defence Acquisition Procedure 2020 (DAP 2020), which comes into effect from Friday, October 1. Changing a 15-year old policy, the government has decided to remove the clause for offsets if the equipment is being bought either through deals or agreements between two countries, or through an ab initio single-vendor deal.

What are defence offsets?

In simplest terms, the offset is an obligation by an international player to boost India's domestic defence industry if India is buying defence equipment from it. Since defence contracts are costly, the government wants part of that money either to benefit the Indian industry, or to allow the country to gain in terms of technology. The Comptroller and Auditor General (CAG), in a report submitted on September 23, defined offsets as a "mechanism generally established with the triple objectives of: (a) partially compensating for a significant outflow of a buyer country's resources in a large purchase of foreign goods (b) facilitating induction of technology and (c) adding capacities and capabilities of domestic industry". *An offset provision in a contract makes it obligatory on the supplier to either "reverse purchase, execute export orders or invest in local industry or in research and development" in the buyer's domestic industry, according to CAG.*

When was the policy introduced?

Amit Cowshish, a former Financial Advisor to the Defence Ministry, who retired in 2012 and continues to be part of the Manohar Parrikar Institute for Defence Studies and Analysis, said *the policy was adopted on the recommendations of the Vijay Kelkar Committee in 2005.* "The idea was that since we have been buying a lot of defence equipment from foreign countries, so that we can leverage our buying power by making them discharge offset obligations, which is the norm world over," Cowshish said. *"The first policy said that all defence procurements exceeding Rs 300 crore, estimated cost, will entail offset obligations of at least 30%, which could be increased or decreased by the DAC (Defence Acquisition Council),"* Cowshish said. The Sixth Standing Committee on Defence (2005-06) had recommended in December 2005 in its report on Defence Procurement Policy and Procedure that modalities for implementation of offset contracts should be worked out. The first offset contract was signed in 2007. *The government stated the "objective for defence offsets" for the first time on August 1, 2012: "The key objective of the Defence Offset Policy is to leverage capital acquisitions to develop Indian defence industry by (i) fostering development of internationally competitive enterprises, (ii) augmenting capacity for Research, Design and Development related to defence products and services and (iii) encouraging development of synergistic sectors like civil aerospace, and internal security".*

How can a foreign vendor fulfil its offset obligations?

There are multiple routes. *Until 2016, the vendor had to declare around the time of signing the contract the details about how it will go about it. In April 2016, the new policy amended it to allow it to provide it "either at the time of seeking offset credits or one year prior to discharge of offset obligations".*



The August 2012 Defence Ministry note mentioned these avenues

- * Direct purchase of, or executing export orders for, eligible products manufactured by, or services provided by Indian enterprises
- * Foreign Direct Investment in joint ventures with Indian enterprises (equity investment) for eligible products and services
- * Investment in 'kind' in terms of transfer of technology (TOT) to Indian enterprises, through joint ventures or through the non-equity route for eligible products and services
- * Investment in 'kind' in Indian enterprises in terms of provision of equipment through the non-equity route for manufacture and/or maintenance of products and services
- * Provision of equipment and/or TOT to government institutions and establishments engaged in the manufacture and/or maintenance of eligible products, and provision of eligible services, including DRDO (as distinct from Indian enterprises).
- * Technology acquisition by DRDO in areas of high technology.

Will no defence contracts have offset clauses now?

Only government-to-government agreements (G2G), ab initio single vendor contracts or inter-governmental agreements (IGA) will not have offset clauses anymore. For example, the deal to buy 36 Rafale fighter jets, signed between the Indian and French governments in 2016, was an IGA. "Ab initio single vendor means that when you start the process you have only one vendor... There can be a situation when you start with two or three vendors and issue Request for Proposals (RFP) to them, and are left with a single vendor, which is called a resultant single vendor situation," Cowshish said. The Defence Ministry issues the RFP to only one vendor. IGA is an agreement between two countries, and could be an umbrella contract, under which you can go on signing individual contracts, Cowshish said. G2G is transaction specific, or an acquisition specific agreement, he said. *According to DAP 2020, all other international deals that are competitive, and have multiple vendors vying for it, will continue to have a 30% offset clause.*

Why was the clause removed?

Apurva Chandra, Director General of Acquisitions, said Monday that vendors would "load" extra cost in the contract to balance the costs, and doing away with the offsets can bring down the costs in such contracts. Sources explained that there are "administrative costs" involved in discharging offset obligations, which the vendors pay. Chandra had also mentioned recent CAG criticism.

What has the CAG said?

The CAG has been critical of the entire policy. From the first contract signed in 2007 until March 2018, CAG said, 46 offset contracts have been signed for Rs 66,427 crore. "On the whole, from 2007 till December 2018. Rs 19,223 crore worth of offsets should have been discharged. However, the claimed discharge of the offset obligation by the vendors till December 2018 was Rs 11,396 crore. This was only 59 per cent of the offsets which were due by December 2018." It said the relevant authority had accepted claims of only Rs 5,457 crore out of the Rs 11,396 crore and rest are either pending or rejected. "The remaining offset obligation of about Rs 55,000 crore is due to be completed by 2024". The CAG is not very hopeful of the obligations being met by 2024. It said



the audit “found that the foreign vendors made various offset commitments to qualify for the main supply contract but later, were not earnest about fulfilling these commitments”. The CAG had not found “a single case where the foreign vendor had transferred high technology to the Indian industry”.

WHY AND HOW INDIA CELEBRATES AIR FORCE DAY

The Indian Air Force is celebrating 88th Air Force Day on October 8. The day is being marked by the main event comprising a parade and flypast at Hindon Air Force Base along with events at IAF establishments across the country — this time with many restrictions due to the pandemic. A look at why the day is celebrated, the traditions attached with it and its significance.

Air Force Day, October 8

October 8 is celebrated as the Air Force Day because on this day, the Air Force in India was officially raised in 1932 as the supporting force of the Royal Air Force of the United Kingdom. The first operational squadron came into being in April 1933. After participation in World War II, the Air Force in India came to be called the Royal Indian Air Force in the mid 1940s. In 1950, after the republic came into being it became the Indian Air Force. From six officers and 19 Hawai Sepoys back in 1933, the Air Force now is the fourth largest in the world. For several decades until 2005-06, the Air Force Day used to be marked by the main event, parade and flypast at Palam. But due to the increasing air traffic issues, it was shifted to Hindon Air Force Base in Ghaziabad which is home to two squadrons of transport aircraft and a helicopter unit among other establishments. The flypasts and displays on the occasion have traditionally showcased the in service aircraft and systems of the Air Force.

This year, the Tejas LCA, Mig-29 and 21 and Sukhoi-30 along with newly inducted Rafale jets will be on show. It will also have helicopters like the Mi17V5, Chinook, Mi-35, ALH Rudra and Apache and transport aircraft like C-17 Globemaster, C-130, IL-76 Gajraj among others. Suryakiran fixed wing aerobatic team and Sarang helicopter aerobatic team will also be key attractions. At the IAF stations across the country, the event is marked by various functions including a gathering of IAF veterans from the area and a bada khana for the personnel of units stationed. This year, while gatherings of veterans have been put on hold in most of the formations, other celebrations have also been

WHY ANTI-RADIATION MISSILE RUDRAM MATTERS

*India's first indigenous anti-radiation missile, **Rudram**, developed for the Indian Air Force, was successfully flight-tested from a Sukhoi-30 MKI jet off the east coast.*

What is an anti-radiation missile?

*Anti-radiation missiles are designed to detect, track and neutralise the adversary's radar, communication assets and other radio frequency sources, which are generally part of their air defence systems. Such a missile's navigation mechanism comprises an inertial navigation system — a computerised mechanism that uses changes in the object's own position — coupled with GPS, which is satellite-based. For guidance, it has a “passive homing head” — a system that can detect, classify and engage targets (radio frequency sources in this case) over a wide band of frequencies as programmed. *Officials said once the Rudram missile locks on the target, it is capable of striking**



accurately even if the radiation source switches off in between. Officials said the missile has an operational range of more than 100 km, based on the launch parameters from the fighter jet.

How was Rudram developed?

Rudram is an air-to-surface missile, designed and developed by the Defence Research and Development Organisation (DRDO). Officials said DRDO initiated development of anti-radiation missiles of this type around eight years ago, and its integration with fighter jets has been a collaborative effort of various DRDO facilities and formations of the IAF and Hindustan Aeronautics Ltd. While the system has been tested from a Sukhoi-30 MKI, it can be adapted for launch from other fighter jets too. Because the missiles are to be carried and launched from extremely complex and sensitive fighter jets, the development was full of challenges, such as development of radiation seeker technologies and guidance systems, besides integration with the fighter jet, said a DRDO scientist. An official said the Sanskrit name Rudram was given in keeping with tradition, because it includes the letters ARM (the acronym for anti-radiation missile) and the word in Sanskrit describes a “remover of sorrows” (one of its meanings).

How significant are such missiles in aerial warfare?

Rudram has been developed for the IAF's requirement to enhance its Suppression of Enemy Air Defence (SEAD) capability. As one of the many aspects of SEAD tactics, anti-radiation missiles are used mainly in the initial part of air conflict to strike at the air defence assets of the enemy, and also in later parts, leading to higher survivability to a country's own aircraft. *Neutralising or disrupting the operations of the adversary's early warning radars, command and control systems, surveillance systems that use radio frequencies and give inputs for anti-aircraft weaponry, can be very crucial.* Scientists said modern-day warfare is more and more network-centric, which means it comprises elaborate detection, surveillance and communication systems that are integrated with the weapons systems.

WHAT IS SMART TEST, AND WHY IT MATTERS

India successfully conducted the flight test of a ***Supersonic Missile Assisted Release of Torpedo (SMART)*** system developed by the Defence Research and Development Organisation (DRDO).

What is SMART system?

Torpedoes, self-propelled weapons that travel underwater to hit a target, are limited by their range. In the mid-2010s, DRDO undertook a project to build capacity to launch torpedoes assisted by missiles; Monday's was the first known flight test of the system. *This SMART system comprises a mechanism by which the torpedo is launched from a supersonic missile system with modifications that would take the torpedo to a far longer range than its own.* For example, *a torpedo with a range of a few kilometres can be sent a distance to the tune of 1000 km by the missile system from where the torpedo is launched.* The system also gives flexibility in terms of the missile system's launch platform, DRDO officials said. A number of DRDO laboratories including Defence Research and Development Laboratory (DRDL) and Research Centre Imarat (RCI), both in Hyderabad; Aerial Delivery Research and Development Establishment (ADRDE) in Agra; and Naval Science and Technology Laboratory (NSTL) Visakhapatnam have developed the technologies required for SMART.



What happened at the test?

It was conducted from Wheeler Island off the coast of Odisha around noon. DRDO has said all mission objectives including the missile's flight up to the designated range and altitude, separation of its nose cone, release of the torpedo and deployment of Velocity Reduction Mechanism (VRM) were met perfectly. An anti-submarine torpedo of the lightweight category was used. *The test follows another crucial test two days ago of the nuclear-capable Shaurya missile. Shaurya is a land-based parallel of the submarine-launched K-15 missile.*

Why is it significant?

DRDO Chairman Dr G Satheesh Reddy said SMART is a game-changing technology demonstration in anti-submarine warfare. India's anti-submarine warfare capacity building is crucial in light of China's growing influence in the Indian Ocean region. Assets of such warfare consist of deployment of submarines, specialised anti-submarine ships, air assets and state-of-the-art reconnaissance and detection mechanisms. *The Navy's anti-submarine warfare capability got a boost in June after the conclusion of a contract for Advanced Torpedo Decoy System Maareech, capable of being fired from all frontline warships.* India has been indigenously developing and building several anti-submarine systems and vessels in the recent past. In January, *DRDO conducted two successful tests of the K Family's K-4 missiles. The capability of launching nuclear weapons from submarine platforms has great strategic importance in light of the "no first use" policy of India. These submarines can not only survive a first strike by an adversary but also can launch a strike in retaliation. The nuclear-powered Arihant submarine and its class members in the pipeline are assets capable of launching missiles with nuclear warheads.*

WHAT IS INDIA'S K MISSILE FAMILY, NAMED AFTER APJ ABDUL KALAM?

A successful trial of the nuclear capable Shaurya missile was conducted by India, the news agency ANI reported Saturday. Shaurya is a land-based parallel of the submarine launched K-15 missile. *These ballistic weapons belong to the K missile family — codenamed after late Dr APJ Abdul Kalam — which are launched from Arihant class of nuclear submarines.* A look at what this family of missiles is, their strategic importance as a nuclear deterrent and their recent tests.

The K Family of missiles

The K family of missiles are primarily Submarine Launched Ballistic Missiles (SLBMs), which have been indigenously developed by Defence Research and Development Organisation (DRDO) and are named after Dr Kalam, the centre figure in India's missile and space programmes who also served as the 11th President of India. The development of these naval platform launched missiles began in the late 1990s as a step towards completing India's nuclear triad — the capability of launching nuclear weapons from land, sea and air based assets. Because these missiles are to be launched from submarines, they are lighter, smaller and stealthier than their land-based counterparts, the Agni series of missiles which are medium and intercontinental range nuclear capable ballistic missiles. While K family are primarily submarine-fired missiles to be fired from India's Arihant class nuclear powered platforms, the land and air variants of some of its members have also been developed by the DRDO. Shaurya, whose user trial was conducted on Saturday, is a land variant of short range SLBM K-15 Sagatika, which has a range of at least 750 kilometers. India has also developed and successfully tested multiple times the K-4 missiles from the family which has a range of 3500 km. It is reported that more members of K-family — reportedly to have been codenamed



K-5 and K-6 — with ranges of 5000 and 6000 km are also under development. The early development trials of K-15 and K-4 missiles had begun in the early 2010s.

The strategic importance of SLBMs

The capability of being able to launch nuclear weapons submarine platforms has great strategic importance in context of achieving a nuclear triad, especially in the light of 'no first use' policy of India. The sea-based underwater nuclear capable assets significantly increases the second strike capability of a country and thus boosts its nuclear deterrence. These submarines can not only survive a first strike by the adversary but also can launch a strike in retaliation thus achieving Credible Nuclear Deterrence. The 2016 commissioned nuclear powered Arihant submarine and its class members which in the pipeline, are the assets capable of launching missiles with nuclear warheads. The development of these capabilities is important in light of India's relations with the two neighbours China and Pakistan. With China having deployed many of its submarines, including some which are nuclear powered and nuclear capable, this capacity building is crucial for India's nuclear deterrence. In November 2018, after INS Arihant became fully operational, Prime Minister Narendra Modi had tweeted, "In an era such as this, a credible nuclear deterrence is the need of the hour. The success of INS Arihant gives a fitting response to those who indulge in nuclear blackmail."

The recent tests

In the third week of January this year, DRDO conducted two successful tests of the K-4 missile from submerged platforms off the coast of Andhra Pradesh in a span of six days. *These tests were a key step towards ultimately deploying K-4 on INS Arihant, which already has K-15 onboard.* In the Saturday's test, Shaurya was examined for several advanced parameters compared to its earlier tests, according to sources. *Shaurya, like many of the modern missiles, is a canister-based system, which means that it is stored and operated from specially designed compartments. In the canister, the inside environment is controlled thus along with making its transport and storage easier, the shelf life of weapons also improves significantly.* While DRDO has been conducting these tests, there has not been any official communication from the agency about them, possibly because of classified nature of K family missile projects and their close link to the Advanced Technology Vehicle (ATV) project of which Arihant class vessels are part of. These recent tests of these systems can also be looked at as a strong message to China and Pakistan in light of the present situation in the region.

HOW INDIAN ARMY'S NEW MULTI-MODE HAND GRENADES ARE DIFFERENT

The Ministry of Defence on Thursday announced it had signed a contract with a Nagpur-based private entity for supply of 10 lakh of units indigenously designed and developed *Multi-Mode Hand Grenades (MMHG)* to the Indian Army at a cost of over ₹400 crore. *These grenades will be replacing the World War-II vintage 'Mills Bomb' type 36M hand grenades now used by the Army.* A look at the features of the MMGH, and why they are considered an improvement over those currently in use.

The No 36 grenades currently in use

In the early 20th century, militaries across the world started using fragmentation grenades, whose casings are structured for it to break into small fragments which can cause further harm following the explosion. The peculiar pineapple-like look was given because the outside segments and



grooves aid the fragmentation of the casing. In the further improved designs, the grooves and segments were put from the inside and pineapple like outer structure was also retained for better grip. *For several years now, the Indian Army has been using the World War vintage 36M hand grenade. The number refers to a variant of the 'Mills Bomb' which are British origin grenades and these grenades also have the pineapple shape.* These grenades can be fired from the rifle too. The 36M have been manufactured by the facilities of the Ordnance Factory Board (OFB) for the Armed forces.

The Multi-Mode Hand Grenade

“Grenades of natural fragmentation type have been in use by the infantry world over for a long time. Indian Army still uses the 36M, a grenade which also has severe reliability problems and uneven fragmenting pattern making it unsafe even to the thrower. The multi-mode grenade has been developed to overcome these defects. It uses preformed cylindrical mild steel pre-fragments to achieve uniform distribution,” says the official page of the DRDO’s facility Terminal Ballistic Research Laboratory (TBRL) which has developed the MMHG. *The MMHG can be used in two different structures resulting in two different modes — defensive and offensive. The grenades being used by the forces in India till now have been mainly the defensive mode grenades, which means that they are to be hurled when the thrower is in a shelter or has a cover and the target is in an open area and can be harmed by fragmentation. On the other hand, the offensive grenades do not fragment, and the adversary is harmed by the blast or is stunned while the thrower is safe. For the MMHG’s defensive mode, the grenade has a fragmenting sleeve and a lethal radius of 10 metres. In the offensive mode, the grenade is without a sleeve and mainly used for blast and stun effect. In the offensive, it has a lethal radius of 5 meters from point of burst.*

The supply of MMHG

The Acquisition Wing of the MoD on Thursday signed a contract with Economic Explosive Ltd — EEL is a subsidiary of Nagpur-headquartered Solar Group — for the supply of 10 lakh MMHG to the Indian Army at an approximate cost of Rs 409 crore. For conducting field tests of the grenade, the DRDO had transferred the technology to the company four years ago. The grenade has been tested in various types of conditions and is said to have achieved 99 per cent safety and reliability. The MoD press statement in this regard said, “This is a flagship project showcasing public-private partnership under the aegis of Government of India (DRDO and MoD) enabling ‘AtmaNirbharta’ in cutting edge ammunition technologies and accomplishes 100 per cent indigenous content.” Officials said the development of the grenade had begun around 15 years ago and along with the DRDO facility, establishments of Army and OFB have also played a role in the development. According to the company website, the product has a shelf life of 15 years from the date of manufacturing if stored under normal circumstances. The website also states that the product has twin delay tubes for additional safety and 3800 uniform fragments for higher lethality.

ICGS KANAKLATA BARUA: THE LEGACY OF A FREEDOM FIGHTER

A Fast Patrol Vessel (FPV) named ICGS Kanaklata Barua was commissioned in the Indian Coast Guard on Wednesday, in Kolkata. It is named after a teenage freedom fighter who was shot dead in Assam during the Quit India Movement.



What is the ship?

It is the fifth and last in a series of FPVs built by *Garden Reach Shipbuilders and Engineers (GRSE)* Ltd. The other four are ICGS Priyadarshini (named after Indira Gandhi), ICGS Annie Besant, ICGS Kamala Devi (after Kamala Devi Chattopadhyay), and ICGS Amrit Kaur. These FPVs are upgraded versions of the inshore patrol vessels with a modified form of the hull and can achieve a speed of 34 knots. Such vessels have also been delivered to Indian Navy by GRSE. In the Coast Guard these FPVs and their earlier versions belong to the *Rajashree class of patrol vessels*. The previous versions were named ICGS Rajashree, Rajtanag, Rajkiran, Rajkamal, Rajdoot, Rajveer etc; the modified versions are named after freedom fighters. Officials said *these are suited for patrolling, maritime surveillance, anti-smuggling, anti-poaching operations and also for fishery protection, and rescue and search missions*. These FPVs are medium-range surface vessels with a length of around 50 m, and a displacement of over 300 tonnes.

Who was Kanaklata Barua, after whom it is named?

One of the youngest martyrs of the Quit India Movement, Kanaklata Barua has iconic status in Assam. Barua, then 17, led the Mukti Bahini, a procession of freedom fighters to unfurl the Tricolour at Gohpur police station on September 20, 1942. When police did not let them move forward, an altercation led to firing, killing Barua at the head of the procession. “She had joined the Mrityu Bahini [a kind of a suicide squad] just two days before the incident,” said Sheila Bora, retired professor of Dibrugarh University, who has authored a monograph on Barua. *“The squad strictly admitted members aged 18 and above but Kanaklata was an exception. She wanted to lead the procession and after much persuasion she was allowed to.” Even as Barua fell to bullets, she did not let go of the flag. “She did not want it to touch the ground. Another woman volunteer behind her — Mukunda Kakoty — came and held the flag, and she, too, was shot,” said Bora.*

How important is her legacy?

The Coast Guard had named an earlier ship after her. The previous ICGS Kanaklata Barua was commissioned in 1997 and decommissioned in 2017. During its 20-year service, it participated in many search and rescue missions, seizure of foreign fishing vessels venturing into Indian waters and evacuation missions. The ship was dismantled in 2018 and sold as scrap.

GUNNERS DAY AND THE ROLE OF THE ARTILLERY IN INDIAN ARMY

The Regiment of Artillery of the Indian Army is celebrating the 193rd Gunners Day today marking the date in 1827 when the Five Bombay Mountain Battery, equipped with 2.5 inch guns, was raised in the British Indian Army.

The Artillery and its Gunners

One of the basic warfare lessons is that greater the distance from which one can target the enemy, greater the flexibility one can achieve for ground manoeuvres. From the catapults and cannons used in ancient times, the evolution of mechanical projectiles, to the modern day artillery guns which are integrated with network centric warfare, the role of gunners has always been a winning factor in the battlefield, proving to be a crucial support system to the other fighting arms. The artilleries of Mughals, Marathas and those of Sikh armies among other historic entities have played a major role in their successful campaigns. The foundation of the Regiment of Artillery was



laid on September 28 in 1827 when Bombay Artillery, later renamed 5 Bombay Mountain Battery, was raised. This day is celebrated by the Regiment of Artillery as Gunners Day. In May 1857, the mutiny by Indian soldiers started in the artillery of the Army of the Bengal Presidency. The incident prompted a complete ban on Indian artillery units, except the mountain artillery batteries in select provinces. The decision was reversed in the mid-1930s when the first of the field regiments — which support the other formations on the field — of the Indian Army were raised. With the motto 'Sarvatra Izzat-O-Iqbal – Everywhere with Honour and Glory', the regiment boasts of one Victoria Cross, one Distinguished Service Order, 15 Military Crosses during the pre-independence era and one Ashok Chakra, seven Maha Vir Chakras, nine Kirti Chakras, 101 Vir Chakras, 63 Shaurya Chakras, six Bar to Sena Medal, 485 Sena Medals besides many other decorations.

The present day Artillery

Today, the Artillery of Indian Army consists of a dynamic inventory which ranges from Ballistic Missile, Multi-Barrel Rocket launchers, High Mobility Guns, Mortars Precision Guided Munitions for destruction of enemy targets to Radars, UAVs and Electro optic devices for locating and carrying out Post Strike Damage Assessment (PSDA). The Regiment of Artillery has played a key role in all the post independence conflicts with the neighbours including the Kargil War. The importance of the artillery in conventional warfare remains intact, especially with the artillery guns playing a major role in the 'Integrated battle groups'. These battle groups are formations comprising artillery, mechanised infantry and armoured and infantry elements along with the modern day force multipliers like UAVs and electronic warfare systems. The artillery fire can be used for suppressive and destructive purposes to get an upper hand over the enemy. Around 30 years after the acquisition of the Bofors guns in 1980s which proved decisive in Kargil war, two more artillery guns — the K9 Vajra of the Indian-South Korean make and US sourced M777 Ultra Light Howitzers — were inducted into the Indian Army in 2018. While Defence Research and Development Organisation's (DRDO) Dhanush is in the pipeline for induction, its Advanced Towed Artillery Gun System (ATAGS) is in its trial stages.

The evolving role of the Artillery

Along with its role in conventional battlefield, artillery is extensively being deployed and used in the counter insurgency (CI) battles. Earlier the artillery used to be avoided in counter insurgency operations because of the concern of the collateral damage, but with the advent of precision ammunition, its role has attained a lot of importance. Artillery formations have been deployed in counter insurgency operations in Jammu and Kashmir as well as the north eastern theatre by the Indian Army. With the introduction of self-propelled and automated artillery weapon systems, the footprint of artillery has reduced because of removal of ancillary systems. These advancements have also helped in increasing the survivability of the systems against the enemy fire because their ability to manoeuvre in all types of terrains has also increased. The introduction of 'force multipliers' like satellite communication, UAVs, networked electronic systems and artificial intelligence have increased the efficacy of artillery and have again underlined its role as a decisive arm on the battlefield.



THE RIGHT BALANCE

Long after Shaheen Bagh became a potent symbol of democratic resistance against a discriminatory law, the Supreme Court has ventured to hold that any such indefinite blockade of a public pathway is unacceptable. And that the administration ought to take action to remove “encroachments and obstructions” placed during such protests. The Court’s assertion was made even while “appreciating the existence of the right to peaceful protest against a legislation”. On the face of it, the Court’s view arises from a straightforward balancing of two contrasting rights — the right to protest and the right to free movement. However, a moot question is whether the manner and content of a protest should always conform to forms deemed acceptable by the law. Protests, by their very nature, are not always rooted in legality, but rather derive legitimacy from the rightness of the underlying cause and the extent of public support. In many cases, they are against laws and regulations perceived as unjust. A flash strike, a spontaneous road block, a call for a complete shutdown, or a campaign to fill up jails by defying prohibitory orders — each of these is not, in a strict sense, legal; but, at the same time, it is an inevitable part of the culture of protest in a democracy. In this case, the Court rightly notes that the administration neither negotiated with the protesters in Shaheen Bagh nor tried to clear the scene.

Any finding that a peaceful protest had continued too long, or in a place deemed inconvenient to others, should not encourage the administration to seek early curbs on the freedom of assembly. After the pandemic led to the end of the protests, there was little left for adjudication, and the Court’s remarks might come across as a gratuitous offering to administrators looking to delegitimise protests. Following the earlier judgment that any ‘bandh’ is illegal, courts routinely stayed sector-wide strikes. Another aspect of the present ruling is the assertion that protests should be confined to “designated places”. Such judicial certitude may end up undermining the larger democratic need for public expression of dissent in a manner and place that would be most effective. While notified demonstrations are subject to regulations regarding time and space, it may not be possible to extend the same to spontaneous, organic and leaderless protests driven by a cause. The ruling should not form the basis for suppression of such protests by the force of the state. Both principles — the need for balance between the right to protest and the right to free movement, and the rule that protests should take place at designated spots — are salutary from an administrative point of view. But these cannot become unquestionable axioms to the point of rendering any and all protests that cause inconvenience to others the target of the strong arm of the state.

SC CRITICISES GOVT.’S TABLIGH AFFIDAVIT

Chief Justice of India (CJI) Sharad A. Bobde pulled up the Union government for mistreating the Supreme Court for having a “junior officer” file an “evasive” affidavit containing “unnecessary, nonsensical” averments on petitions challenging the discriminatory and communal coverage of the Tablighi Jamaat incident by some sections of the media. Chief Justice Bobde addressed Solicitor-General Tushar Mehta. Mr. Mehta promised to file a fresh affidavit. “We want the Secretary of the department [Information and Broadcasting] to file this affidavit... The Secretary has to say what he thinks of the incidents. We do not want any unnecessary, nonsensical averments like those made now,” the CJI said.



'Most abused freedom'

Senior advocate Dushyant Dave, appearing for petitioners led by Jamiat Ulama-i-Hind, said the present government affidavit even accused the petitioners of trying to gag the freedom of speech. "Freedom of speech may be one of the most abused freedom in recent times," CJI Bobde, heading a three-judge Bench comprising Justices A S. Bopanna and V. Ramasubramanium, replied. The government affidavit had claimed that a "blanket gag order" on the media in this issue would violate a journalist's right to free speech and an informed citizen's right to know. The hearing began with Chief Justice Bobde asking whether the regulatory provisions of the Cable TV Act, which are meant for cable networks, would be "exercisable" on TV broadcasts. "We want to know if the government has any power to question or ban TV broadcasting signals," he asked the parties. The CJI said regulatory bodies had issued advisories to the TV channels. Mr. Dave argued that the Information and Broadcasting Ministry had indeed the power to ban TV broadcasting under the Cable TV Act. He referred to how Malayalam channel Asianet was banned for several hours in March under the Act in relation to their coverage of the Delhi riots. The court said it would hear arguments on this point and adjourned the case for two weeks. *The petitions have said that certain sections of the media were spreading bigotry and communal hatred in relation to the Tablighi Jamaat conference held in the Nizamuddin Markaz area.*

GOOD CONDUCT IS KEY TO EARLY RELEASE

The length of a prison sentence or the gravity of the crime cannot be the sole basis for denying a convict premature release from jail, the Supreme Court has held in a judgment. A three-judge Bench of Justices N.V. Ramana, Surya Kant and Hrishikesh Roy said an assessment of the proclivity to commit a crime upon release "must be based on antecedents as well as the conduct of the prisoner while in jail, and not merely on his age or apprehensions of the victims and witnesses". In a judgment on September 30, Justice Kant wrote: *"Society has a right to lead a peaceful and fearless life, without free-roaming criminals creating havoc in the lives of ordinary peace-loving citizens. But equally strong is the foundation of reformative theory, which propounds that a civilised society cannot be achieved only through punitive attitudes and vindictiveness."* The court said reformative justice should not merely focus on public harmony, but should foster brotherhood and mutual acceptability. First-time offenders should especially be given a second chance at life. "First-time offenders ought to be liberally accorded a chance to repent their past and look forward to a bright future," the court observed.

Prisoners' plea

The judgment came in a plea made by two prisoners who have been incarcerated for a botched kidnapping for ransom case in Uttar Pradesh. They are in their early middle age with a record of good conduct in jail. The court, ordering their release, said that their "action of kidnapping was nothing but a fanciful attempt to procure easy money, for which they have learnt a painful life lesson".

INTENTION TO ABET SUICIDE CANNOT BE ASSUMED, IT HAS TO BE EVIDENT

The intention to abet suicide cannot be assumed and it needs to be backed by solid, visible proof, the Supreme Court held in a judgment. A three-judge Bench of Justices N.V. Ramana, Surya Kant and Hrishikesh Roy said every crime should be backed by a "state of mind" or mens rea or



intention. The police have to establish that an accused wanted to abet the suicide. 'Abetment' is defined in Section 107 of the Indian Penal Code (IPC). Its ingredients consist of instigating a person or to intentionally aid a person to do or not do something. Similarly, *the crime of 'abetment of suicide' under Section 306 of the IPC involves instigating or actively aiding a person to take his own life. The police cannot assume the intention (mens rea) of the abettor of a suicide. It has to be evident, it held.*

'Something on record'

"In order to prove mens rea, there has to be something on record to establish or show that the appellant herein had a guilty mind and in furtherance of that state of mind, abetted the suicide of the deceased. *The ingredient of mens rea cannot be assumed to be ostensibly present but has to be visible and conspicuous*", Justice Roy, who authored the judgment, said. The judgment came on an appeal filed by Gurcharan Singh, who was convicted of abetting the suicide of his wife 22 years ago in Punjab. The trial court found him guilty, saying the woman was pushed into taking her own life when her hopes of a happy relationship was dashed by his "wilful neglect". There was, however, no direct evidence of any cruelty on his part towards her. The trial court had even acquitted the man of dowry harassment charges. The High Court agreed with the trial court, saying the death was a cause of the "circumstances and the atmosphere" at home. In his appeal before the Supreme Court, Singh argued about the complete lack of evidence to show that he had instigated or intentionally aided his wife to take her own life. here was no proof that he wilfully neglected her, he said. Setting aside his conviction, the court said it cannot make conjectures about why a young woman with two small children chose to take her own life.

BABRI MASJID ACQUITAL

The ruins of the Babri Masjid were cleared in record time by the hordes of vandals mobilised for demolishing it. Some detritus was still left, though: a belief among many that justice would be done and the Constitution and the rule of law would be upheld if the criminal court punishes those who plotted the events of December 6, 1992. Even when the Supreme Court handed over the empty site to those who wanted the mosque brought down to build a Ram temple, its recognition of the demolition as an "egregious violation of the rule of law" gave rise to hope that the ends of justice would be served by the punishment of those who mobilised the vandals. A Special CBI Court in Lucknow has now cleared the remaining debris with an unconscionable judgment. Throwing to the winds the Supreme Court's observations on the demolition, the trial court has in effect given judicial legitimisation to the 'Ram Janmabhoomi movement' by acquitting all those indicted for conspiracy to bring down the structure. Its conclusions are drastic and defy logic and fact. *The court's finding that the demolition was not planned in advance flies in the face of the entry of more than a hundred thousand volunteers into Ayodhya that day, armed with crowbars, spades, hoes and ropes and every implement needed to bring down a sturdy structure and clear the site. The proponents of the movement, headed by L.K. Advani, Murli Manohar Joshi and Uma Bharti among others, had positioned themselves in vantage points to witness the occasion and celebrate with pride what ought to have caused shame and disgust.* It is indeed true that it is not easy to prove a conspiracy, as it essentially takes place in secret. This is where courts must draw reasonable inferences from the circumstances. But in a conspiracy of this nature, it is easy to see that those involved were "marching under a banner", an image the Supreme Court had once referred to while explaining the ingredients of a conspiracy. In this case, apart from the political mobilisation and the purported intent to assemble on a particular day, the court had with it sufficient evidence *that*



there was studied inaction on the part of the State, whose Chief Minister was one of the accused, and the unambiguous and open threats to the structure voiced by many of the movement's protagonists. The dissembling Kalyan Singh, as Chief Minister then, had given what, in hindsight, was an obviously false assurance to the highest court and the National Integration Council that nothing but a symbolic 'kar seva' would take place. Specific instructions appeared to have been given to the security forces not to stop the 'kar sevaks' or hinder their plans. How else would one explain the events? When the crowd went into a frenzy, goaded on by provocative speeches by the dignitaries, and vandals went up the dome, the accused would have the court believe that they were actually trying to restrain the mob and prevent the demolition! The possibility of tampered audio and video evidence or even disavowals on record would not undo the cumulative effect of the logistical and financial preparation, besides the communal mobilisation. Mr. Advani, who had then claimed it was the saddest day of his life, now says the en masse acquittal is a vindication of the movement. This indicates that the objective of the mobilisation, exemplified by his rath yatra, was always to alter the status quo with violence. *The Manmohan Singh Liberhan Commission had laid bare the entire conspiracy in its damning report, but unfortunately, a probe under the Commission of Inquiry Act has no binding value, whereas the evidence adduced at the trial alone matters.* It is, of course, the responsibility of the CBI to prove the element of conspiracy, the details of the advance mobilisation, the "meeting of minds" that is required to prove a plot and its broad contours. That the agency failed is no surprise. From the beginning, the police investigation has been marked by bungling. When the main events were covered by two FIRs, the U.P. government initially failed to notify both of them while designating courts for trial. The Allahabad High Court quashed the flawed notification, and the State government's failure to rectify the irregularity resulted in separate proceedings in Lucknow and Rae Bareilly. *The CBI, instead of challenging the State's rejection of its request for curing a technical defect, filed a supplementary charge sheet after omitting the 'conspiracy' charge. The Supreme Court later said this derailed the joint trial and resulted in separate proceedings in two places. In 2017, the Supreme Court revived the conspiracy charge, directed the trial court to resume day-to-day trial and sternly reminded the agency that it was because of its failure and that of the State government that a crime that shook the secular fabric of the Constitution had not seen justice for 25 years.* Whether a politically hamstrung agency could have successfully prosecuted such a sensitive case is a moot question. But the results are there for all to see. Even allowing for the possibility that the judiciary is in close alignment with the executive, it is unacceptable to see *a court going so far as to parrot the specious theory advanced by the demolition squad from the BJP-VHP-RSS family for years that the destruction was a "spontaneous act".* All those who went through that disgraceful phase in India's political history know that the demolition was only the culmination of a revanchist movement. The period was marked by communal mobilisation, holding of processions to gather 'bricks' meant for constructing a temple, and an attempt to storm the site in 1990, which ended in bloodshed. Given this grisly background, and the grave implications that the exoneration of those who demolished a religious structure would have on public trust in the judicial system, it is imperative that the CBI goes on appeal. The cause of communal amity cannot afford successive judicial setbacks to both secular values and the rule of law.



WHERE IS THE SENTINEL GUARDING OUR RIGHTS? (DUSHYANT DAVE - SENIOR ADVOCATE IN THE SUPREME COURT OF INDIA AND PRESIDENT OF THE SUPREME COURT BAR ASSOCIATION)

In P.K. Ghosh v. J.G. Rajput (1995), the Supreme Court held, “Credibility in the functioning of the justice delivery system and the reasonable perception of the affected parties are relevant considerations to ensure the continuance of public confidence in the credibility and impartiality of the judiciary. This is necessary not only for doing justice but also for ensuring that justice is seen to be done.” In its own words, the Supreme Court has been assigned the role of a “sentinel on the qui vive” as regards fundamental rights. The right to get redress from the Court is itself a fundamental right, and the Court cannot abandon its own duty in this regard.

Exercise of power

Since assumption of office by Chief Justice J.S. Khehar in 2017, the Court has increasingly come under the public gaze not for its role as the protector of the Constitution but for its repeated failures. Successive Chief Justices have failed to stop the decline of the Court. With the Court upholding the Chief Justice as ‘Master of the Roster’, in a debatable judgment in 2018, Chief Justices have used their powers to constitute Benches and allocate cases to such Benches in a highly selective manner. This defeats the fundamental principle of the rule of law. There is no doubt that the Chief Justice must be the administrative head. But he must exercise his powers in a fair and just manner. He must not constitute Benches and allocate cases to those Benches in a manner which tilts the balance in favour of the executive. *Decisions in some of the most important matters affecting the nation, the Constitution, democracy, and the people and their fundamental rights have been taken in favour of the executive, such as in the Ayodhya case, the Rafale case, the Birla-Sahara case, and the order for a National Investigation Agency probe into the Hadiya case. On the other hand, the Court refuses to decide on the challenge to electoral bonds, the removal of Article 370, and habeas corpus cases, among others.* These decisions have all come from Benches constituted by respective Chief Justices. The Supreme Court consists of a maximum of 34 judges although it generally functions with around 30. Yet, constitution of Benches and allocation of cases have left much to be desired in the last five years. *For instance, diverse Benches, all presided by Justice Arun Mishra (now retired), were assigned as many as eight cases of the Adani Group.*

Disturbing events

The outcome of these cases is not the subject matter of this debate. *The issue is, does justice appear to have been done? Perhaps, the abject failures of the Court were influenced by different but disturbing events involving these Chief Justices. Former Arunachal Pradesh Chief Minister Kalikho Pul's suicide note, which otherwise is an admissible piece of evidence, carried serious allegations against “two senior-most judges” of the Supreme Court. Pul's wife requested an inquiry, which Chief Justice J.S. Khehar and his colleagues stopped. Contrast this with the Supreme Court ordering an investigation by the Central Bureau of Investigation into the suicide of actor Sushant Singh Rajput, where no suicide note was found. The same Court declined to order any inquiry into the demise of judge B.S. Loya, thereby failing to reassure the subordinate judiciary that it stands with it. Later, the fact that Chief Justice Dipak Misra presided over the Constitution Bench hearing matters related to the medical college scam, despite the FIR naming unknown persons including constitutional functionaries of misconduct, perhaps weakened his authority. Subsequently, many including retired judges have been chargesheeted in that case. Then came the sexual harassment charge against Chief*



Justice Ranjan Gogoi. Soon after the complainant's charge, Chief Justice Gogoi, Justice Arun Mishra and Justice Sanjiv Khanna presided over a Bench on a Saturday to condemn the complainant at the instance of the Solicitor General in a matter that they stated was "of great public importance touching upon the independence of judiciary". The entire judiciary and executive demonstrated their high-handedness in the case. The complainant later withdrew her complaint and the police filed a report saying no offence was disclosed. Another Bench presided by Justice Mishra entertained a strange affidavit from a lawyer and ordered an inquiry by Justice A.K. Patnaik (retired) into the charge of attack on the judiciary stating: "This is with respect to the contents of the affidavits, whether the affidavits are correct or not." The Court also directed the top agencies to co-operate and investigate this matter. Simultaneously, her complaint was found unsubstantiated by a three-member committee headed by Justice S.A. Bobde and comprising Justice Indu Malhotra and Justice Indira Banerjee. The report has not seen the light of day. *The complainant was reinstated just after Chief Justice Bobde took over. This vindicated her on the one hand and proves that every action taken by the Court and the police were unconstitutional.* Did these events influence the exercise of the powers by these three masters of the roster? When Chief Justice Bobde took over, I had written that his appointment gave "fresh hope to all stakeholders in the administration of justice", but that his acceptance of the Presidential Proclamation from P.K. Mishra, Principal Secretary to the Prime Minister, raised serious concerns about the times to come.

Functioning of the court

Since the lockdown, the Supreme Court has been functioning in a truncated manner. Despite repeated requests from the Bar, virtual hearings have not improved. While the High Courts have been using better systems, the Supreme Court persists on using a system which does not allow all the judges to sit every day. As a result, generally seven-eight Benches sit every day as against 13-15 which can be constituted by the master of the roster. The Court, which in March stated that the migrant exodus was triggered by panic created by fake news, has been repeatedly adjourning the matter on the role of the media in publishing/ broadcasting false and vicious reports on the Nizamuddin Markaz vilifying a section of Indians. Is the Court not the protector of minorities? The working of the Court is far from satisfactory although the Court claims that sufficient number of matters are being heard. The Bar and litigants feel otherwise. The constitution of Benches and allocation of matters even under the present dispensation continues to be subjective. Senior judges are not assigned PIL matters and almost all matters raising important issues in respect of acts of commissions and omissions by the executive have been allocated to Benches constituted by the Chief Justice. The Court needs to re-address its role assigned under the Constitution. The Supreme Court must reassert emphatically that it is truly the sentinel on the qui vive as regards the fundamental rights of all citizens.

WHEN IS AN ACCUSED'S STATEMENT ADMISSIBLE IN A TRIAL?

A former executive producer of Dharmatic Entertainment, the sister concern of Karan Johar's Dharma Productions, told a Mumbai court on Sunday (September 27) that he was made to sign a statement against his will by senior officials of the Narcotics Control Bureau (NCB). Kshitij Prasad also told the court that he was forced to falsely state that Johar and some others consume drugs. The NCB has denied the accusations. It has said that the investigation was being carried out in a professional manner, and that Prasad was not cooperating with the investigators. So far, 20 accused have been arrested in the drugs case which the NCB is probing. Some of the accused,



including actor Rhea Chakraborty, have told the court that they were coerced into giving self-incriminatory confessions, and have retracted from them.

What is 'self-incrimination'?

One of the methods employed by investigating agencies to collect evidence in a criminal investigation is interrogation of the accused. However, a safeguard in criminal law across the world, specified also in the International Covenant on Civil and Political Rights, states that no person charged with a criminal offence can be compelled to testify against herself, or to confess guilt. This is often referred to as the right to remain silent or the right against self-incrimination. *A common reference about this in popular culture is the "Miranda rights" or "Miranda warning".* It refers to the law in the United States after a 1966 Supreme Court case 'Miranda vs Arizona', which makes it obligatory for police to inform a person in custody that they have the right to remain silent, and that anything they say can be used against them in court. In India, Article 20(3) of the Constitution states: "No person accused of any offence shall be compelled to be a witness against himself." This means that an accused cannot be forced by an investigating agency to give a confession or any information which may establish their involvement in an offence, or that of others.

What is the law in India on confessions by accused?

The Indian Evidence Act, 1872, states that confessions obtained through inducement, threat, or promise are irrelevant in a criminal proceeding. *Any statement made before the police is inadmissible as evidence as per the Act.* A voluntary confession by an accused can be given only before a magistrate under Section 164 of the Criminal Procedure Code. This is to ensure that police do not force statements out of accused in their custody through threats, violence, and harassment. The magistrate who records the confession is expected to inform the accused beforehand that she is not bound to give the statement, and that it could be used against her. The magistrate has to ensure that the statement is being given with free will, and that no police officer is present during its recording. If a statement is retracted subsequently, the courts may rely on them as long as there is other evidence which corroborates the statements.

Is this true of all cases?

Some special Acts, including the now repealed Terrorism and Disruptive Activities(Prevention) Act (TADA) and Prevention of Terrorism Act (POTA), as well as the existing Control of Organised Crime Acts in Maharashtra and Gujarat, permit confessions to be recorded by a police officer above a specified rank. And what about confessions given in cases involving the Narcotic Substances and Psychotropic Substances (NDPS) Act like the current case involving Rhea Chakraborty and others? Section 67 of the Act gives an officer the power to call for information from any person or examine him during an inquiry. However, the provision has seen differing judgments and opinions over the years. One argument is that the official given this power under the NDPS Act should be treated as a 'police officer', and such statements should not be admissible as evidence. The contrary opinion is that *Section 67 does not state that the officer is a 'police officer'; hence the statement can be treated as a confession and be relied upon as evidence.* In 2013, the Supreme Court in 'Tofan Singh vs State of Tamil Nadu' considered these arguments. The court said that the term 'police officer' is not defined under the Evidence Act or the Criminal Procedure Code, and its meaning ought to be assessed from the "perception of the common public", and from whether the person concerned "is capable of exercising influence or authority over a person from whom a confession is obtained".



The court referred the case to a larger Bench for consideration of these issues. Arguments before a Bench of Justices R F Nariman, Navin Sinha, and Indira Banerjee were concluded on September 16, and the order has been reserved.

Can the statements given by Chakraborty, the ex-staffer of Dharmatic Entertainment, and other accused be relied upon in this case?

In the drugs case, the NCB has said that during the investigation, a link was established from statements given by accused persons including Chakraborty. However, *she and a few others have told a court that they were coerced into giving these statements, and have retracted them.* But these statements are the basis for the summoning of others, including actors Sara Ali Khan, Shraddha Kapoor, and Rakul Preet Singh, who were called in for questioning. The Supreme Court order could determine the status of these statements, and whether they can be admissible during the trial eventually.

CAN THE POLICE SEIZE YOUR PHONE EVEN IF YOU ARE NOT AN ACCUSED?

The Narcotics Control Bureau (NCB), which is probing drug charges against actor Rhea Chakraborty and others, has seized and retrieved data from the mobile phones of Rhea and Jaya Saha – manager of late actor Sushant Singh Rajput. NCB has named Rhea and Shah as accused in its FIRs in the case. They also seized the phones of actresses Deepika Padukone, Shraddha Kapoor and Sara Ali Khan who are not accused in the case.

Can the police seize the phones of those under investigation?

Yes. Section 102 of the Code of Criminal Procedure gives the police the right to seize material they think will be valuable as part of investigation. The sections on the power of a police officer to seize certain property says, “ Any police officer, may seize any property which may be alleged or suspected to have been stolen, or which may be found under circumstances which create suspicion of the commission of any offence. Such police officer... shall forthwith report the seizure to the Magistrate having jurisdiction and where the property seized.” NCB, a central agency which is technically not police, gets similar powers of ‘search and seizure’ from the NDPS Act.

What if the person has not been named as an accused?

Section 102 of the CrPC gives the police the power to seize the mobile/laptop/private diary or anything that they think will help them investigate the case. It doesn't matter if the person is an accused or just a witness in the case as long as the police believe he/she has something that will aid the investigation.

Are there any safeguards to respect the privacy of the person whose phone is seized?

It is expected that an investigating officer takes personal devices for investigation alone and it is not to be leaked to anyone. However, if someone feels that his data is being leaked, he/she can approach the court hearing the matter seeking the agency be restrained from making leaks that could lead to defamation. “Like entire contents of private data is considered indiscretion on the part of the investigating agency,” an IPS officer said.



In the case of Deepika, Sara and Shraddha, the agency said that they had voluntarily given their phones. How does that work?

An IPS officer said that while generally they seize phones of accused, when it comes to getting data from witnesses or government agencies like land records in a particular case, there is also something called “handing over/taking over” for smoother operation. Seizing a particular document/device entails a proper procedure including seizing evidence in the presence of witnesses and doing a panchnama, sealing items and also taking hash value in case of electronic items to show it was not tampered with. Handing over/taking over is usually done without these detailed procedures and it means to hasten the process.

In what cases do agencies perform seizures and/or handing over/taking over?

Cases where there is a probability that the person could later claim in the court that the evidence was tampered with, agencies usually seize it so that there are safeguards against any allegations since all evidence is sealed in front of witnesses who can be called to confirm the same in a court. Handing over/taking over is usually reserved in cases where there are no chances of allegations like a government body handing over land records/ birth certificates to an agency. Usually while state police prefer seizures in most cases, while central agencies like the CBI at times use handing over/taking over.

What is hash value in cases of electronic goods?

When an agency seizes a mobile, laptop or any electronic devices, they have to take the hash value. *A hash value is basically an algorithm which is a specific numerical value that identifies the contents of the file at a particular time. If there is any attempt made to change the content of the device, the hash value will change. When the device is given to a forensic authority, to retrieve data, they are expected to go ahead only if the hash value recorded at the time of seizure is the same as the one on the device when they handed it over to them.* It ensures sanctity of the data. If during a raid, there are no experts to take hash value, officers are supposed to seal the phone in a bag which is then opened in front of cyber experts. *Even in cases of computers, officers are not supposed to switch off the computer – as data could be lost – and just pull out the wire and seal it.*

Are there cases where the hash value has not been provided to the accused?

In the Bhima Koregaon case where several activists and lawyer were arrested on the charges of inciting violence at the Elgar Parishad at Shaniwar Wada in Pune in 2017, the family members of some of the arrested accused alleged that the Pune police did not provide the hash value of the devices they seized from the residences of the accused person. The allegations were that the hash value in some cases was provided months later, thereby putting into question the sanctity of the data on the devices, the accused had alleged.

So when are the seized devices returned?

It depends on what the investigating agencies find on these devices. In case they do not find any evidence which is used in the chargesheet, the owner of the device or the investigating officer can file an application before the court that the device be returned. If it has important evidence, the person may have to wait till the end of the trial or after the evidence is taken on record by the court before the court agrees for it to be returned to the owner.



HOW IMPORTANT IS VICTIM'S TESTIMONY, AND IF ABSENCE OF SEMEN CAN RULE OUT RAPE

Uttar Pradesh Additional Director General (Law and Order) Prashant Kumar, while quoting a Forensic Science Laboratory report in the Hathras case, said no semen or sperm secretion was found in the viscera sample and the cause of death was trauma caused by assault. Kumar's statement, which seems to negate the rape allegation, has been challenged by several legal experts on the basis of the existing law as well as the various court rulings of the past. What does the law say about the issue?

How important is a victim's statement in a rape case?

There have been many cases where the victim's "reliable" testimony has been the sole basis for conviction of the accused, with the courts holding that the testimony in such cases requires no corroboration. Such testimony or solitary evidence, however, has to appear to be "absolutely trustworthy, unblemished, and should be of sterling quality", as per the Supreme Court's ruling in Krishna Kumar Malik vs State of Haryana. The "material contradictions" in statements of victims have many a time led to acquittal of accused in cases where there is no medical or corroborative evidence. In Hathras case, the statement of the victim before her death will hold the key when the case goes to trial. The victim in her statement to doctors during medical examination has claimed both physical assault as well as "complete" "penetration by penis" of the "vagina".

What does the law say about medical examination of the rape victim?

Section 164A of the Code of Criminal Procedure states that a woman, against whom rape has been committed or an attempt has been made, can be medically examined by a medical practitioner after her consent or on consent of a person competent to give it on her behalf. The examination has to take place "without delay" and the report is required to state her identity, age, the description of the material taken from her for DNA profiling, the marks of any injury, the general mental condition of the woman or any other material in reasonable detail. The report is required to provide reasoning for the conclusions and the exact time of commencement and completion of the examination. *In the Hathras case, the medical examination of the 19-year-old was conducted on September 22 at AMU's Jawaharlal Nehru Medical College while the incident allegedly took place on September 14.*

What are the Centre's guidelines regarding the examination of the victim?

The Ministry of Health and Family Welfare, in its guidelines for medico-legal care for survivors or victims of sexual violence while defining the purposes of forensic medical examination, states that *"a sexual act may not only be penetration by the penis but also slightest penetration of the vulva by the penis, such as minimal passage of glans between the labia with or without emission of semen or rupture of the hymen"*. The doctor, according to the guidelines, is also required to collect information about post-assault activities like "changed clothes, cleaned clothes, bathed/urinated/showered/washed genitals and rinsing mouth, drinking, eating (in oral sexual violence)/had sexual intercourse after the sexual violence" as same would have bearing on trace evidence. The guidelines also state that *"the likelihood of finding evidence after 72 hours (3 days) is greatly reduced; however it is better to collect evidence up to 96 hours in case the survivor may be unsure of the number of hours lapsed since the assault"*. The guidelines also state that spermatozoa can be *"identified only for 72 hours after assault" and asks doctors to refrain from taking swabs for*



spermatozoa after three days of assault. "In such cases, swabs should only be sent for tests for identifying semen," read the guidelines, adding evidence on the outside of the body and on materials such as clothing can be collected even after 96 hours.

How is rape defined in law?

Under Section 375 of Indian Penal Code, a man is said to have committed *rape of woman not only when there is penetration "to any extent" of penis into her vagina (labia majora included), mouth, urethra or anus but also when there is insertion of any object or a part of the body into her. It is also rape when the man "applies his mouth to the vagina, anus, urethra of a woman..."*. However, the acts would amount to rape only when the same were committed *against the will of the woman*, without her consent — defined as *"unequivocal voluntary agreement"* in the forms of words, gestures or any form of verbal or non-verbal communication — and *when her consent has been obtained by putting her or any person in whom she is interested in fear or death or of hurt*. It is also rape when at the time of giving consent, *there was unsoundness of mind in the woman or intoxication or after administration of some substance due to which she is unable to understand the nature and consequences of her consent. The acts are rape, with or without consent, when the girl is under 18 years of age. While the punishment for rape is rigorous imprisonment of at least 10 years or life, the sentence in a case where the victim has died or has been subjected to gangrape is at least 20 years of jail, which can be extended to imprisonment for the remainder of convict's natural death. The convict can also be sentenced to death where the victim has died.*

What have courts held about the absence of semen stains on a victim's person or her clothes?

The Supreme Court, in 2014 in a rape case, upheld a Delhi High Court decision, which had relied on a passage from 'Medical Jurisprudence and Toxicology' stating that *"...to constitute the offence of rape it is not necessary that there should be complete penetration of penis with emission of semen and rupture of hymen"*. The apex court in Wahid Khan vs. State of MP reiterated that it has been the court's consistent view that even a slightest penetration is sufficient to make out an offence of rape and depth of penetration is immaterial. In Ranjit Hazarika Vs. State of Assam (1998), the Supreme Court rejected the doctor's opinion in which he said "no rape appeared to have been committed" on the basis of absence of rupture of hymen and injuries on the private parts of the victim.

HATHRAS CASE

The registration of multiple police cases in Uttar Pradesh on charges of conspiracy and sedition is an insensitive, albeit unsurprising, response to the legitimate outrage sparked by the way in which its officials had handled the aftermath of the gang rape and murder of a Dalit girl in Hathras. *The State administration is seeking to convert the outcry and political advocacy into a putative conspiracy to foment caste discord.* There seems to be inadequate recognition that initial attempts to deny that any rape took place and to prevent political leaders and the media from meeting the girl's family pointed to an administrative posture hostile to the doing of complete justice. It was only to be expected that such an attitude would create a backlash against the State government. The only way to restore its image is to display empathy for the victim and treat protests seeking justice as legitimate. Even though the suspects named by the 19-year-old before her death in a Delhi hospital have been arrested and the FIR includes the charge of gang rape, there are clear signs that the Yogi Adityanath government is adopting dubious tactics to prevent what it sees as



the crystallisation of public opinion against itself. Recognising that the formation of an SIT did not help undo the damage to the government's image, the Chief Minister recommended a CBI investigation. However, even that came across as a move to fob off any adverse order from the Allahabad High Court, which has taken suo motu cognisance of the matter.

Remarks by senior police officers to the effect that there was no evidence of rape — citing the absence of semen in swabs taken for forensic analysis — indicated an official reluctance to acknowledge the gang-rape part of the offence. Latest reports suggest that a journalist on his way to Hathras and three others have been detained. *They are also sought to be linked to the Popular Front of India, an organisation whose name came up in connection with recent riots and anti-government protests. This raises the suspicion of an attempt to control the narrative by resorting to a template of identifying members of a communal organisation as alleged conspirators and instigators of violence. The template includes the use of penal provisions relating to sedition and conspiracy and the projection of a theory that all protests and political activity against it constitute a plot to overthrow the government.* A responsive government would have endeavoured to extend a healing touch, reassure the victims, and reserve its wrath for the offenders. Instead, the Adityanath government is focusing on blaming political leaders, pressuring the victim's family and preventing the emergence of a united voice against sexual violence, attacks on the marginalised communities and the devastating effect an unregenerate caste hierarchy has on society.

HATHRAS CASE: ISSUES OF CONSENT, RELIABILITY IN NARCO AND POLYGRAPH TESTS

A spokesperson for the Uttar Pradesh government said on Friday (October 2) that polygraph and narcoanalysis tests would be conducted as part of the investigation into the alleged gangrape and murder of a 19-year old Dalit woman by four men of the Thakur caste in Hathras last month. The spokesperson said that the tests would be conducted on "all people on the accused and victim side", apart from "police officers involved in the case and other persons related to the case".

What are polygraph and narcoanalysis tests?

A *polygraph test* is based on the assumption that physiological responses that are triggered when a person is lying are different from what they would be otherwise. Instruments like cardio-cuffs or sensitive electrodes are attached to the person, and variables such as *blood pressure, pulse, respiration, change in sweat gland activity, blood flow, etc.*, are measured as questions are put to them. A numerical value is assigned to each response to conclude whether the person is telling the truth, is deceiving, or is uncertain. *A test such as this is said to have been first done in the 19th century by the Italian criminologist Cesare Lombroso, who used a machine to measure changes in the blood pressure of criminal suspects during interrogation.* Similar devices were subsequently created by the American psychologist William Marston in 1914, and by the California police officer John Larson in 1921. *Narcoanalysis, by contrast, involves the injection of a drug, sodium pentothal, which induces a hypnotic or sedated state in which the subject's imagination is neutralised, and they are expected to divulge information that is true.* The drug, referred to as "*truth serum*" in this context, was used in larger doses as anaesthesia during surgery, and is said to have been used during World War II for intelligence operations. More recently, investigating agencies have sought to employ these tests in investigation, and are sometimes seen as being a "softer alternative" to torture or "third degree" to extract the truth from suspects. However, neither method has been proven scientifically to have a 100% success rate, and remain contentious in the medical field as well.



Are Indian investigators allowed to put accused through these tests?

In 'Selvi & Ors vs State of Karnataka & Anr' (2010), a Supreme Court Bench comprising Chief Justice of India K G Balakrishnan and Justices R V Raveendran and J M Panchal ruled that *no lie detector tests should be administered "except on the basis of consent of the accused"*. Those who volunteer must have access to a lawyer, and have the physical, emotional, and legal implications of the test explained to them by police and the lawyer, the Bench said. It said that the 'Guidelines for the Administration of Polygraph Test on an Accused' published by the National Human Rights Commission in 2000, must be strictly followed. The subject's consent should be recorded before a judicial magistrate, the court said. *The results of the tests cannot be considered to be "confessions", because those in a drugged-induced state cannot exercise a choice in answering questions that are put to them. However, any information or material subsequently discovered with the help of such a voluntarily-taken test can be admitted as evidence, the court said. Thus, if an accused reveals the location of a murder weapon in the course of the test, and police later find the weapon at that location, the statement of the accused will not be evidence, but the weapon will be.* The Bench took into consideration international norms on human rights, the right to a fair trial, and the right against self-incrimination under Article 20(3) of the Constitution. "We must recognise that a forcible intrusion into a person's mental processes is also an affront to human dignity and liberty, often with grave and long-lasting consequences," the court said, observing that the state's plea that the use of such scientific techniques would reduce 'third degree' methods "is a circular line of reasoning since one form of improper behaviour is sought to be replaced by another".

Are investigators allowed to put people other than the accused in a criminal investigation — witnesses, victims, their families — through these tests?

The Supreme Court had said in its order that "no individual should be forcibly subjected to any of the techniques in question, whether in the context of investigation in criminal cases or otherwise", and expanded *the same rule to others who can be made to undergo the test only if they consent to it.* It had said that forcing an individual to undergo these tests amounts to an "unwarranted intrusion into personal liberty", but had left scope for "voluntary administration" of these techniques if the individuals gave consent. *The court examined the scope of Article 20(3), the right against self-incrimination, which states that no accused can be compelled to be a witness against himself. It said that while this requires a person to be formally named as an accused, other provisions of the Criminal Procedure Code extend this protection to witnesses as well.* With reference to victims, especially of sexual offences, the Bench said that irrespective of the need to expedite the probe in such cases, a victim of an offence cannot be forced to undergo these tests as it would be "an unjustified intrusion into mental privacy and could lead to further stigma for the victim".

In which criminal cases in recent years have these tests been used?

In most cases, investigating agencies seek permission for such tests to be done on accused or suspects, but rarely on victims or witnesses. Legal experts say that investigating agencies can submit to a court that the tests are being sought to help in their probe but consent or refusal to undergo the tests by an individual do not reflect innocence or guilt. Most recently, the CBI has sought to conduct these tests on the driver and helper of the truck that hit the Unnao rape victim in Uttar Pradesh in July last year. It also sought to conduct the tests on one accused in the Punjab National Bank alleged fraud case, but the court rejected the plea after the accused did not give consent. In May 2017, the founder of INX Media, Indrani Mukerjea, who is facing trial for the alleged murder of her daughter Sheena Bora in 2012, had offered to undergo the lie detector test,



which was refused by the CBI, stating that they had sufficient evidence against her. The polygraph test was also conducted on Dr Rajesh Talwar and Dr Nupur Talwar, who were accused of killing their daughter Aayushi and help Hemraj in Noida. The video of the narco analysis test on their compounder, Krishna, had been leaked. The Supreme Court in its judgment had warned against such leaks, calling it a “worrisome practice”.

RAJASTHAN IS AMONG THE TOP STATES WHEN IT COMES TO CRIMES AGAINST WOMEN

Data released by the National Crime Records Bureau (NCRB) for 2019 puts Rajasthan at the top when it comes to rape or attempt to rape cases. Between 2018 and 2019, there was a drastic increase of 49.11 per cent in cases of crimes against women in Rajasthan.

Where does Rajasthan stand in national figures for crime against women?

Overall, *Rajasthan stood second in crime against women, with a crime rate of 110.4 per lakh population; it is calculated by adding crimes registered under the Indian Penal Code (IPC) and Special and Local Laws (SLL). The list is topped by Assam with 177.8; however, it is one of the smaller states.* Assam and Rajasthan are followed by Haryana (108.5) and Odisha (103.5). The national average is 61.3. When it comes to IPC section 376 (rape), Rajasthan again tops the list with an incidence (FIRs registered) of 5,997 and 6,051 victims, translating into a crime rate of 15.9. The national average crime rate for rape is 4.8. For attempt to commit rape (Sec 376/511 IPC) too, Rajasthan tops the list with an incidence of 1,019 and 1,030 victims. Also, the rate of all cognisable crimes in Rajasthan (IPC+SLL) stood at 392.2 Interestingly, *Kerala tops the list with a rate of 1,287.7 while the national average is 367.4.* However, at 8.7 per cent, Rajasthan has the lowest pendency rate with police among all states when it comes to crime against women. The national average is 32.4 per cent.

How much is the difference between the 2018 and 2019 figures in Rajasthan?

In Rajasthan, more cases are being registered now. The figures for crime against women (IPC+SLL) for the state increased from 25,993 (2017) to 27,866 (2018) to 41,550 in 2019. So while there was an increase of 7.21 per cent from 2017 to 2018, the increase from 2018 to 2019 was a drastic 49.11 per cent. Overall IPC+SLL crimes have also shot up drastically. While there was an increase of just 1,873 cases between 2017 and 2018, the difference between 2019 and 2018 is of 53,848 cases, or an increase of 21.49 per cent. State capital Jaipur saw 2,957 more cases in 2018, compared to 2017, but the difference between 2019 and 2018 is 10,008 cases.

Why have the figures shot up drastically in Rajasthan under Congress?

Soon after assuming power, Chief Minister Ashok Gehlot emphasised the need to mandatorily register an FIR. A January 31, 2019 circular by then Director General of Police Kapil Garg, said that “registration of FIR is the fundamental duty of police.” In the detailed note, he wrote how an immediate registration of FIR for a cognisable offence “reflects sensitivity and efficiency of police before the complainant,” and how a delay in registration of FIR aggravates the pain of the complainant and works to the benefit of the accused. At a police department review meeting in June 2019, Gehlot said that every complainant who arrives at a police station be heard patiently and “registration of FIR should be ensured.” He said that “complaints about hesitation in registering FIR or about behaviour (of police) will not be tolerated.” Earlier, when there were more cases, police station in-charge used to be pulled up and at the state level, the government



used to take credit – look, we have reduced crime by x, y per cent. The premium was on not registering FIR. If you had ‘reduced’ crime, you were appreciated. *Now reduction of crime is questioned. If you don’t register (an FIR), you are pulled up: departmental proceedings were initiated against two dozen SHOs when they did not register a case and a fellow had to go to SP or IG or police HQ; and half a dozen SHOs were suspended.* Even a few SPs were also pulled up.” All of this mainly started in May, 2019, post Lok Sabha elections. Soni says that the government also undertook “a large number of decoy operations” to see whether FIRs were being lodged at police stations. There were a host of other measures undertaken by the government to make the process more transparent. In May 2019, following the Thanagazi gangrape case in Alwar, Gehlot announced that FIRs could directly be registered with the SP’s office if local police stations did not entertain a complaint. On July 1, 2019, the state government also made it mandatory to register every complaint on Crime and Criminal Tracking Network and Systems (CCTNS). “FIRs were being registered on CCTNS but now the difference was that every complaint should also be registered in the system,” Soni said. Following the Thanagazi rape case and no let-up in crime in the district, Alwar was divided into two separate police districts – Alwar and Bhiwadi – in August 2019. *“Also, earlier people used to approach the courts for registration of FIRs under CrPC 156(3). This saw a decline too from 28 per cent (in 2018) to 16 per cent in 2019 end, since cases were being freely lodged by the police,” Soni said.*

So has the crime situation in Rajasthan worsened between 2018 and 2019?

Registration of more cases doesn’t necessarily mean that crime has increased. That also explains why Kerala has the highest rate of cognisable crimes in all of India. In Rajasthan, the police department’s campaign to register every complaint has led to an increase in registration of FIRs in the state, and thus the overall drastic rise in figures between 2018 and 2019. NCRB itself says that “the primary presumption that the upward swing in police data indicates an increase in crime and thus a reflection of the ineffectiveness of the police is fallacious. *‘Rise in crime’ and ‘increase in registration of crime by police’ are clearly two different things, a fact which is often confused. Thus an oft-repeated expectation from certain quarters that an effective police administration will be able to keep the crime figures low is misplaced. Increase in crime numbers in state police data may in fact be on account of certain citizen centric police initiatives, like launching of e-FIR facility or women Helpdesks, etc.*”

GOING BEYOND THE ‘ME TOO’ MOVEMENT (PREETI PRATISHRUTI DASH - RESEARCH ASSOCIATE AT PROJECT 39A, NATIONAL LAW UNIVERSITY AND WORKS ON VARIOUS ISSUES OF CRIMINAL LAW)

Recent allegations of sexual harassment against filmmaker Anurag Kashyap by actor Payal Ghosh have opened fresh debates on the ‘Me Too’ movement in India. Many have raised concerns over the veracity of the allegations. With Mr. Kashyap’s colleagues, ex-employees and former spouses coming out in his support, questions arise as to whether ‘believing the survivor’ is a slogan reserved only for certain women. While Ms. Ghosh has filed an FIR, Mr. Kashyap and other female actors named by her have initiated legal action at their ends. However, criminal law is unlikely to be able to maturely handle the complex elements of sexual harassment at the workplace. This article highlights issues stemming from abandoning due process mechanisms for nebulous allegations on social media, and underscores how this could potentially intensify the problems confronting survivors, furthering their marginalisation. Devising a holistic response to sexual



harassment lies in the creation of strong, formal systems at the workplace where survivors can level charges without fearing a backlash.

Towards a just system for all

The controversies surrounding 'Me Too' are complicated by the reality that the movement itself is a result of the failure of due process. Years of apathy towards the Supreme Court's Vishaka guidelines failed to provide a safe working environment for women and actively created hurdles when they sought legal recourse. Yet, losing sight of the fact that the 'Me Too' movement is only a symptom of the problem and not its cure is missing the forest for the trees. Today, when we have a law on sexual harassment at the workplace, it is imperative that this new-found attention on 'Me Too' paves the way for systemic changes which are based on fair principles of justice delivery to all parties. A look at some of the cases arising out of the 'Me Too' movement in India validates the urgent need for creating systems that are fair to all parties. For instance, when anonymous allegations of sexual harassment were made against writer Varun Grover by a woman claiming to be his junior and colleague at a theatre group of Banaras Hindu University, Netflix considered dropping his web series, Sacred Games 2. Mr. Grover clarified in detail how the dates in the allegation proved that he had not worked with the woman at Banaras Hindu University. Later, an independent inquiry cleared him of all charges. Similarly, in one of the incidents which embroiled comedy company All India Bakchod in a major controversy, comedian Utsav Chakraborty was accused of sexual harassment, and CEO Tanmay Bhat was accused of not taking appropriate action. A year later, one of the women who had accused Mr. Chakraborty acknowledged having consensual sex with him and another clarified that she was not underage, although the messages were unsolicited. It remains unclear if the women making allegations in these cases had access to formal complaint registration and grievance redress mechanisms, such as the Internal Complaints Committee (ICC) or the Local Complaints Committee (LCC) in accordance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. The mere presence of ICCs or LCCs may not be sufficient, as sexist, prejudicial attitudes towards women are often pervasive among employers as well as members of these committees. But this is no reason to imply that the framework itself can be substituted by a culture of naming and shaming. Drastic outcomes like shutting down of companies, firing employees or stalling shows result from not having strong systems in place, and that is precisely why every institution must put its weight behind building robust systems. The scale of violence against women in India demonstrates that the popular rhetoric of women 'abusing' the system through false complaints is unwarranted. However, notions about 'believing the survivor' must be grounded in the principle that a woman cannot be disbelieved merely because she does not conform to societal standards of morally appropriate behaviour. At the same time, one cannot discount the possibility of a false allegation, or place subjective feelings over objective facts by characterising all inconsistencies in a woman's statement as evidence of trauma. A just process necessarily allows all parties to probe, and decision-makers to assess the credibility of the parties and witnesses. Giving a full and fair opportunity to the accused to defend themselves forms part of inalienable principles of natural justice. Diluting these principles not only increases the scope of people being unfairly and disproportionately punished, but also makes way for accused persons to be vindicated later in lawsuits in court, as artist Subodh Gupta tried through a civil defamation suit, which ended in a settlement leading to taking down of the posts. This could further undermine the credibility of the survivors, rendering them more vulnerable. Seeking solutions in call-out-and-cancel cultures also does not help survivors in the long term. Survivors seeking closure through such calling out may end up disappointed, especially since structures of power operate in a way that even when



powerful men are called out, their lives seem to go back to normal after what might be just another tumultuous episode.

Issues of identity

Moreover, issues of identity, especially in a country like India, are way more nuanced than a 'men versus women' debate can address. Not all women can access the Internet in the same ways to make allegations against perpetrators. Similarly, there exists the very real possibility of men from vulnerable sections being unable to counter charges against them on social media and avail formal legal processes to rebut arguments to the same extent as their more privileged counterparts. Moreover, in a political climate where every dissent is stifled by exaggerated allegations, it is all the more important to create, enable and retain systems which protect the rights as well as the mental and physical well-being of survivors and the accused. Fair solutions within the due process framework are rarely easy to arrive at, given the ambiguity of what constitutes sexual harassment in different contexts, as well as the general atmosphere of sexual policing in India. Despite this, feminist efforts need to be directed towards implementing the law on sexual harassment while simultaneously working on its inadequacies. Building strong systems would go a long way in assuring survivors that their complaints are taken seriously, without sexist prejudices and power structures getting in the way.

CASE AGAINST SUDHA BHARADWAJ; WHY SC TURNED DOWN HER BAIL PLEA

The Supreme Court turned down activist Sudha Bharadwaj's application for interim bail. The court said that since the plea was on medical grounds, it will not be able to entertain it as the medical report did not back her claims. It, however, said Bharadwaj has a "good case on merits".

What is the case in which Sudha Bharadwaj and 14 others are arrested?

*Bharadwaj was arrested on August 28, 2018 in connection with the **Bhima Koregaon/Elgar Parishad** case. On January 1, 2018, lakhs of Dalits had gathered near Pune to commemorate the 200th anniversary of the Battle of Bhima Koregaon, won by the British army — largely comprising soldiers from the Dalit community — against the Peshwas in 1818.* Violence was reported on the day and following an eyewitness account, an FIR was registered at Pimpri police station on January 2, naming *Hindutva leaders Milind Ekbote and Sambhaji Bhide*, for alleged incitement. On January 8, however, another FIR was filed by Pune police claiming that the violence took place due to an event held on December 31, 2017 called Elgar Parishad at Shaniwar Wada in Pune. Six members of cultural group *Kabir Kala Manch* were named in the FIR for organising the event. Three months later, searches were conducted on ten persons with the police seizing their electronic devices. The police claimed they were then led to other persons, including Bharadwaj, a resident of Faridabad. In January this year, the National Investigation Agency took over the probe from the Pune police and, apart from the nine arrested initially, arrested six more in connection with the case. All 15 accused in the case are currently in jail.

What are the allegations against Sudha Bharadwaj?

The Pune police filed a chargesheet against the accused including 59-year old Bharadwaj in 2018 claiming that some documents were recovered from her co-accused which mention her activities and prove that she is an 'active member' of banned organisation CPI (Maoist).



WHO IS STAN SWAMY, THE LATEST TO BE ARRESTED IN THE ELGAR PARISHAD-BHIMA KOREGAON CASE?

The National Investigation Agency (NIA) made its seventh arrest in the Elgar Parishad-Bhima Koregaon case, with 83-year old Father Stan Swamy being taken into custody from Ranchi.

Who is Stan Swamy, and what kind of work does he do?

Father Stan Swamy is a Jesuit priest and a tribal rights activist based in Jharkhand. He has worked in the state for over three decades on various issues of the adivasi communities on land, forest and labour rights. This includes questioning the non-implementation of the Fifth Schedule of the Constitution, which stipulated setting up of a Tribes Advisory Council with members solely of the adivasi community for their protection, well-being and development in the state. In a statement given two days before the NIA took him into custody, Swamy said that he had challenged the “indiscriminate” arrest of thousands of young adivasis and moolvasis with investigating agencies labeling them as “Naxals”. Swamy had filed a public interest petition in the High Court against the state, asking for all such undertrial prisoners to be released on a personal bond, and the conduct of a speedy trial. He had also sought the appointment of a judicial commission to investigate the reasons for delays in the trial process. Swamy’s work also involves opposition to the setting up of “land banks”, which he argues would free up land belonging to the community to set up small and big industries. Swamy’s statement says that his work involved expressing dissent with several policies of the government, and laws enacted in violation of the Constitution. “This, I believe, is the main reason why the state is keen to put me out of the way. The most feasible way is to implicate me in serious cases and stall the judicial process to give justice to the poor innocent adivasis,” the statement said.

The NIA, which took over the investigation into the Elgar Parishad/Bhima Koregaon case, alleges that all the accused have links with the banned CPI (Maoist).

And what is the allegation against Swamy, specifically?

Swamy was questioned multiple times by the NIA including in the last two months at the Jesuit residence in Bagaicha. Searches were also conducted at his residence with the NIA claiming his links to Maoist forces. Swamy has said that the NIA placed several extracts before him claiming they were taken from his computer implicating his connection to Maoists. “I told them all these were fabrications stealthily put into my computer and I disowned them,” his statement said. He has also denied allegations of Maoist links, and said in the video that he has never been to Bhima Koregaon. “I would just add that what is happening to me is not unique. Many activists, lawyers, writers, journalists, student leaders, poets, intellectuals and others who stand for the rights of adivasis, Dalits and the marginalised and express their dissent to the ruling powers of the country are being targeted,” he said.

WHY IS THE UP GOVERNMENT SENDING OUT PRESS NOTES IN SANSKRIT?

As Uttar Pradesh readies for by-elections to eight assembly seats, the state government has started issuing significant press releases, especially the speeches of Chief Minister Yogi Adityanath, in Sanskrit language, besides English, Hindi and Urdu. The move comes after a similar attempt by the Yogi government more than a year ago, in June 2019, that did not last long.



In order to sustain the move, the state government has decided to hire Sanskrit experts on contract basis to carry out the job of translation. The translated speeches and notifications decisions in Sanskrit are also being uploaded on social media. The idea is to ensure that not just the CMO releases press notes in Sanskrit but also all government departments and offices of deputy chief ministers as well as other ministers do the same.

Why is the UP govt promoting Sanskrit

The Bharatiya Janata Party, in its poll manifesto for 2017, had specifically promised to promote Sanskrit if it would be voted to power in Uttar Pradesh. Besides, Yogi Adityanath's love for Sanskrit is well-known. The CM is well-versed in the language and takes personal interest in its promotion. A Sanskrit school functions on the premises of Gorakhnath Temple, of which Adityanath is the chief priest. With the crucial bypolls approaching, the state government is keen to deliver on its promise.

Why is this good news for Sanskrit scholars?

While there are hardly any prominent Sanskrit dailies in the state, there are a large number of students with degrees of Acharya and Shashtri pass out each year in the state. Sources in the government inform that the move would result in the hiring of Sanskrit translators, in line with similar hirings of Urdu translators during the previous state governments, that released press-notes and notifications in Urdu along with Hindi and English. Every year, about 50,000 students pass-out with the degrees of Sashtri and Acharya (graduation and post-graduation) in the state, which has one dedicated Sanskrit University, Sampurnanand Sanskrit University, Varanasi, and about 69 aided Sanskrit colleges and over 200 private Sanskrit colleges operational in the state. Students either become "Purohits" or wait for the vacancies for Sanskrit teachers in government schools. Chairman of Sanskrit Sansthan Vachaspati Mishra said: "Promotion of the language would not stop at this, there are several other things in the pipeline and being discussed, including launch of online competitions for the students in Sanskrit. There might not be many newspapers at present, but once the government starts promoting the language, it would encourage others to follow the same as well."

HOW AND WHY NATHURAM GODSE BECAME TOP TREND ON TWITTER ON GANDHI JAYANTI

The last name you would expect to see trending on Gandhi Jayanti is that of Nathuram Godse. But that is exactly what Twitter users in India woke up to October 2, the 151st birth anniversary of the Father of the Nation. #नाथूराम_गोडसे_जिंदाबाद (Nathuram Godse Zindabad) was up there as the top trend, much to the distress of a lot of users. But how does a fringe thought like this become a top trend, especially when Twitter has over 17 million daily users in India? For that you first need to understand how the Twitter trends algorithm works.

How does the Twitter Trends algorithm work?

The Twitter Trends algorithm is based on multiple factors and is "tailored" for users based on who they follow, their interests, and location. But in the trends tab, visible for users on the Twitter smartphone app as well the web client, there is also a trending section that shows trends that are not customised for the user. Twitter says, "this algorithm identifies topics that are popular now, rather than topics that have been popular for a while or on a daily basis, to help you discover the



hottest emerging topics of discussion on Twitter". It adds that *"the number of Tweets that are related to the trends is just one of the factors the algorithm looks at when ranking and determining trends". But experts like data scientist Gilad Lotan have explained that this algorithm favours "sharp spikes rather than gradual sustained growth", and the trends are hence "determined by a combination of volume and how much time it takes to create volume". So if there are a lot of tweets using a certain hashtag within a small space of time, it will start trending. When this activity is happening at a time when other trends are not prominent, like early in the morning, there is a high chance the hashtag becomes a top trend too.*

So what happened on October 2?

On October 2, starting around 5 am, as analysed on keyhole.co, there was a spike in the number of tweets using the #नाथूराम_गोडसे_जिंदाबाद hashtag. This was at least an hour before the #MahatmaGandhi tweets started gaining momentum. And though #MahatmaGandhi is tweeted almost on a daily basis, Twitter's algorithm gave weightage to the spike of #नाथूराम_गोडसे_जिंदाबाद. Over 80,000 tweets had used #नाथूराम_गोडसे_जिंदाबाद by 1 pm. These included tweets that were complaining about the trend and random unrelated tweets trying to piggyback on a trending hashtag, a common phenomenon on Twitter. One of the first tweets that started the trend was from @vishalurl at 1.50 am, getting over a thousand retweets and 3.5K quote tweets in under 12 hours. Among the handles that helped amplify the hashtag, the most prominent was that of *@Harvansh_Batra* who retweeted scores of tweets with #नाथूराम_गोडसे_जिंदाबाद to his 63,000-plus followers, showed the analytics tool tweetbinder.com. At least five other handles with over 20,000 followers showed a similar behaviour, helping the hashtag trend. Verified handles do not seem to have helped the trend. While #नाथूराम_गोडसे_जिंदाबाद was trending in multiple locations across India, there were locations like Kerala where it was not prominent. In Kolkata, meanwhile, another hashtag, #नाथूराम_गोडसे_अमर_रहे (Nathuram Godse amar rahe) was trending with over 18,000 tweets. By 1 pm, #GandhiJayanti and #MahatmaGandhi were the top trends with over 1,00,000 tweets each.

HOW THE TRP SYSTEM WORKS

Mumbai Police Commissioner Param Bir Singh said on Thursday that police are looking into a scam about manipulation of **TRPs (Television Rating Points)** by rigging the devices used by the **Broadcast Audience Research Council (BARC)** India, which has the mandate to measure television audience in India.

What is TRP?

In simple terms, TRPs represent how many people, from which socio-economic categories, watched which channels for how much time during a particular period. This could be for an hour, a day, or even a week; India follows the international standard of one minute. The data is usually made public every week. TRPs are the main currency for advertisers to decide which channel to advertise on by calculating the cost-per-rating-point (CPRP).

What is BARC?

It is an industry body jointly owned by advertisers, ad agencies, and broadcasting companies, represented by The Indian Society of Advertisers, the Indian Broadcasting Foundation and the Advertising Agencies Association of India. Though it was created in 2010, the I&B Ministry notified



the Policy Guidelines for Television Rating Agencies in India on January 10, 2014 and registered BARC in July 2015 under these guidelines, to carry out television ratings in India.

How is TRP calculated?

BARC has installed “BAR-O-meters” in over 45,000 empanelled households. These households are classified into 12 categories under the New Consumer Classification System (NCCS), the so-called “new SEC” adopted by BARC in 2015, based on the education level of the main wage earner and the ownership of consumer durables from a list of 11 items ranging from an electricity connection to a car. While watching a show, members of the household register their presence by pressing their viewer ID button — every person in household has a separate ID — thus capturing the duration for which the channel was watched and by whom, and providing data on viewership habits across age and socio-economic groups. The panel chosen to capture TRPs must be representative of the country’s population, and the methodology must be economically viable for the industry.

How can TRP data be rigged?

If broadcasters can find the households where devices are installed, they can either bribe them to watch their channels, or ask cable operators or multi-system operators to ensure their channel is available as the “landing page” when the TV is switched on. *For TRPs, it does not matter what the entire country is watching, but essentially what the 45,000-odd households supposed to represent TV viewership of the country have watched. Broadcasters can target these households to fudge actual viewership data.* In the 2018 consultation paper, TRAI said: “One of the biggest challenges has been the *absence of any specific law through which the agents/ suspects involved in panel tampering/infiltration could be penalised*”. It noted that BARC “has filed FIRs in various police stations against the agents/ suspects involved in panel tampering/infiltration” but its efforts “to mitigate panel tampering/ infiltration have been hampered due to absence of any legal framework”.

How does panel tampering affect TRPs?

TRAI mentioned “panel infiltration has a significant impact when the panel size is smaller” and “with the increase in panel size, infiltration of panel homes becomes challenging”. A senior industry insider said BARC has filed multiple FIRs in the past “as it tracks unusual viewership behaviour and takes action”. In the current case, the insider said an FIR was filed against employees of Hansa Research, which BARC hires for certain field jobs like going to panel households. BARC hires multiple agencies so that no single agency has the entire map of panel households across the country. The source cited the example of English TV news, which has a small share of the national viewership pie at around 1.5%, which means that for around 45,000 panel households, around 700 households will contribute to the viewership. “What actually happens is that while your sample is around 700, not all of them are watching English TV news every day. Actual watching will be around 350 homes.” In such a scenario, the source said, “if you manage to rig 10 among the heavy viewing homes, then you can swing the needle big time”.

How often have allegations been made?

Two years ago, the I&B Ministry had raised concerns that BARC was under-reporting viewership of Doordarshan, and floated the idea of chip-based activity logs through all set-top boxes. The idea was finally rejected. In 2017, the editor of one of the top five English news channels had written



to BARC about how a few households from Gujarat were contributing heavily to a rival channel's overall viewership.

FARM ACTS, FEDERALISM AND CONSTITUTIONALITY

The President gave assent to the controversial farm Bills passed by Parliament last week. Amid protests by farmers' organisations across the country, Chhattisgarh, Maharashtra, and Punjab have said they might not implement the new laws, Kerala and Punjab have declared their intention to challenge them in the Supreme Court, and a Congress MP from Kerala, Prathapan T N, has already done so.

What are the broad arguments for and against the laws?

The government claims these Acts will transform Indian agriculture and attract private investment. The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020, provides for contract farming, under which farmers will produce crops as per contracts with corporate investors for a mutually agreed remuneration. The protesting farmers fear that powerful investors would bind them to unfavourable contracts drafted by big corporate law firms, with liability clauses that would be beyond the understanding of poor farmers in most cases. According to the government, The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 liberates farmers by giving them the freedom to sell anywhere. The Opposition says this would lead to corporatisation of agriculture, with the market, along with the monsoon, becoming an unpredictable determinant of the destiny of farmers. They argue that farmers can sell outside the APMC even now, and most in fact do, albeit after paying the required fees or cess. *In Punjab and Haryana, the epicentre of the protests, the market fee, rural development fee, and arhatiya's commission are 3%, 3%, and 2.5%; and 2%, 2%, and 2.5% respectively. These are big sources of state revenue — with states not permitted to levy market fee/cess outside APMC areas under the new laws, Punjab and Haryana could lose an estimated ₹3,500 crore and ₹1,600 crore each year respectively.*

What is the question over the constitutionality of these laws?

As per *Union of India v H.S.Dhillon (1972)*, constitutionality of parliamentary laws can be challenged only on two grounds — that the subject is in the State List, or that it violates fundamental rights. Is invoking parliamentary powers on agriculture consistent with the scheme of federalism and spirit of the Constitution? Does Parliament have the power to enact laws on agricultural markets and lands? Should the Constitution have been amended before enacting these laws? These are some of the questions that will be raised in the petitions challenging the constitutionality of the Acts. *As per Ram Krishna Dalmia v Justice S R Tendolkar (1958) and other judgments, the Supreme Court will begin hearings after presuming the constitutionality of these laws; therefore, the burden on states and individuals who challenge these Acts will be quite heavy.* Generally, the Supreme Court does not stay the implementation of parliamentary laws. CAA and UAPA were not stayed. The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020, and The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 do not mention, in the Statement of Objects & Reasons, the constitutional provisions under which Parliament has the power to legislate on the subjects covered.



And where does the question of federalism come in?

In *State of West Bengal v Union of India* (1962), the Supreme Court held that the Indian Constitution is not federal. But in *S R Bommai v Union of India* (1994), a nine-judge Bench held federalism was part of the basic structure of the Constitution. “Neither the relative importance of the legislative entries in Schedule VII, Lists I and II of the Constitution, nor the fiscal control by the Union per se are decisive to conclude the Constitution is unitary. The respective legislative powers are traceable to Articles 245 to 254... The State qua the Constitution is federal in structure and independent in its exercise of legislative and executive power,” it said. Federalism, like constitutionalism and separation of powers, is not mentioned in the Constitution. But it is the very essence of our constitutional scheme.

Where is agriculture in the scheme of legislative powers?

Terms relating to agriculture occur at 15 places in the Seventh Schedule. Entries 82, 86, 87, and 88 in the Union List mention taxes and duties on income and assets, specifically excluding those in respect of agriculture. In the State List, eight entries contain terms relating to agriculture: Entry 14 (agricultural education and research, pests, plant diseases); 18 (rights in or over land, land tenures, rents, transfer agricultural land, agricultural loans, etc.); 28 (markets and fairs); 30 (agricultural indebtedness); 45 (land revenue, land records, etc.); 46 (taxes on agricultural income); 47 (succession of agricultural land); and 48 (estate duty in respect of agricultural land). In the Concurrent List, Entry 6 mentions transfer of property other than agricultural land; 7 is about various contracts not relating to agricultural land; and 41 deals with evacuee property, including agricultural land. *It is clear that the Union List and Concurrent List put matters relating to agriculture outside Parliament’s jurisdiction, and give state legislatures exclusive power. No entry in respect of agriculture in the State List is subject to any entry in the Union or Concurrent Lists.*

What about Entry 27 of the State List that is subject to Entry 33 of List III (Concurrent)?

Entry 33 of the Concurrent List mentions trade and commerce, production, supply and distribution of domestic and imported products of an industry over which Parliament has control in the public interest; foodstuffs, including oilseeds and oils; cattle fodder; raw cotton and jute. The Centre could, therefore, argue that it is within its powers to pass laws on contract farming and intra- and inter-state trade, and prohibit states from imposing fees/cesses outside APMC areas. However, like education, farming is an occupation, not trade or commerce. If foodstuffs are considered synonymous with agriculture, then all the powers of states in respect of agriculture, listed so elaborately in the Constitution, shall become redundant.

So what happens in case of legislation that covers entries in two Lists?

In cases such as State of Rajasthan v G Chawla (1959), courts have used the doctrine of “pith and substance” to determine the character of legislation that overlaps between entries. The constitutionality of legislation is upheld if it is largely covered by one list and touches upon the other list only incidentally. But the two new farm Acts go beyond that — they impinge on entries in the State List. The Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 flies in the face of Entry 28 of the State List (markets and fairs), and The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020 impinges on Entries 14, 18, and 46 of the State List, and Entry 7 of the Concurrent List (above). *In interpreting the lists, the Supreme Court in State of Bihar v Kameshwar Singh (1952) invoked the doctrine of colourable*



legislation, which means you cannot do indirectly what you cannot do directly. In ITC Ltd v APMC (2002), the Supreme Court upheld the validity of several state laws relating to agricultural produce marketing, and struck down the central Tobacco Board Act, 1975. It interpreted Entry 28 of the State List (markets and fairs) in favour of states, and rejected the Centre's argument based on Entry 52 of the Union List read with Entry 33 of Concurrent List that tobacco is an industry declared as being under the control of Parliament in public interest. It said raw materials or activity that does not involve manufacture or production cannot be covered under 'industry'.

What is the government's stated view on agricultural markets?

The committees headed by Ashok Dalwai and Ramesh Chand recommended that 'agricultural market' be entered in the Concurrent List. It is implicit in the recommendations that "foodstuffs" under Entry 33 of the Concurrent List do not empower Parliament to enact laws on agricultural markets. On May 5, 2015, the government told Lok Sabha that the National Commission of Farmers (Swaminathan Commission) had recommended 'agricultural market' be added to the Concurrent List. **On March 27, 2018, the government yet again told Lok Sabha that it has no intention of inserting 'agricultural market' in the Concurrent List.**

PUNJAB: BEHIND LOW YIELD OF HIGH-YIELD BASMATI VARIETY, EARLY SOWING

With harvesting of the PUSA 1509 Basmati (fine quality aromatic rice) — an early variety which is a favourite among farmers because of its short duration and high yield — having begun, a large number of farmers are complaining of low yield. The reason: they suspect it is hot weather. However, temperatures this year have more or less remained the same as it is every year during its cropping season. So what else could be the problem? Is it really hot weather? The Indian Express explains:

What is the average yield of Basmati 1509?

PUSA Basmati 1509, which was introduced over 7-8 years ago in Punjab has become quite popular among farmers because unlike other Basmati varieties, the yield of this variety was much higher. In Punjab, farmers usually get 23 to 26 quintals per acre yield from this variety.

What is the yield this year?

Most of the farmers sitting in the grain markets of Tarn Taran, Amritsar and Gurdaspur districts, the hubs for this variety, say they got just between 8 to 14 quintals this time. "We are shocked because farmers are bringing this crop to the mandi every day and complaining about low yield of just 12-13 quintals per acre against 23-24 quintals they used to," said Vijay Kalra, president of Federation Arhtiya Association Punjab, adding that not a single farmer who got full yield from this crop this time has approached him till now. Also, the rate of this variety has crashed from Rs 2,500-2700 per quintal last year to Rs 2,000-1,650. "With this yield and low price they will not fetch more than Rs 22,000-25,000 per acre against Rs 62,000-66,000 per acre last year," said Kalra.

Why the yield has gone down this year?

While farmers are blaming it on hot weather conditions, experts are blaming the "wrong timing of sowing" by a large number of farmers. According to the Indian Meteorological Department (IMD), the weather has remained more or less the same as compared to last year. *Experts say PUSA 1509 has the advantage of maturing in 115-120 days from the date of nursery sowing to harvesting, and*



farmers can transplant it from June 15 to July 25. If they want to take matar (pea) in September and potato in October for harvesting by late-November/early-December, which still gives time for sowing a late variety of wheat, winter maize or ajwain (celery). They should plant it after June 15 so as to harvest between mid-September and early-October. If they want to go for normal wheat crop after it, they can transplant it between July 20 to 25. Amritsar Chief Agriculture Officer (CAO) Dr Gurdial Singh Bal said that due to Covid-19, *several farmers had sown the crop early, in May-end and early June, due to which not only yield, even the quality has also gone down.* "When paddy sowing time was June 10, how can Basmati, which is always sown 10-15 days after paddy, be sown before? Also, we have observed that farmers who have sown it after June 10 are getting around 20 quintals per acre, while those who sowed in May and early June are getting 30-40 per cent less yield and facing losses due to low yield and less price too," he added. Tarn Taran CAO Dr Kuljit Singh Saini said, "Due to early sowing, the graining stage also came early, when the days were still long, while *Basmati varieties need longer nights, which are less warm than days.* Due to this, the grains could not be developed properly. We always guide farmers about proper sowing time as per variety of the crop but sometimes they do not adhere to our advice and face losses." Dr Bal said, "*It is basically a late variety of Basmati but farmers in Punjab have made it early so as to take vegetables and winter maize/late wheat variety crops after sowing it in June.*"

What other varieties of Basmati are sown in Punjab?

While PUSA 1509 is sown on 40 per cent of the total Basmati area in Punjab, the remaining area comes under PUSA 1121, the improved basmati variety that till recently accounted for maximum of India's exports of the aromatic rice since 2008 and fetched the highest price among all Basmati varieties. But now, *PUSA 1718, another new basmati variety by the Indian Agricultural Research Institute (IARI) in New Delhi, is also being sown in Punjab.* While PUSA 1121 is longer-duration basmati (140-145 days, nursery period to harvesting), which, if transplanted from June 10 to July-end, is harvested by October-end and mid-November. It only leaves scope for sowing wheat and yield is 18-20 quintals per acre. *PUSA 1718 is 10 days shorter than 1121, more disease-resistant and does not need too much pesticide. Farmers claim that they are taking a yield of 25-26 quintals/acre of 1718 and the grain quality and aroma is similar to PUSA 1121.*

ON THE FRONT LINES OF RIGHTS AND ROWS

Just past 10am on September 29, a notice went up on global human rights agency Amnesty International's India webpage. The notice said that owing to the fact that the government had frozen all its funds through an order earlier in the month, Amnesty was shutting down its India operations, laying off about 150 people and ending its presence in the country, 55 years after it had set up its first office in India. Amnesty's closure evoked concern from the U.K., where Amnesty is headquartered, the 27-nation EU and the U.S. Both the EU and the U.K. said their officials had met Indian officials in Delhi and in Brussels and London, and said they hoped that Amnesty could continue its work in the future, but the government has firmly told them not to interfere. Prior to this, other international groups like Ford Foundation, Greenpeace and Compassion International have faced similar restrictions, part of a list of at least 20 foreign NGOs on the government's scanner. While Amnesty's notice said the actions by the government were part of an "incessant witch-hunt" that had failed to produce evidence of wrong-doing, the government said it had a long list of charges pertaining to the funding of the group and its interference in India's internal affairs, dismissing its claims of conducting humanitarian work as "glossy statements". Over the past decade, the Ministry of Home Affairs has conducted an investigation into the workings of the



group, and even raided its offices in Bengaluru in 2018, summoning various officials and staff members for questioning, and sending income tax notices to its Indian donors. It also pointed out that Amnesty International's India chapter had been given clearance to accept funds as an NGO under the Foreign Contributions Regulatory Act (FCRA) only once, in the year 2000, but had "circumvented" laws to receive foreign funds through commercial means since then. Eventually, the government said, it had had to block foreign funds of about ₹8 crore to Amnesty India due to their "dubious" routing, in "bipartisan" actions taken by the Manmohan Singh-led UPA government and the Narendra Modi-led NDA government, and the Enforcement Directorate served a show-cause notice to the human rights body for alleged violation of the Foreign Exchange Management Act (FEMA), involving a total of ₹51.72 crore. "Human rights cannot be an excuse for defying the law of the land," said the government. Amnesty shot back that the government had carried out its crackdown due to its anger over Amnesty's reports on alleged human rights violations in Jammu and Kashmir, and more recently, on what it called "police complicity" in the Delhi riots of February 2020, in which 53 people were killed. "Amnesty has never been particularly welcome in India even under previous governments," said former Amnesty International India's executive director Aakar Patel, who has himself faced many enquiries and interrogations. He said that raising contentious issues like the Armed Forces Special Powers Act (AFSPA), Jammu and Kashmir, the 1984 Sikh massacre, land rights in coal mine areas and journalist protections had always made it difficult for the group to engage with the state.

The West factor

Given a self-proclaimed mandate to raise such issues, Amnesty is not particularly welcome in many of the countries it works in, and is often accused of working for western, interventionist powers, and of gathering intelligence and fomenting trouble in the countries it reports on. In Nigeria, it faced massive protests over its report on sexual violence by the military. In Turkey, its top officials were arrested in 2017 on charges of links to the Fethullah Gulen group accused of attempting a coup against President Recep Tayyip Erdogan. Amnesty does not have offices in Pakistan, nor has it been able to set up offices in mainland China (it operates from Hong Kong), but its reports on enforced disappearances, minority rights and the blasphemy law in Pakistan, and the treatment of Uighurs, Tibetans, and democracy activists in China have put it on collision course with those countries. In Russia, in 2016, Amnesty's offices were sealed and then seized, over a series of reports on human rights violations in the North Caucasus, as well as in Syria and Ukraine, leading to the only other time the group has been forced to close its country operations besides in India. Amnesty now operates in about 150 countries, and claims a global membership of 7 million, which would make the number of its concerned citizens larger than the populations of Denmark or Lebanon. Its original mandate, when it was set up by British lawyer Peter Benenson in 1961, was to campaign for the freedom of "prisoners of conscience", or political prisoners around the world. Benenson's first campaign, for two Portuguese students arrested for raising a toast "to freedom" in a public restaurant during the reign of dictator António Salazar, led to a major newspaper campaign for other political prisoners, many of whom were released as a result of the international spotlight on them. Once set up, Amnesty broadened its mandate to deal with torture, executions, and other human rights issues, where its volunteers would bombard governments with letters until they were forced to pay attention to the issue. Among its successes, Amnesty counts its efforts towards the setting up of the International Criminal Court to try war criminals, as well as the end of capital punishment in more than 100 countries, among a total of about 24,000 campaigns it lists on its website. In 1977, when Amnesty won the Nobel Peace Prize,



its citation called the group a “light in the darkness”, in a reference to its logo of a candle surrounded by barbed wire.

Controversies within

However, there were questions on the group’s own operations and the organisation has also had its share of controversies internally. Benenson himself resigned from the organisation in 1966, claiming it had been infiltrated by the British Foreign Office and MI-6, a charge that lingers to this day, despite repeated denials from the group. In the 1990s, the group was accused of helping prepare the U.S. case for the war against Iraq, with a report on Kuwaiti hospitals ravaged by Saddam Hussein’s Army that later turned out to be false, and faced a major controversy over its partnership with a British Taliban sympathiser, jailed by U.S. forces in Afghanistan for al-Qaeda links. Other challenges have come from within the organisation, with accusations of financial mismanagement and overspending on senior staff, inequality and bullying within the workplace, as well as discrimination and ‘selection bias’. The accusation of “western bias” within the organisation has persisted too, despite the fact that since 1992, its Secretaries-General have belonged to Africa and South Asia, including Salil Shetty, a human rights activist from Bangalore, who ran the organisation from 2010 to 2018. But it is the accusation levelled by the government this week, of Amnesty’s “interference in domestic political debates funded by foreign donations”, that remains the biggest challenge the organisation faces globally, 60 years after it was created.

WHERE ARE THE FUNDS COLLECTED THROUGH CESS PARKED?

The Comptroller and Auditor General (CAG) of India, in its latest audit report of government accounts, has observed that the Union government withheld in the Consolidated Fund of India (CFI) more than ₹1.1 lakh crore out of the almost ₹2.75 lakh crore collected through various cesses in 2018-19. The CAG found this objectionable since cess collections are supposed to be transferred to specified Reserve Funds that Parliament has approved for each of these levies. The nation’s highest auditor also found that over ₹1.24 lakh crore collected as Cess on Crude Oil over the last decade had not been transferred to the designated Reserve Fund — the Oil Industry Development Board — and had instead been retained in the Centre’s coffers. Similarly, the Goods and Services Tax (GST) Compensation Cess was also “short-credited” to the relevant reserve fund to the extent of ₹47,272 crore in two years (₹40,806 crore in 2018-19 and ₹6,466 crore in 2017-18).

What is a cess?

Every cess is collected after Parliament has authorised its creation through an enabling legislation that specifies the purpose for which the funds are being raised. Article 270 of the Constitution allows cess to be excluded from the purview of the divisible pool of taxes that the Union government must share with the States.

How many cesses does govt. levy?

A report titled ‘Cesses and Surcharges: Concept, Practice and Reforms since 1944’, prepared by the Vidhi Centre for Legal Policy in August 2018 and submitted to the Fifteenth Finance Commission listed 42 cesses that have been levied at various points in time since 1944. *The very first cess was levied on matches*, according to this study. Post Independence, the cess taxes were linked initially to the development of a particular industry, including a salt cess and a tea cess in 1953. Subsequently, the introduction of a cess was motivated by the aim of ensuring labour



welfare. Some cesses that exemplified this thrust were the iron ore mines labour welfare cess in 1961, the limestone and dolomite mines labour welfare cess of 1972 and the cine workers welfare cess introduced in 1981. *The introduction of the GST in 2017 led to most cesses being done away with and as of August 2018, there were only seven cesses that continued to be levied.* These were Cess on Exports, Cess on Crude Oil, Health and Education Cess, Road and Infrastructure Cess, Building and Other Construction Workers Welfare Cess, National Calamity Contingent Duty on Tobacco and Tobacco Products and the GST Compensation Cess. And in February, Finance Minister Nirmala Sitharaman introduced a new cess — a Health Cess of 5% on imported medical devices — in the Finance Bill for 2020-2021.

HOW PROCTORING KEEPS A TAB ON CANDIDATES TAKING ONLINE EXAMS

With colleges allowing students to take final-year exams online from home, *proctoring, a technology deployed to ensure the identity of the test taker and the integrity of the test taking environment has gained currency.*

What is proctoring, and why is it necessary?

At exams conducted in colleges, invigilation helps keep a check on students. For online exams taken at home, the possibility of cheating increases. Several universities have adopted a multiple choice questionnaire format, which might also enable a candidate to quickly search the Internet for the right answers. To maintain the veracity of an individual's grades, as a measure to evaluate a student's performance, invigilation becomes mandatory. Proctoring comprises artificial intelligence (AI) based algorithms and tools that keep a check on candidates during online exams not taken at an exam centre.

What set of rules does a candidate need to comply with during online exams?

Most commonly, college or government-issued identity cards are to be displayed by candidates in front of the camera to prove their identity at the time of taking the examination. Use of electronic devices, textual material and stationery items like smart watches and pen drives is prohibited, and so is the use of telecommunication devices like cellphones, head phones, bluetooth earphones, pagers and health bands among others. A candidate has to make sure that there is no noise in the background during the exam. No other application or web page should be open on the computer except the provided exam software. Switching, minimising or closing the exam window is not allowed. A candidate also has to ensure the availability of hardware, software, broadband Internet and power back-up. Further, no other person should be present in the room.

How does proctoring work?

Before the exam begins, the image of the student on the screen is compared with the photo available in the system, based on which a user is allowed to continue. AI-based algorithms keep users from opening other tabs on their screen. In case of multiple such attempts, the examinee is suspended from appearing for exam in most cases. The algorithms also keep a record of the number of times students opened other windows, and captures surrounding audio. Any change in the user's line of sight — to the left or right — is flagged to the invigilator by an alert. Audio-video streaming or continuous capturing of photos at intervals of about 15 to 20 seconds, which can amount to 200 to 240 images in an hour, is deployed, apart from capturing all activity on the user's screen.



What are the types of proctoring?

Proctoring can be done in two ways: full-view and face proctoring. In full-view proctoring, the student's laptop is kept on the side at a suitable vantage point to obtain a view of his or her face, hands, answerbook, and the cellphone used to take the exam. The "full view" can also be obtained using a phone instead of a laptop, but has limitations such as storage issues. In face-view proctoring, a student takes the exam on a laptop, and the laptop camera monitors his or her face. The hands are not visible. Given the limitations of equipment and Internet connectivity faced by students, most institutions have opted for this mode of remote proctoring. However, there are two types of integrity risks with face view proctoring — there are workarounds that web-based remote proctoring software cannot catch. *Separate devices, such as cheat sheets, notes or phones kept on or beside laptops, which are out of view of the laptop cameras, are harder to catch.*

Is this method full-proof?

Regardless of the technology solutions adopted by colleges, there is a common consensus among faculties that online exams are not full-proof. "The software deployed for exams has so far not flagged any student for misconduct, yet we have come across screenshots of question papers that are being shared on informal WhatsApp groups. *Most students have been achieving good marks, which would not have been the case if physical exams were to be conducted,*" said an exam coordinator of a south Mumbai college. *Videos have been trending on YouTube explaining ways to cheat during online exams.* Institutions such as IIT-Bombay have proposed solutions requiring a laptop with a webcam and a smartphone, or two smartphones in the absence of a laptop, to minimise instances of cheating. However, it may still not be a full-proof solution to curb malpractices.

WHY MAHARASHTRA IS THE LATEST STATE TO BAN SALE OF LOOSE CIGARETTES, BEEDIS

The Maharashtra government has banned the sale of loose cigarettes and beedis, in a bid to reduce the consumption of tobacco and to comply with the Cigarettes and Other Tobacco Products Act (COTPA) 2003. Before this, Chhattisgarh had banned the sale of loose cigarettes earlier this year, while Karnataka banned the sale of loose cigarettes, beedis and chewing tobacco in 2017. As per the Tobacco Free Union, over 1 million people die from tobacco-related diseases in India every year.

Why did Maharashtra take this step?

The government's aim is to make sure that users are able to see the mandated warnings on cigarette packaging. Under COTPA, tobacco products need to be sold with graphic health warnings on their packaging and loose cigarettes do not comply with this rule. Section 7 of the Act mentions, "No person shall, directly or indirectly, produce, supply or distribute 6 cigarettes or any other tobacco products unless every package of cigarettes or any other tobacco products produced, supplied or distributed by him bears thereon, or on its label 1 [such specified warning including a pictorial warning as may be prescribed.]" The Act also mentions that the warning should be specified on not less than one of the largest panels of the packet in which the cigarettes or any other tobacco products have been packed for distribution, sale and supply. Further, India is a signatory to the WHO Framework Convention on Tobacco Control, whose core tobacco demand reduction provisions include regulating the packaging and labelling of tobacco products and product disclosures. India ratified the WHO FCTC in 2004.



What is the pattern of tobacco use in India?

According to the Global Adult Tobacco Survey (GATS) 2016-2017, 10.7 per cent of all adults (99.5 million) in India smoke tobacco and 28.6 per cent of all adults (266.8 million) use tobacco (smoked or smokeless tobacco). Among the tobacco smokers, roughly 4.4 per cent are cigarette smokers and 7.7 are bidi smokers. In India, the average monthly expenditure of a daily cigarette smoker comes around to about Rs 1,100 and that of a daily beedi smoker is estimated to be around Rs 284. As per this survey, Maharashtra has the lowest prevalence of tobacco smoking in the country. Further, over 91 per cent of current smokers in the country believe that smoking causes serious illness. The GATS survey was a household survey conducted on over 74,000 people aged 15 years or more. The survey also showed that 68 per cent of smokers, 17 per cent bidi smokers, and 50 per cent of smokeless tobacco users in India purchase loose tobacco.

Are such bans effective?

The effectiveness of this ban remains to be seen and depends on how widespread and stringent the implementation is. According to a 2017 study published in the Journal of the Scientific Society, raising tax on tobacco products is one of the key ways of controlling tobacco consumption. Even so, while on one hand making tobacco products dearer may lead to an overall decrease in consumption of tobacco globally, on the other hand, it can lead to an increase in the sale of loose cigarettes. This study found that 57 per cent of cigarette smokers (3.46 million approximately) in India (based on data from the Global Adult Tobacco Survey, India 2009–2010) bought loose cigarettes. The authors of this study also note that the proportion of buying loose cigarettes decreased with increased levels of education and was least among government employees. But this study associated loose cigarette buying with decreased intensity of smoking. “This may be due to increased taxes leading to increased buying of single cigarettes,” the study says.

IN KERALA, FANS, LOCALS JOIN HANDS TO PRESERVE LEGENDARY SNAKEBOAT

It was in 1952 that India's first Prime Minister Jawaharlal Nehru, during a visit to Alappuzha, hopped on the Nadubhagam Chundan (snakeboat) after witnessing a snakeboat race. The rest is history. On his return to New Delhi, Nehru donated a silver trophy, a replica of a snakeboat and paved the way for the renowned Nehru Trophy Boat Race. As time passed, the legendary snakeboat ceased competing and the Nadubhagam Boat Club (NBC) retired the snakeboat in 2013. They replaced it with a brand new boat with the same name. Since its retirement, the snakeboat has been kept in a crumbled shed, a piece of history left to decay. But not any more. Although the Kerala Tourism Department's promise to set up a museum and shift the snakeboat there remains unfulfilled, the NBC, the Nadubhagam Chundan Fans Club (NCFC) and locals have now joined hands to preserve it. As part of protecting it, the snakeboat will be reconditioned under the guidance of craftsman Sabu Narayanan Achary, who built the new boat a few years ago. The project is expected to cost ₹10 lakh. While the NCFC members will bear a major share of the cost, the rest will be raised from the public.

A PROPOSED ROAD TUNNEL BENEATH WESTERN GHATS IN KERALA: PURPOSE, CONCERNS

Kerala Chief Minister Pinarayi Vijayan “launched” a tunnel road project that would connect Kozhikode with Wayanad. The launch actually meant the beginning of a survey and fixing the final alignment ahead of the detailed project report, which should be followed by steps such as



technical sanction, environmental impact assessment report, and seeking mandatory clearance from various agencies including the Union Ministry of Environment, Forest and Climate Change (MoEFCC). Vijayan promised the survey would be over in three months and work would start next March with a deadline of 34 months for completion.

What is this Kozhikode-Wayanad tunnel road?

The 7-km tunnel, being described as the third-longest in the country, is part of an 8-km road cutting through sensitive forests and hills of the Western Ghats. Its endpoints are at Maripuzha in Thiruvambady village panchayat (Kozhikode) and Kalladi in Meppadi panchayat (Wayanad). At present, Wayanad plateau is linked to the rest of Kerala via four roads, all with hilly sections, the longest being the 13-km Thamarassery Ghat Road along the Kozhikode-Mysuru NH 766. The tunnel road is an outcome of a decades-long campaign for an alternative road as the Thamarassery Ghat Road is congested and gets blocked by landslides during heavy monsoon.

How will the road impact the ecology?

The Forest Department has identified *the proposed route as a highly sensitive patch comprising evergreen and semi-evergreen forests, marsh lands and shola tracts. This region is part of an elephant corridor spread between Wayanad and Nilgiri Hills in Tamil Nadu. Two major rivers, Chaliyar and Kabani that flows to Karnataka, originate from these hills in Wayanad. Eruvazhanjipuzha, a tributary of Chaliyar and the lifeline of settlements in Malappuram and Kozhikode, begins in the other side of the hills.* The region, known for torrential rain during monsoon, has witnessed several landslides, including in 2019 at Kavalappura near Nilambur and at Puthumala, Meppadi in Wayanad.

So, will it not face a challenge in getting environmental clearance?

Proponents of the project have been stressing that the tunnel will not destroy forest (trees). The MoEFCC guidelines state that the Forest Act would apply not only to surface area, but the entire underground area beneath the trees. For tunnel projects, conditions relating to underground mining would be applicable. As the proposed tunnel is 7 km long, it will require emergency exit points and air ventilation wells among other measures, which would impact the forest further.

How much has actually been cleared?

With an eye on elections early next year, the government “launched” the project with several procedures pending: a survey report, DPR and even environmental clearance. The two entry points of the tunnel are in Thiruvambady and Kalpetta constituencies, both held by the ruling CPI(M). Forest officials, meanwhile, are yet to get applications from KRC for conducting the survey, which is now outside the forest land.

FROM HUMBLE FUNGI, THE PROMISE OF CLEANER AIR IN DELHI THIS WINTER

Paddy stubble-burning season is here, and satellite remote sensing data from the **Indian Agriculture Research Institute (IARI)** show a five-fold increase in the number of farm fires in Punjab, Haryana, and Uttar Pradesh during the first six days of October compared to the corresponding dates in 2019. While this initial spike might flatten in the coming days, the SAFAR-India short-range forecast on Thursday (October 8) said the overall AQI in Delhi was in the “higher end moderate category”, and was forecast “at the higher end of moderate to the poor category”



for October 9. The burning of paddy stubble left in the fields after harvest has been a cause of concern for the past several years as it contributes to air pollution in the northern Gangetic plains and its already polluted cities like Delhi. It is a common practice in October and November across North West India, but primarily in Punjab, Haryana, and Uttar Pradesh to quickly clear crop residue from their fields before planting the rabi wheat crop. Several solutions have been proposed over the years to tackle the issue. The most recent one, which has been billed as a game-changer if found successful, is *the 'Pusa Decomposer' capsule developed by IARI.*

What is the 'Pusa Decomposer'?

It is essentially a fungi-based liquid solution that can soften hard stubble to the extent that it can be easily mixed with soil in the field to act as compost. This would then rule out the need to burn the stubble, and also help in retaining the essential microbes and nutrients in soil that are otherwise damaged when the residue is burned.

How long does it take for the decomposer to work?

The window of time required for the solution to work, which is currently the main concern of farmers, is around 20 to 25 days, as per the IARI. Farmers argue that this window is too long for them, as they ideally wait about a week or 10 days after harvesting the non-basmati variety of rice — which leaves hard stubble — to sow the wheat crop. IARI scientists, however, say that farmers do not necessarily have to plant the next crop in a rush — and that 20-25 days is enough waiting time.

How is the decomposer to be used by farmers?

There are seven strains of fungi that IARI has identified after research which help in rapid breakdown of hard stubble. These seven strains of fungi are packed into four capsules, which cost about Rs 20 per pack of four. But there is a process for developing the liquid solution from these capsules which can take about four to five days. It starts with boiling 25 litres of water mixed with 150 grams of jaggery, which scientists say has properties that help in multiplication of fungi. After this mix has cooled, 50 grams of besan (or gram flour) is added to it along with four 'Pusa Decomposer' capsules. This solution is then covered with a thin piece of cloth and left in a dark room for four days. On the fourth day, a thick growth of fungi will be seen on top of the solution. This has to be mixed well, and thereafter the solution is ready for use.

What is the 'dose' of decomposer that has to be used?

A 25-litre solution is advisable for use in one hectare of land after being mixed with 500 litres of water. It can be sprayed over the field and left to do its work. IARI scientists explained that the decomposer will work even in fields where stubble has not been finely chopped with a Super Straw Management System (Super SMS) machine. The Super SMS is attached with a combine harvester machine to cut paddy stubble into small pieces and spread it uniformly in the field. This in itself is a stubble management process, as chopped stubble can be removed from the field or wheat can be sowed in the field even without removing the chopped stubble, however, not all farmers currently have this machine, which is offered on 50% subsidy to individual farmers. About the decomposer, IARI scientists have also said that farmers do not necessarily have to wait for the entire 20-25 day window before getting to work on the field. They can start ploughing and preparing the land 10-15 days after spraying the decomposer.



How is this technology being used?

Union Environment Minister Prakash Javadekar has said that the decomposer will be used on a trial basis this year in Punjab, Haryana, Uttar Pradesh and Delhi. Ministry officials said the technology would be used over 100 hectares of land in Punjab and Haryana, 800 hectares in Delhi and 10,000 hectares in Uttar Pradesh, which they said has been experimenting with a similar technology for the last three years. IARI has been conducting experiments for a year-and-a-half on the decomposer. The technology was licensed for commercial use to four companies in 2019, and to two other companies in 2020. Delhi has started preparing the solution with help from IARI and would begin spraying it over fields October 11 onwards. Chief Minister Arvind Kejriwal has said the technology is inexpensive, as the whole process — from development, transport and spraying of decomposer — is costing the government only Rs 20 lakh. The results from trials this year would give an answer to the effectiveness of the technology and decide whether its use would be scaled up in the future.

THE ANATOMY OF THE CANNABIS PLANT — WHAT IS ILLEGAL UNDER NDPS ACT, WHAT IS NOT

At the centre of the storm around the Narcotics Control Bureau's investigation into the alleged drug trafficking in connection with actor Rhea Chakraborty — given bail by Bombay High Court on October 7 — following the death of actor Sushant Singh Rajput and what has now become an 'inquiry' aimed at "uprooting the drug citadel in Bollywood", is a plant that goes by many names: cannabis, hemp, marijuana or pot. As potent as various parts of its anatomy may be, not all of them amount to criminality under the Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985.

What is the cannabis plant?

According to the World Health Organisation (WHO), cannabis is a generic term used to denote the several psychoactive preparations of the plant *Cannabis sativa*. The major psychoactive constituent in cannabis is *Delta-9 tetrahydrocannabinol (THC)*. The *Mexican name 'marijuana'* is frequently used in referring to cannabis leaves or other crude plant material in many countries. Most species of cannabis are *dioecious plants* that can be identified as either male or female. *The unpollinated female plants are called hashish*. Cannabis oil (hashish oil) is a concentrate of cannabinoids — compounds which are structurally similar to THC — obtained by solvent extraction of the crude plant material or of the resin. *The WHO says that cannabis is by far the most widely cultivated, trafficked and abused illicit drug in the world.*

How does the NDPS Act define cannabis?

According to the NDPS Act "cannabis plant" means any plant of the genus cannabis. The legislation that was enacted in 1985 succeeded the Dangerous Drugs Act, 1930. It was introduced as lawmakers felt that the older legislation that entailed a maximum punishment of up to four years was not strict enough to check drug trafficking. Under section 2 (iii), the Act defines cannabis (hemp). The sub-sections refer to parts of the plant that come under the purview of the Act. *'Charas' is the separated resin extracted from the cannabis plant*. The NDPS Act covers separated resin, in whatever form, whether crude or purified, obtained from the cannabis plant and also includes *concentrated preparation and resin known as hashish oil or liquid hashish*. According to a 2018 WHO report by the Secretariat of the Expert Committee on Drug Dependence (ECDD), "The resin can resemble a resinous secretion of the plant, which is produced in the glandular trichomes,



but also occurs as finer plant material, which appears as loose or pressed sticky powder, depending on the method of production.” *Charas is also commonly called ‘hash’.* Section 2(iii)(b) of the NDPS Act defines ‘ganja’ as the flowering or fruiting tops of the cannabis plant but it clearly excludes the seeds and leaves, when not accompanied by the tops, by whatever name they may be known or designated. *Street names for the drug include ‘weed’ and ‘marijuana’.* The Act also illegalises any mixture with or without any neutral material, of any of the two forms of cannabis – charas and ganja — or any drink prepared from it.

Are substances made from cannabis leaves also illegal under the NDPS Act?

No. As defined in the Act, the legislature left seeds and leaves of the cannabis plant out of the ambit of the NDPS Act. The serrated leaves of the plant have negligible THC content. THC is the psychoactive or intoxicating compound present in the cannabis plant that is mainly responsible for giving consumers the ‘high’. *‘Bhang’, which is commonly consumed during festivals like Holi, is a paste made out of the leaves of the cannabis plant, and is hence not outlawed.* Similarly, CBD oil — an acronym for cannabidiol derived from the cannabis plant — that surfaced in the NCB’s investigation of WhatsApp chats between Sushant Singh Rajput’s talent manager Jaya Saha and Rhea Chakraborty, Saha’s lawyer said, would not come under the NDPS Act. “The information on the bottle of the ‘CiBiDiUM’ brand of the oil that Saha suggested Rhea could give Rajput, stated that it contained no THC. Khan also pointed out that the bottle does not bear the ‘NRx’ sign that prescription drugs that contain substances that may come under the NDPS Act, are required to have according to section 97(c) of the Drugs and Cosmetics Act that refers to labelling of medicines.

How is CBD oil used?

CBD is extracted from marijuana plants as either an oil or powder. These can be mixed into creams or gels. They can be put into capsules and taken orally, or rubbed on your skin. All topicals (cannabis-infused products) should be applied directly to the site of inflammation or pain to work in a specific area.

Is CBD oil helpful in the treatment of cancer?

There is not enough robust scientific evidence to prove that CBD oil can safely and effectively treat cancer. A study from the European Journal of Pain showed that CBD applied on the skin could help lower pain and inflammation due to arthritis. CBD inhibits inflammatory and neuropathic pain associated with cancer. Studies have long shown that people who took marijuana extracts in clinical trials tended to need less pain medicine. The US-based National Cancer Institute says that CBD may help alleviate side-effects of cancer treatment.

WHATSAPP & LEAKS

In recent weeks, television *news channels have shared leaked WhatsApp chats of film actors in their coverage of actor Sushant Singh Rajput’s* passing away. This has led to questions about whether communication over platforms such as WhatsApp is secure or not. It prompted *Facebook-owned WhatsApp to come out with a statement on its use of end-to-end encryption to secure user messages.*

Does WhatsApp have access to chats?



No. Since 2016, WhatsApp has installed an *end-to-end encryption* system, which, as its FAQ section says, “ensures only you and the person you’re communicating with can read what’s sent, and nobody in between, not even WhatsApp”. Governments across the world see end-to-end encryption as a huge issue when it comes to law enforcement. While WhatsApp says it responds to requests from law enforcement agencies “based on applicable law and policy,” it is not clear what kind of data it would have to share. News reports have mentioned that these could be in the nature of metadata such as mobile number, IP address, location, and so on.

How is WhatsApp designed to ensure such secure communication?

WhatsApp uses the encryption protocol developed by Open Whisper Systems, a project known best for its Signal app, which also uses the same open-source framework to ensure privacy. Whistle-blower Edward Snowden’s quote — “I use Signal every day” — is prominently displayed on the application’s homepage. Many closed messaging applications now use the Signal protocol.

What is the technology behind this?

The technology that forms the basis for this is called the ‘*Diffie-Hellman key exchange*’. In a 1976 paper titled, ‘New Directions in Cryptography,’ Whitfield Diffie and Martin E. Hellman saw the futility of the old ways of sharing a key securely (say, by “sending the key in advance over some secure channel such as private courier or registered mail”) in the emerging digital world. They proposed a way for secure communication via a method of a shared secret key, and that too when the communication is over a not-so-secure channel. This is all about high math, but one way to understand the broad concept, used by many experts, is by way of colours. In the world of imagination, a shared secret colour is the shared secret key between two communicators, who we will call A and B. (There are many versions of this example on the Internet.) A and B need to communicate without anyone eavesdropping. They first agree on a public colour (say, yellow). The two communicators then choose their own private colour, which is not to be shared with anyone. Say A chooses red and B, blue. They then individually mix their private colour with the public colour and send the mixture to each other. Note that the eavesdroppers can figure out the public colour and the mixtures. But there is one more step. B’s mixture (some sort of green) at A’s end is added with A’s private colour (red), and A’s mixture (some sort of orange) at B’s end is added with B’s private colour (blue). They both arrive at the same secret colour after the final step. There is now a shared secret colour key. The message that also needs to be understood is that while it is easy to add colours, it is difficult to figure out the original colours that contributed to a mixture. In the math world, that is called a one-way function. Imagine the difficulty in figuring out a key from complex mathematical computations. The Diffie-Hellman paper said: “A third party eavesdropping on this exchange must find it computationally infeasible to compute the key from the information overheard.”

Can’t those who have access to the server read messages?

End-to-end encryption removes this vulnerability. WhatsApp also says it does not store messages on its servers once they are delivered. An earlier generation of encryption did not secure the entire channel, but secured the communication between a user and the server (of a messaging service). Once the server received a message intended for another user, it would decrypt and again encrypt it before sending it securely to the receiver. But this meant that there was a chance of security being compromised at the level of the server.



Can leaks still happen?

End-to-end encryption cannot prevent leaks from happening if a third party has access to a device which contains these messages. Encryption also does not help in cases wherein the sender or the receiver of a message shares it with others, a member of a group shares it with others, or messages are stored in a different format on a different application or platform open to others.

Are there other vulnerabilities?

Bugs that lead others to control a user's phone are an example of such vulnerabilities. For instance, last year, WhatsApp revealed that surveillance technology developed by Israel's NSO Group had been used to spy on about 1,400 people across the world, including civil rights activists and journalists in India.

USING CLOUD COMPUTING FOR BETTER FLOOD INUNDATION MAPPING

The Kerala rains of July-August 2018 caused substantial loss of lives and property and left major cities flooded for days. Maps showing where flooding may occur or flood inundation maps can help in better flood risk preparedness. Using openly accessible satellite data and a cloud computing platform, an international team has now developed a powerful tool for a near real-time mapping of flood extent. The paper published in PLOS ONE notes the new flood inundation maps showed an accuracy of over 94%. *Space-based sensors known as **synthetic aperture radar (SAR)** have been used widely for monitoring and mapping of flood-water inundation. SAR is capable of acquiring data in all-weather condition, making it useful for mapping and monitoring flood inundation areas.*

Copernicus programme

These sensors operate on the constellation of two SAR satellites belonging to the Copernicus Programme launched by the European Space Agency. The data from the satellites was utilised on a cloud-based platform known as Google Earth Engine (GEE) for the rapid processing of big data. The GEE also has publicly made available numerous satellite image collections and has functions for image processing and analysis. The team studied water inundation maps from 2015 and their analysis was clearly able to show the areas submerged underwater in 2018.

HOW INDIANS SPEND THEIR TIME: WOMEN DO THE UNPAID WORK; LOTS OF SOCIALISING; ALMOST NO VOLUNTEERING

India's first Pan India time use survey was released by the Ministry of Statistics and Programme Implementation on Tuesday.

What are time use surveys?

A time use survey measures the amount of time people spend doing various activities, such as paid work, childcare, volunteering, and socialising. The primary objective of a time use survey (TUS) is to measure participation of men and women in paid and unpaid activities. TUS is an important source of information on the time spent in unpaid caregiving activities, volunteer work, unpaid domestic service producing activities of the household members. It also provides information on time spent on learning, socialising, leisure activities, self-care activities. The findings of these



surveys are deemed to be helpful in drafting policies on poverty, gender equity and human development.

Has India conducted a TUS earlier?

Over the last three decades, a number of developed countries have been conducting time use surveys with increasing frequency. The United States has been doing one annually since 2003. Australia conducted its first full-scale national survey in 1992, Canada has been doing it since 1961. Germany, Austria, and Israel have also conducted these surveys. The “NSS Report- Time Use in India 2019” whose findings were revealed on Tuesday, is the first such pan India survey conducted. It is a sample survey conducted between January and December 2019 in which 1.39 lakh households across the country and 4.47 lakh persons over the age of 6 were enumerated.

What are the major findings in the report?

The 2,140-page report provides data on the participation rate of Indians in different activities in a day and the average time they spend in those activities. It, however, does not provide the reasons for why people participate in certain activities, and why they spend as much time as they do in conducting that activity. The data, however, point to the fact that while the large chunk of paid work is done by men, unpaid work is largely done by women. *The participation rate of men in paid employment — which includes jobs, farming, fishing, mining amongst other economic activities — is high at 57.3 per cent, compared to women whose participation rate is only 18.4 per cent.* Indian men also spend more time at paid work, spending on average 7 hours 39 minutes compared to the 5 hours 33 minutes spent by women. However, when it comes to unpaid work like domestic services for household members which includes cooking food, cleaning, or unpaid caregiving like looking after a dependent child or an adult, the participation of women is very high. 81.2 per cent women participate in unpaid domestic services spending an average 4 hours 59 minutes each day. The participation rate of men in domestic services is low at 26.1 per cent, and the amount of time they spend conducting this service is far lesser than women, who spend around 1 hour 37 minutes while conducting this activity.

How do Indians like to socialise and entertain themselves?

A very high percentage of Indians socialise and spend their time in leisure each day. However, Indians are not inclined towards participating in unpaid volunteer work, the report suggests. *Contrary to popular perception, men tend to participate more in socialising and communication, community participation, and religious practice than women.* The report says that 91.4 per cent of men participated in social activities, spending two hours and 27 minutes each day. The participation rate for women is just a little less at 91.3 per cent, and they also spend less time compared to men, at two hours and 19 minutes. Indians do not like to participate in unpaid volunteer work. The report shows that only 2.7 per cent of Indian men participate as unpaid volunteers or trainees, or participate in other unpaid work. They spend 1 hour 42 minutes conducting that activity per day. The participation of women in volunteer work is lesser at 2 per cent, spending 1 hour 39 minutes.



#COUPLECHALLENGE: WHAT IS IT AND WHY IS THE POLICE WARNING PEOPLE NOT TO PARTICIPATE?

The latest trend to take the internet by storm is the 'Couple Challenge', where thousands of people from around the world have been sharing photographs with their partners or spouses on Twitter, Instagram and other social media platforms. But the seemingly innocent social media challenge has prompted law enforcement authorities in India to warn users against sharing their images online after receiving complaints from people whose pictures and personal information were misused by cyber criminals. Pune Police on Thursday posted a cautionary message on its official Twitter handle, warning social media users to "think twice before you post a picture with your partner." "A 'cute' challenge can go wrong if not cautious! #BeAware," the tweet read.

What is #CoupleChallenge?

As of today, more than 37,000 pictures have been shared under the hashtag 'Couple Challenge' on Instagram alone. Using this hashtag, netizens have been celebrating their relationships online by sharing pictures with their spouses and partners. The challenge also sparked a flurry of memes on social media, with some people using editing software Photoshop to digitally insert themselves into pictures with their favourite celebrities. Local law enforcement authorities, like the Nagpur Police, have even used the challenge to share memes that promote good practices during the ongoing Covid-19 pandemic, such as the use of face masks.

Why is the police warning netizens against participating in #CoupleChallenge?

In its recent Twitter post, the Pune police warned users to think twice before sharing their pictures on social media as they may be morphed, edited or used for pornography and other cyber crimes. "Couple Challenge is again trending on social media. Just an awareness these pics may misuse for morphing, revenge porn, deep fake, etc related cyber crime," the tweet read. Police personnel said that they had already received a number of complaints from people who had suffered harassment as their pictures and personal information were misused. Some claimed that their images were morphed and uploaded on "obscene websites" by a few criminal elements. In a press briefing, Police Inspector Jayram Paigude of the Cyber police station told reporters that people should be cautious before posting their personal information on social media.

What constitutes 'revenge porn' and 'deep fakes'?

Over the years, thousands of people — women in particular — have fallen prey to cybercrime such as deep fakes and revenge porn. 'Deep fakes' are computer-generated images and videos made using Artificial Intelligence (AI) technology. Criminals using AI software are now able to easily superimpose a person's face on to an existing video or photograph. In March 2018 for instance, a fake video of then-US First Lady Michelle Obama appeared on Reddit. An app called FakeApp was used to superimpose her face onto the video of a pornstar. A similar pornographic video surfaced on the internet in 2017, which featured actor Gal Gadot. It is not uncommon for criminals to use fake or edited images to blackmail victims, seek revenge or commit fraud on social networking and dating sites. The act of creating or sharing sexually explicit images or videos on the internet without the subjects consent and as a means of harassing them is known as revenge porn. Cybercrime officials in India have been tracking apps and websites that have been known to produce nude photographs of innocent people using AI algorithms. These images are often shared by criminals without the person's consent on pornographic websites.



THE REVISED GUIDELINES ON 'IDEAL' WEIGHT AND DIET

The National Institute of Nutrition (NIN), the Hyderabad-based premier research body of the Indian Council of Medical Research (ICMR), has released a new set of guidelines, updating norms on recommended dietary allowances (RDA), which is the average daily intake needed for a nutritious diet. Besides several other recommendations, a salient point in the report released this week is the *upward revision of the 'ideal' weight of Indian men and women.*

How are these reports prepared?

In 1989, an expert committee constituted by the NIN to decide on what should be a nutritious diet, used data generated by studying body weights and heights of well-to-do Indian children and adolescents. This was not reflective of the breadth and diversity of India. The reference weights for a man and woman were fixed at 60 kg and 50 kg respectively. Another committee in 2010 considered extensive data on anthropometry collected by the National Nutrition Monitoring Bureau, using nutrition profiles from ten States of India for computing reference body weights. They computed reference weights for different age groups. Most of the data collected were from rural India, but the reference points for a single 'ideal' weight remained unchanged. For the latest report, NIN looked at nationally representative data from the National Family Health Survey-4 (NFHS-4, 2015-16), the National Nutrition Monitoring Bureau (2015-16), the World Health Organization (2006-07) and the Indian Academy of Paediatrics (IAP, 2016) to "derive acceptable reference body weight values through the lifespan." *The definition for a reference Indian adult man and woman were modified with regard to age (19-39 years) instead of (20-39 years) and a body weight of 65 kg and 55 kg respectively were fixed for a normal Body Mass Index (BMI).* Though termed 'ideal', it is more appropriately a measure of the average weight of Indians.

How do Indians compare internationally?

The reference weights are a proxy for the nutritional status of the people of a country. International comparisons find that the average Indian is lighter than his or her counterparts globally. *The average Dutch male is 87.4 kg and a woman 72.3 kg, and the average weight in the United Kingdom is 86.8 kg for men and 72.9 kg for women, according to data aggregator 'WorldData.info'. Indians are closer to typical weights prevalent in Asia. The average Sri Lankan male is 61.3 kg and woman 56.2 kg, and the average Japanese man is 69 kg and woman 54.7 kg.* The data, however, is based on 2010 estimates, and the latest NIN revision will push India up a few notches.

What are the dietary recommendations?

The guidelines specify the amount of carbohydrates, minerals, dietary fibre, fats and oils, protein, and even water, that a person must ideally consume. The water intake for an adult man ranges from 32-58 ml per kg body mass, and for a woman, it ranges from 27-52 ml per kg body mass. For children, the requirement is over 60 ml per kg body mass, and for adolescent boys it ranges from 47-60 ml per kg body mass, while for girls, it is 39-49 ml per kg body mass. For a pregnant woman, based on the working intensity, the water required from beverages ranges from 2.1 litres to 3.2 litres per day. A minimum 400 gram/day of fruits and vegetables are necessary to obtain sufficient antioxidant nutrients, such as beta-carotene, Vitamin C, and certain non-nutrients like polyphenols and flavonoids that reportedly protect against chronic diseases. This should be complemented with a sufficient amount of vegetable oil to obtain Vitamin E. The fat intakes for



sedentary, moderate and heavy activities have been set at 25 gram/day, 30 g/d and 40 g/d respectively for an adult man, and 20 g/d, 25 g/d and 30 g/d for adult women.

WHAT A GOVT SURVEY SAYS ABOUT THE HEALTH OF INDIA'S RELIGIOUS COMMUNITIES

The Ministry of Statistics and Programme Implementation has released the report of a survey titled 'Health in India', whose main objective was to gather basic quantitative information on India's health sector. The report details aspects of the role played by government and private sector facilities, and also contains health information for separate religious communities, including estimates of their susceptibility to ailments.

According to the report, which religious group in India is the most prone to illness?

The Zoroastrian community remains the most susceptible to ailments, the report says. Results from the National Sample Survey (NSS)'s 75th Round released in July show that 31.1 per cent of Zoroastrians reported that they were suffering from an ailment at the time the survey was conducted. This number for other communities is: Jains, 11.2 per cent; Sikhs 11 per cent; Christians 10.5 per cent; Muslims 8.1 per cent; Buddhists 8 per cent; and Hindus 7.2 per cent. The report is based on information collected through NSS Schedule 25.0 (Household Social Consumption: Health) spread over the entire Indian Union. Data were collected through a sample survey of 1.13 lakh households covering 5.55 lakh persons.

How does the survey define 'ailment'?

The survey defines ailment as any deviation from a person's state of physical and mental well-being. The 'Proportion of Persons who Responded as Ailing', or PPRA, in a 15-day period when they were approached by the surveyors, were registered as those suffering from ailments.

Is there a significant division in terms of sex?

The survey shows that women remain more susceptible to suffering from ailments than men. In rural India 6.1 per cent of males said that they were suffering from ailments, while 7.6 per cent of rural women said the same. While 8.2 per cent of urban males said that they were sick, 10 per cent urban females said the same.

Overall, how healthy (or unhealthy) is India?

Around 7.5 percent of Indians reported that they were suffering from ailments, as per the survey. The difference in people suffering from ailments in rural and urban India was stark. While in rural India only 6.8 per cent said that they were suffering from an ailment, this number in urban India was 9.1 per cent.

60 MN INDIANS MAY HAVE BEEN EXPOSED TO VIRUS

Around 7% of India's adult population may have been exposed to the novel coronavirus till the last fortnight of August, according to the second national sero-survey by the Indian Council of Medical Research (ICMR). This is roughly a 10-fold jump in numbers from the first sero-survey conducted by the Council across 70 districts in 21 States that sought to estimate the likely number of infected until early May. The people tested in the second survey were drawn from the same villages and clusters as the first, in which the scientists said that 0.73% of adults — or about 6.4



million — across the country were likely infected. No figures were shared on the likely number of infections by ICMR Director General, Dr. Balram Bhargava, in his presentation on Tuesday. But 7% of the population works out to about 62 million people. Sero-surveys are conducted by drawing blood samples and checking for a specific class of antibodies called IgG that appear within two weeks of an infection. Because it is yet unclear how long antibodies detectably persist in the body, their presence only indicates past exposure to — and not presence of — the virus. During the first survey, it emerged that there were 82-130 infections for every confirmed COVID-19 positive case. That number has now dropped to 26-32 infections, which according to Dr. Bhargava, was the result of ramped up testing and early case detection. In September, there were 29 million tests, compared to 23 million in August, 10.5 million in July and 30,000 in March, according to Health Secretary Rajesh Bhushan. However, the numbers also suggest that the country still has an overwhelming majority of its population yet to be exposed to the virus and therefore, is far from any peak or herd immunity levels. These refer to approximate estimates that show what percentage of the population needs to be exposed to the virus so that its spread is curtailed.

More risk in urban slums

“The risk of being exposed to the virus is real and we have to continue with our measures. Risk in urban slums is twice that of non-slums and four times that in rural settings,” Dr. Bhargava said. One in fifteen individuals above 10 were exposed to the virus by August and there was no difference by age group and gender. “In light of upcoming festivities, winter season and mass gatherings, inventive containment strategies need to be implemented by States,” Dr. Bhargava emphasised.



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BUSINESS & ECONOMICS

FLAGGING CESS NON-TRANSFER, ITS ECONOMIC

The Financial Audit Report of the Government of India by the Comptroller and Auditor General (C&AG) for 2018-19 placed in Parliament on September 23 has raised significant issues of a lack of transparency and propriety. The Opposition-ruled States have criticised the Centre on the short transfer of Goods and Services Tax (GST) compensation cess revenues to the GST Compensation Fund. The C&AG's report stated that the Government of India did not transfer ₹6,466 crore of compensation cess revenue in 2017-18 and ₹40,806 crore in 2018-19. Thus, a total of ₹47,272 crore was retained in the Consolidated Fund of India (CFI). The report also alluded to the non-apportionment of a portion of Integrated Goods and Service Tax (IGST) among the States and retaining it in the CFI.

Boosts claim by States

At a time when there is a raging controversy over the Union government's refusal to compensate States for the shortfall in the collection of GST as per the agreement, and, instead, giving States two options to borrow, the C&AG's report has only added more fuel to the fire of the States' claim. *These States contend that when there were surplus collections, the Union government appropriated them and when there is a shortfall, it simply distances itself, instead asking States to borrow.*

Levy of cesses

The C&AG's observations on a non-transfer of cesses, however, has a much larger macroeconomic significance. There are as many as 35 cesses levied by the government of India. These are earmarked taxes and the proceeds should be used for the purposes for which they are levied. A number of reserve funds or development boards have been created for these specified purposes and the collections from the cesses are supposed to be transferred to these funds placed in public accounts for defraying expenditures on the specified purposes. They are not a part of the CFI and cannot be used for defraying regular expenses. The transactions in public accounts are supposed to be done by the government as a trustee or a banker, and are not subject to vote by Parliament. The C&AG has pointed out that in 2018-19, the collections from 35 Cesses amounted to nearly ₹2.75-lakh crore of which only ₹1.64-lakh crore was transferred to various reserve funds and boards designated for the purpose in Public Accounts. Thus, the short transfer to the Public Account during the year amounted to ₹1.11-lakh crore payment. Besides, ₹47,272 crore short transfers to the GST Compensation Cess Fund, there was a short payment of ₹38,000 crore in the transfer of the road cess to the Central Road and Infrastructure Fund. In addition, the government collected ₹1,24,399 crore from the cess on crude oil which, as required, was not transferred to the Oil Industry Development Board (the designated Reserve Fund) and retained in the CFI. By short transfer of the realised amount of cess to the respective funds and boards in Public Account, the government understated revenue and fiscal deficits for the year; and it works out to more than 1.2% of GDP. Thus, in addition to off Budget borrowings to cover fertilizer and food subsidy, financing irrigation projects from the Long Term Irrigation Fund (LTIF) created by the National Bank for Agriculture and Rural Development (NABARD), and financing of railway projects through borrowings from the Indian Railway Finance Corporation (IRFC), short transfer of cess revenue to public accounts is a method used to obfuscate the Budget to show lower revenue and fiscal deficits.



Process becomes opaque

Should the government of India raise revenues through so many cesses? Cesses are earmarked taxes and to ensure a minimum allocation to important and priority programmes, this method of financing could be used. In India, even after a number of cesses and surcharges were abolished when the GST was implemented, there are as many as 35 cesses levied by the Finance and other Ministries of the Government of India. The ostensible reasoning for levying these cesses is the belief that ring fencing of revenue for specified priority purposes may evoke greater tax compliance as people can link the benefits with the taxes paid. However, when there are as many as 35 earmarked cesses, it is difficult to see all of them as priority areas requiring protection of funding. There is also a possibility of limiting the funding of important and priority areas to the amount of cess collected even when they require much larger amounts. Too many cesses also complicate the tax system and add to administrative and compliance costs. In addition, the operation of the cesses involving collections and transfer to designated funds in the Public Accounts makes the entire process opaque as the operation of these funds too needs to be monitored and audited.

Governmental arrangements

A major reason for the proliferation of cesses in India is to be found in the inter-governmental fiscal arrangements. Article 270 of the Constitution requires the Union government to distribute the proceeds from all Central taxes listed in the Union List based on the recommendation of the Finance Commission. However, Article 271 excludes the distribution of the revenue from any surcharge or cess levied by the Union government for any specified purpose. As the Finance Commissions are appointed once in five years, the Union government can raise additional revenue from taxes mainly through the levy of cesses and surcharges to avoid sharing them with the States. This has been practised for long and despite the adverse comments of many Finance Commissions, the Union government has found the practice convenient. This is one of the ways to partially negate the recommendation of the Finance Commission, particularly when the Centre sees the recommendations as generous to the States. *After the Fourteenth Finance Commission recommended that the share of the States in the divisible pool be pegged at 42%, almost all discretionary increases in taxes were done by levying cesses and surcharges. The large increases in additional excise duties on petroleum products this year will entirely accrue to the Centre. The States' share in the gross Central taxes was 35% in 2015-16, the first year of the Fourteenth Finance Commission's recommendation, but decreased to 32% in 2019-20, and in the current year, it could be less than 30% as a large volume of revenue from petroleum products is sought to be raised through additional excise duties.* As shown by Y.V. Reddy and G.R. Reddy (in their book, Indian Fiscal Federalism, p.241), *the cesses and surcharges constituted just about 3% of Central gross tax revenue in 2000-01; but in 2015-16, it was 16.5%. It could be as much as 20% in 2020-21.* The issues raised by the C&AG relate merely to short transfer of funds, but the implications are much larger. They relate to obfuscations in the Budget and denying the share of the States in the divisible pool of taxes.

RBI'S RECONSTITUTED POLICY PANEL TO MEET OCT. 7-9

The Reserve Bank has scheduled the next meeting of the MPC for October 7-9. This follows the appointment of three new external members to the Monetary Policy Committee (MPC). The meeting, originally scheduled for September 29-October 1, had to be postponed as the term of the previous external members ended on September 30. *The government on Monday appointed*



Ashima Goyal, Jayanth R. Varma and Shashanka Bhide as new external members of the panel. Nomura said in a note that Dr. Goyal and Dr. Varma were from academia and specialised in macroeconomics and the financial sector, respectively, while Dr. Bhide came from a think-tank and had worked on real economy issues, but that his policy views were not yet known. With the fresh nominations, the MPC had developed a more 'dovish tilt' it added.

How are MPC members selected?

RBI Governor Shaktikanta Das is the head of the MPC, while the Deputy Governor in charge of the Monetary Policy Department (Michael Patra) and the Executive Director (Dr. Mridul K. Sagar) looking after the monetary policy are members from the RBI side. The three government nominees are selected by a committee formed by the government for a four-year term. The three members whose tenure ended in August are: *Dr Chetan Ghate*, Professor, Indian Statistical Institute; *Dr Pami Dua*, Director, Delhi School of Economics; and *Dr Ravindra H Dholakia*, former Professor, IIM Ahmedabad. As per the RBI Act, the quorum for an MPC meeting is four, and in effect the committee cannot meet until at least one external member is present, in addition to the three RBI representatives. If there's a tie on any proposal, the RBI Governor holds the casting vote.

Review of MPC in 2021

The MPC is scheduled for a review in 2021 when it completes five years. *The panel to select external members was set up earlier this year. It is headed by Cabinet Secretary Rajiv Gauba, and includes RBI Governor Shaktikanta Das or a deputy governor representing him, NITI Aayog vice-chairman Rajiv Kumar and Economic Affairs Secretary Tarun Bajaj.*

RBI EXTENDS ENHANCED BORROWING LIMIT FOR BANKS TILL MARCH 31

Amid the ongoing economic woes created by the COVID-19 pandemic, the Reserve Bank has decided to extend by six months the enhanced borrowing facility provided to banks to meet the shortage of liquidity till March 31, 2021. As a temporary measure, the RBI had increased the borrowing limit for scheduled banks under the marginal standing facility (MSF) scheme from 2% to 3% of their net demand and time liabilities (NDTL) with effect from March 27, 2020. The facility, which was initially available up to June 30, 2020 was later extended up to September 30, 2020 in view of the disruptions caused by the pandemic. "With a view to providing comfort to banks on their liquidity requirements as also to enable to continue to meet LCR requirements, it has been decided to continue with the MSF relaxation for a further period of six months, i.e., up to March 31, 2021," the RBI said in a statement. This dispensation, it added, provides increased access to funds to the extent of ₹1.49 lakh crore, and also qualifies as high-quality liquid assets (HQLA) for the liquidity coverage ratio (LCR). Under the MSF, banks can borrow overnight at their discretion by dipping into the statutory liquidity ratio (SLR).

AS INVESTORS OUST CEOS OF DHANLAXMI BANK AND LVB, OLD PRIVATE BANKS COME UNDER SCANNER

The functioning of old generation private banks has come under the spotlight with shareholders of two private sector banks, Lakshmi Vilas Bank (LVB) and Dhanlaxmi Bank firing their chief executive officers in the span of a week and the Reserve Bank of India (RBI) taking a close scrutiny of their operations. While there are no strong promoters for these banks, a clutch of powerful



investors are calling the shots with the stage set for a takeover or merger of these banks, sources said. Shareholders of Kerala-based Dhanlaxmi Bank voted against the appointment of Sunil Gurbaxani as managing director and CEO, though the RBI had approved his appointment for a period of three years from the date of taking charge. Last week, shareholders of the struggling LVB voted against the appointment of seven directors to its board, including that of S Sundar as the MD and CEO, and the promoters KR Pradeep and N Saiprasad. Although these banks have been in existence for several decades, they have no promoter groups who can take these banks forward. Two other South-based banks — South Indian Bank and Federal Bank — have been operating as board-driven banks without a promoter. In Karur Vysya Bank, the promoter stake is 2.11 per cent and there's no promoter in Karnataka Bank. All these banks are prime takeover targets if the RBI agrees, as takeover or merger of a bank is not possible without the approval of the central bank. The firing of CEOs in two banks has raised concern among depositors as the collapse of Punjab and Maharashtra (PMC) Co-operative Bank last year was followed by the near-death experience of Yes Bank. However, the RBI made timely intervention and salvaged Yes Bank, preventing a systemic fallout. Even before PMC Bank and Yes Bank, the collapse of IL&FS in 2018 had sent the entire financial sector into a turmoil.

Problems in Chennai-based LVB were simmering for quite some time. Everything that can possibly go wrong with a bank, has gone wrong with LVB. And while no one is calling the bank insolvent, this is what it truly is.

Dhanlaxmi Bank

Thrissur-based Dhanlaxmi Bank has been witnessing a different battle, with some high networth investors opposing changes being brought about by the board led by Gurbaxani, who incidentally was appointed by the RBI.

WHAT ARE ESG FUNDS, BIG ABROAD, AND NOW FINDING INTEREST IN INDIA TOO

Although big in global investments, ESG funds — which imbibe environment, social responsibility and corporate governance in their investing process— are witnessing growing interest in the Indian mutual fund industry too. There are currently three ESG schemes managing close to Rs 4,500 crore (two of these launched in the last 15 months), while at least five more fund houses have lined up new schemes. ICICI Prudential Mutual Fund, which launched its ESG fund on September 21, has already raised over Rs 500 crore in its ongoing NFO. It is learnt that Kotak Mahindra AMC is set to come out with its ESG fund NFO soon and more will follow.

What is ESG?

*ESG investing is used synonymously with sustainable investing or socially responsible investing. While selecting a stock for investment, the ESG fund shortlists companies that score high on **environment, social responsibility and corporate governance**, and then looks into financial factors.* So, the schemes focuses on companies with environment-friendly practices, ethical business practices and an employee-friendly record.



Why so much focus on ESG now?

Fund houses say modern investors are re-evaluating traditional approaches, and look at the impact their investment has on the planet. As a result of this paradigm change, asset managers have started incorporating ESG factors into investment practices.

How big is ESG?

There are over 3,300 ESG funds globally and the number has tripled over the last decade. The value of assets applying ESG to investment decisions today is \$40.5 trillion. In India, as of now there are three schemes — SBI Magnum Equity ESG (Rs 2,772 crore), Axis ESG (Rs 1,755 crore) and Quantum India ESG Equity (Rs 18 cr) — following the ESG investment strategy. While ICICI Prudential's scheme launched its NFO last week, Kotak Mahindra AMC is expected to launch its NFO soon and more are expected to follow.

What change can it bring?

As ESG funds gain momentum in India, fund managers say companies will be forced to follow better governance, ethical practices, environment-friendly measures and social responsibility. Globally there has been a big shift as many pension funds, sovereign wealth funds etc don't invest in companies that are seen as polluting, don't follow social responsibility or are tobacco companies. "No one is saying that companies should exit chemicals business or refining business or thermal power business etc, but it is just that they need to do it responsibly, utilise the technology available, effluent treatment, should not discharge untreated waste in soil, water or air, and should also take care of their minority shareholders and society," said Mrinal Singh, Deputy CIO–Equity, ICICI Prudential AMC. He added that in coming years, companies that do not follow sustainable business models will find it tough to raise both equity and debt.

Which sectors/companies will lose out?

Industry insiders say tobacco companies and companies in the coal business may find it tough to make the cut; so will companies that generate hazardous waste and do not manage them properly. Besides, sectors that use a lot of water and do not follow best practices on its reuse, or companies that discharge untreated waste in soil, water or air will find it tough to get funds parked in them. Experts in the industry say there are conflicts at various levels and many investors worldwide who are looking at sustainable wealth creation do not wish to be associated with such conflicts. For example, while the global tobacco industry profits per year come to \$35 billion, it is also a cause of nearly 6 million annual deaths and investors are growing sensitive to these realities.

SUCCESSFUL BIDDER CANNOT WITHDRAW OFFER, RULES NCLAT

The National Company Law Appellate Tribunal (NCLAT) has said that once a resolution plan for a debt-ridden company is approved by the lenders, the successful bidder cannot be permitted to withdraw its offer. A three-member NCLAT bench said the sanctity of the resolution process has to be maintained and such withdrawal by a successful bidder 'frustrates' the entire exercise of Corporate Insolvency Resolution Process. Moreover, there is also no express provision in the Insolvency & Bankruptcy Code to allow any successful resolution applicant to 'stage a U-turn', it added. "Provision for submission of a Performance Bank Guarantee by a resolution applicant while submitting its resolution plan, as required under the amended provisions of IBBI



[Insolvency Resolution Process of Corporate Persons] Regulations, 2016 is a step in this direction, but may not be deterrent enough to prevent a Successful Resolution Applicant from taking a U-turn," the NCLAT said.



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LIFE & SCIENCE

WHO WON THE NOBEL PEACE PRIZE 2020, AND WHY?

About the Nobel Peace Prize

In his will, signed by Alfred Nobel on November 27, 1885, he mentioned that one part of his fortune that went towards the Nobel Prizes would be dedicated to “the person who shall have done the most or the best work for fraternity between nations, for the abolition or reduction of standing armies and for the holding and promotion of peace congresses”. *The Nobel Peace Prizes have been awarded since 1901 and was not awarded on 19 occasions including 1914-1916, 1918, 1939-1943 among some other years.* This is because the statutes of the Nobel Foundation mention, “If none of the works under consideration is found to be of the importance indicated in the first paragraph, the prize money shall be reserved until the following year. If, even then, the prize cannot be awarded, the amount shall be added to the Foundation’s restricted funds.” Therefore, fewer awards were given during the two World Wars. Overall, the prize has been awarded to 135 laureates, including 107 individuals and 28 organisations. *The Office of the United Nations High Commissioner for Refugees has been awarded the prize twice. So far, the youngest laureate is Malala Yousafzai, who was 17 years old when she won in 2014 and the oldest recipient was Joseph Rotblat who was given the award at the age of 87 in 1995.*

So what is the UN WFP and why did it win the prize?

The World Food Programme (WFP), which was *established in 1961 at the behest of the US president Dwight Eisenhower*, is the *world’s largest humanitarian organisation* (certified as the largest by the Guinness World Records in 2002) committed towards its global goal of ending hunger by the year 2030.

In 2015, eradication of world hunger became one of the UN’s Sustainable Development Goals (SDGs) and WFP is the UN’s primary instrument in achieving that goal. Other UN agencies that work towards providing food security include the World Bank, the Food and Agriculture Organisation (FAO) and the International Fund for Agricultural Development (IFAD). Other UN SDGs include ending poverty, gender equality, clean water and sanitation, providing quality education and affordable and clean energy among others. WFP was awarded the peace prize “for its efforts to combat hunger, for its contribution to bettering conditions for peace in conflict-affected areas and for acting as a driving force in efforts to prevent the use of hunger as a weapon of war and conflict.” *WFP runs entirely on public donations and was able to raise over \$8 billion last year. Its donors include governments, corporations and individuals.*

How does WFP help people?

WFP provides food assistance in two ways, either by way of providing food or by meeting people’s food-needs by providing cash-based transfers. The cash-based transfers were launched for the first time in 2005 in response to the tsunami in Sri Lanka. In 2019, WFP provided assistance to close to 100 million people spread across 88 countries by supplying them with over 4.2 million metric tonnes of food and \$1.2 billion in cash and vouchers. In 1962, the WFP undertook its first emergency operation after an earthquake in Iran killed over 12,000 people; in 1963, the



organisation launched its first development programme in Sudan. In 1989, WFP staged the largest humanitarian airdrop in history involving 20 cargo aircraft when it launched “Operation Lifeline Sudan” to provide assistance to millions of people affected by the civil war that played out in the southern part of the country. More recently, the organisation has provided food aid to over 4.5 million victims of the earthquake in Haiti in 2010, in 2011 to millions of people affected by the Syrian conflict, in 2014 to people affected by the Ebola outbreak and in 2015 to the Nepal earthquake survivors.

How does WFP measure hunger?

The organisation estimates hunger by the prevalence of undernourishment. The UN defines undernourished or food-deprived people as those individuals whose food intake falls below the minimum level of dietary energy requirements. These dietary energy requirements are set by sex and age groups in consultation between the FAO, UN and WHO. The energy requirement is the amount of energy from food required to balance energy expenditure in order to maintain body-weight, body composition and a level of necessary and desirable physical activity that is consistent with long-term good health, as per the UN. *According to current estimates, about 8.9 per cent of the world's population or about 690 million people are hungry and as per WFP if the current trends continue, by 2030 there will be 840 million hungry people. Further, about 135 million suffer from acute hunger mainly as a result of man-made conflicts, climate change and economic downturns.* WFP estimates that the COVID-19 pandemic could possibly double that figure.

Does WFP work in India?

Yes, WFP has been working in India since 1963 and has transitioned from food distribution to providing technical assistance as India became self-sufficient in cereal production. One-fourth of the world's undernourished population is in India and about 21 percent of the population live on less than \$1.90 a day. At the moment, WFP is working to improve the government's *targeted public distribution system (TPDS)* to ensure that food reaches those that need it the most. *The WFP has proposed some unique initiatives like Automatic Grain Dispensing Machine (Annapurti) and Mobile Storage Units for the effective implementation of TPDS.* Annapurti allows beneficiaries to withdraw their foodgrain quota accurately and at a time of their choice. It can dispense two commodities at a speed of 25 kg per 1.3 minutes. It has a storage capacity of 200 kg to 500 kg. According to WFP India, it has completed a pilot on rice fortification used in the government's Mid-day Meals scheme in Varanasi. Since December 2018, 4,145 tonnes of fortified rice has been produced and fed to 300,000 schoolchildren, it says. Even during the pandemic, WFP India has worked with the central and state governments. For instance, it signed *an MoU with the Uttar Pradesh State Rural Livelihood Mission. Under the agreement, WFP will provide technical assistance for setting up supplementary nutrition production units in 18 districts for supply of quality food to about 33 lakh beneficiaries of the Anganwadi scheme (Integrated Child Development Services).* It has also prepared a guidance note for the re-opening of schools during the pandemic.

AMERICAN POET LOUISE GLUCK WINS NOBEL LITERATURE PRIZE

American poet Louise Gluck won the 2020 Nobel Literature Prize on Thursday, an unexpected choice known for themes of childhood and family life that draw inspiration from myths and classical motifs. Ms. Gluck, 77, was honoured “for her unmistakable poetic voice that with austere beauty makes individual existence universal,” the Academy said. Ms. Gluck won the Pulitzer Prize



in 1993 for her collection *The Wild Iris* and the National Book Award for her latest collection, *Faithful and Virtuous Night*, in 2014. Ms. Gluck was not seen as a favourite for the Nobel in the run-up to Thursday's announcement. The chair of the Academy's Nobel committee, Anders Olsson, lamented that she was not more well-known, "at least outside the US' borders", and had not been translated into many other languages. She is the fourth woman to win the Nobel Literature Prize in the past decade — after Olga Tokarczuk, Svetlana Alexievich and Alice Munro — and only the 16th since the Nobel prizes were first awarded in 1901. A professor of English at Yale University, Ms. Gluck "seeks the universal, and in this she takes inspiration from myths and classical motifs, present in most of her works," the Academy said in its prize citation. "The voices of Dido, Persephone, and Eurydice — the abandoned, the punished, the betrayed — are masks for a self in transformation, as personal as it is universally valid."

Natural tone

Her collections *The Triumph of Achilles* (1985) and *Ararat* (1990) address "almost brutally straightforward images of painful family relations", the jury said, noting that her use of a "deceptively natural tone is striking", with "no trace of poetic ornament." Ms. Gluck is also a poet of radical change and rebirth, describing in her poem *Snowdrops* the miraculous return of life after winter, her work often marked by "humour and biting wit". The jury said her 2006 collection *Averno* was a "masterly collection, a visionary interpretation of the myth of Persephone's descent into Hell in the captivity of Hades, the god of death."

NOBEL PRIZE IN CHEMISTRY FOR SCISSORS TO EDIT GENES

Its simplicity has often been compared to the 'Cut-Copy-Paste' mechanism in any word processor (or probably, the equally common 'Find-Replace' mechanism), while its uses can potentially transform human beings, and all other life forms. It can potentially eliminate genetic, and other, diseases, multiply agricultural production, correct deformities, and even open up the more contentious possibilities of producing 'designer babies', and bringing cosmetic perfection. In effect, anything that is linked with functioning of the genes can be corrected, or 'edited'. *The CRISPR (short for the rather inelegantly named **Clustered Regularly Interspaced Short Palindromic Repeats**) technology for gene-editing has been triggering tremendous excitement ever since it was developed in the year 2012, both for the promise that it holds in improving the quality of life, and the dangers of its misuse.* Hundreds of scientists and laboratories have since started working on the technology for a variety of uses. In the last eight years, the technology has brought a string of awards and honours for its developers. On Wednesday, it culminated in the Nobel Prize for Chemistry for the two women who started it all, 52-year-old **Emmanuelle Charpentier of France**, and 56-year-old **American Jennifer Doudna**. It is possibly the only time in the history of Nobel Prize that two women have been declared the sole winners.

The Technology

Editing, or modifying, gene sequences is nothing new. It has been happening for several decades now, particularly in the field of agriculture, where several crops have been genetically modified to provide particular traits. "But what CRISPR has done is make gene editing very easy and simple, and at the same time extremely efficient. And the possibilities are nearly endless," said Debojyoti Chakraborty who works with this technology at the New Delhi-based CSIR-Institute of Genomics and Integrative Biology. *In essence, the technology works in a simple way — it locates the specific*



area in the genetic sequence which has been diagnosed to be the cause of the problem, cuts it out, and replaces it with a new and correct sequence that no longer causes the problem. **The technology replicates a natural defence mechanism in some bacteria that uses a similar method to protect itself from virus attacks.** An RNA molecule is programmed to locate the particular problematic sequence on the DNA strand, and a special protein called Cas9, which now is often described in popular literature as 'genetic scissor', is used to break and remove the problematic sequence. A DNA strand, when broken, has a natural tendency to repair itself. But the auto-repair mechanism can lead to the re-growth of a problematic sequence. Scientists intervene during this auto-repair process by supplying the desired sequence of genetic codes, which replaces the original sequence. It is like cutting a portion of a long zipper somewhere in between, and replacing that portion with a fresh segment. **Because the entire process is programmable, it has a remarkable efficiency, and has already brought almost miraculous results.** There are a whole lot of diseases and disorders, including some forms of cancer, that are caused by an undesired genetic mutation. These can all be fixed with this technology. There are vast applications elsewhere as well. **Genetic sequences of disease-causing organisms can be altered to make them ineffective. Genes of plants can be edited to make them withstand pests, or improve their tolerance to drought or temperature.** "In terms of its implications, this is possibly the most significant discovery in life sciences after the discovery of the double-helix structure of the DNA molecule in the 1950s," said Siddharth Tiwari of the Mohali-based National Agri-Food Biotechnology Institute who has been using the CRISPR technology on genes of banana plant.

The Winners

Charpentier and Doudna were working independently when they stumbled upon different pieces of information that later came together to be developed into this technology. Charpentier, a biologist then working at a laboratory in Sweden, needed the expertise of a biochemist to process the new information she had got on the genetic sequences in a particular bacteria she had been working on called *Streptococcus pyogenes*. She had heard of Doudna's work at the University of California, Berkeley, and the two happened to meet at a scientific conference in Puerto Rico in 2011, according to an account published on the website of the Nobel Prize. Charpentier proposed a collaboration, to which Doudna agreed. Their research groups then collaborated over long distance over the next year. Within a year they had been able to come out with a revolutionary technology of gene-editing. Several other scientists and research groups also made vital contributions in the development of this technology. **Someone like Virginijus Siksnys, a biochemist working at the Vilnius University in Lithuania, is widely recognised as a co-inventor of this technology. In fact, Siksnys shared the 2018 Kavli Prize in Nanoscience with Doudna and Charpentier for this technology.** But the seminal contribution of the two women is undisputed. Their achievement has been recognised through several prestigious awards in the last few years, including the Breakthrough Prize in Life Sciences in 2015 and the Wolf Prize in Medicine earlier this year. **There has been some murmurs in the scientific community about the Chemistry Nobel having gone to biologists. But apparently this is not a new phenomenon. The central role of chemistry in life sciences — at the molecular level, biology is essentially chemistry — has ensured that increasing number of Nobel prizes have recently been awarded for work in the field of biochemistry.** In fact, a research paper published earlier this year has pointed out this gradual shift in the nature of Chemistry prize. According to Chemistry World, a news magazine published by the Royal Society of Chemistry, of the 189 scientists awarded with the Chemistry Nobel so far, 59 had worked in the field of biochemistry. This was more than any other branch of chemistry.



Ethical Concerns

*In November 2018, a Chinese researcher in Shenzhen created international sensation with his claim that he had altered the genes of a human embryo that eventually resulted in the birth of twin baby girls. This was the first documented case of a 'designer babies' being produced using the new gene-editing tools like CRISPR, and raised exactly the kind of **ethical concerns that scientists like Doudna have been speaking about**. In the case of the Chinese twins, the genes were edited to ensure that they do not get infected with HIV, the virus that causes AIDS. This special trait would then be inherited by their subsequent generations as well. The concerns were not over the reason for which the technology was used as much as the ethics of producing babies with particular genetic traits. Scientists pointed out that the problem in this case, potential infection to HIV virus, already had other alternative solutions and treatments. What made matters worse was that the gene-editing was probably done without any regulatory permission or oversight. Others also pointed out that while CRISPR technology was incredibly precise, it wasn't 100 per cent accurate, and it is possible that some other genes could also get altered by mistake. **Doudna herself has been campaigning for the development of internationally rules and guidelines for the use of CRISPR technology, and has advocated a general pause these kind of applications till such time.***

WHAT HAS THE 2020 NOBEL PRIZE IN PHYSICS BEEN AWARDED FOR?

*The Royal Swedish Academy of Sciences decided to award one half of the 2020 Nobel Prize in physics to **Roger Penrose** and the other half jointly to **Reinhard Genzel** and **Andrea Ghez** for furthering the understanding of black holes, the most "enigmatic" objects in the universe. Earlier on Monday, three biologists shared the Nobel Prize in medicine for the discovery of the vaccine for the hepatitis C virus.*

What are black holes?

*A black hole is formed when stars collapse and can be defined as a space in the universe with an escape velocity so strong that even light cannot escape it. Escape velocity is the speed at which an object must travel to override a planet or an object's gravitational force. For instance, for a spacecraft to leave the surface of the Earth, it needs to be travelling at a speed of about 40,000 km per hour. Since light cannot get out, black holes are invisible and can only be tracked with the help of a space telescope or other special tools. And the reason light cannot escape is mainly that the gravity inside a black hole is very strong as a result of **a lot of matter being squeezed into a small space.***

What do the award winners' work tell us about black holes?

*Penrose has been awarded the prize for the discovery "that black hole formation is a robust prediction of the general theory of relativity," while Genzel and Ghez have been awarded the prize for the discovery of a "supermassive compact object at the centre of our galaxy." Penrose's work has shown that black holes are a direct consequence of Albert Einstein's general theory of relativity. Einstein himself did not believe that black holes exist and presented his theory in November 1915, providing a new way to look at and understand gravity that shapes the universe "at the largest scale". Gravity also shapes space and influences the passage of time. It is this gravity, which is so great inside a black hole that is able to bend space and slow down time. **Penrose used Einstein's general theory of relativity in order to prove that the process of formation of black holes is a stable one. He proved that black holes exist and described them in detail back in 1965, ten years after***



Einstein died. Genzel and Ghez, on the other hand, have discovered that an invisible and an extremely heavy object governs the stars' orbit at the centre of the Milky Way. This extremely heavy object has the mass equivalent to 4 million solar masses and is packed into an area about the size of our solar system. Essentially, their work tells us that at the centre of our galaxy the Milky Way lies an invisible supermassive object, of which a black hole provides a reasonable explanation. Physicists have been suspecting the existence of a black hole at the centre of our galaxy for over 50 years now. In order to see through to the middle of the Milky Way, Genzel and Ghez worked on developing methods and used some of the world's largest telescopes. By observing the orbits of the stars' that are closest to the centre of the Milky Way, the physicists think that the black hole could most likely be hiding in *Sagittarius A**, a source of radio waves around which all stars in the Milky Way orbit. In other words, the existence of a black hole at the centre of our galaxy is what the physicists believe is what pulls a "jumble of stars," causing them to "rush around at dizzying speeds".

Where does research on black holes go from here?

While work done by Penrose has established that black holes are a "robust" consequence of the theory of relativity and that they are formed naturally in very overdense regions, thereby proving that their formation is a stable process, the theory ceases to apply at the centre of the black hole called the singularity- "a boundary at which all the known laws of nature break down". This essentially means that the extent to which the theory of general relativity applies to the structure of black holes requires further probing and questions about the internal structure of black holes still remain.

This year's Nobel prize in physics awards studies that established the existence of black holes. It celebrates theoretical work as much as it does dedicated observation. Andrea Ghez is only its fourth woman recipient. Roger Penrose, now at Oxford, who gets half the prize, ingeniously used mathematics in the 1960s to theorise under what conditions black holes must form. This was a time when the reality of black holes as a solution to Albert Einstein's field equations of the General Theory of Relativity was not accepted by many prominent physicists. Within a couple of months after Einstein proposed his General Theory of Relativity in 1915, Karl Schwarzschild published a solution to the field equations that exhibited singularities, or points where physical quantities grew infinitely large or vanished. Today, this is understood as the *event horizon — the point of no return beyond which even light cannot escape the black hole's gravitational attraction*. While more solutions were found to Einstein's equations that suggested black holes, they all required special symmetries and their realisation under general astrophysical conditions was doubtful. Penrose, through the singularity theorems, identified the formation of trapped surfaces as the condition for the formation of black holes in a generic manner. In this climate came observational hints of supermassive black holes, through the discovery of what were initially called quasars that were supermassive and found at the centre of galaxies.

Ms. Ghez is just the fourth woman to receive the physics prize since 1901 when the first Nobel prizes were handed out.

The first woman to win the prize was Marie Curie in 1903, who was also the first person to receive two Nobel prizes when she won the 1911 chemistry prize.

"The award to Penrose is a bit of a surprise because it has come so late. In fact, I had thought he would never be given the award, just like (Stephen) Hawking, his collaborator on the work on



black holes, never was. Most of his work on black holes came in collaboration with Hawking. The two have had a long association over several decades. It's difficult to separate one's work from the other," said Somak Raychaudhury, director of the Pune-based Inter-University Centre for Astronomy and Astrophysics (IUCAA). "But Penrose has so many other contributions as well, in mathematics, in physics, in philosophy. Black holes form a very small part of his work. It's really surprising why he did not get the Nobel all these years. But Hawking was ignored as well, and now the recognition for Penrose has come just two years after Hawking's death. Ideally, the two should have been recognised together," said Raychaudhury, who had taken courses from both Penrose and Hawking as a student at Oxford in the 1980s.

Sagittarius A*

The world could soon see what it looks like. *Sagittarius A* is one of two black holes whose photographs have been captured by the Event Horizon Telescope project.* Black holes do not emit or radiate anything, even light. So, there is no way their image can be captured. But *the area just outside its boundary, called the event horizon, which has vast amounts of gas, clouds and plasma swirling violently, does emit all kinds of radiations, even visible light. Through a network of giant telescopes, scientists have collected radiations from outside the event horizon of the black hole, and recreate an image. The black hole can be "seen" only because it is enclosed within a very bright, orange-red doughnut-shaped ring in the image. Images of two black holes were captured this way. One of them, that of the black hole at the centre of the Messier 87 galaxy, 55 light years from Earth, was released by scientists last year. The image of Sagittarius A* was still being processed; it will be released in a few months.*

THE DISCOVERY OF HEPATITIS C VIRUS THAT HELPED THREE SCIENTISTS WIN THE MEDICINE NOBEL

This year's Nobel Prize in Physiology or Medicine rewards an effort that eventually made blood transfusion safer for everyone. American scientists Harvey Alter and Charles Rice, and Michael Houghton of the UK, have been recognised for their contributions to the discovery of a new virus that was the cause of a vast majority of chronic hepatitis cases, or cases of serious liver inflammation, in patients who required blood transfusion. This virus was eventually called Hepatitis C virus. Since the discovery and identification of the virus in the 1970s and 1980s, a cure has been found for the disease, and effective anti-viral drugs are now available. Tests have been developed to identify blood that has this virus, so that infected blood is not given to any patient. Still, according to the World Health Organization, about 71 million people (6 -11 million of them in India) have chronic infection with the Hepatitis C virus, which also happens to be major cause of liver cancer. In 2016, this viral infection led to the death of nearly 400,000 people across the world. A vaccine for the disease has still not been developed.

What was known about hepatitis before the discovery of the Hepatitis C virus?

Before the discovery of the Hepatitis C virus, two other viruses were known to cause hepatitis in patients. The Hepatitis A virus was known to spread mainly through contaminated food and water, and caused a relatively milder form of liver inflammation. Hepatitis B, discovered in the 1960s, was known to transmit mainly through infected blood, and caused a more serious form of the disease. Incidentally, the discovery of the Hepatitis B virus too was rewarded with a Nobel Prize in Medicine, given to Baruch Blumberg in 1976. There are vaccines available for this disease now. The discovery



and identification of Hepatitis B virus facilitated the development of a diagnostic test to detect its presence in blood. *Thereafter, only blood sanitised from this virus would be given to patients, but it was observed that even this sanitised blood was able to prevent only 20% of the blood-borne hepatitis cases. It was then that the search for the new virus began.*

How was it found, and what was the contribution of each Nobel winner?

In the 1960s, Alter had collaborated with Blumberg, the 1976 Nobel winner. Alter later moved to the US National Institutes of Health (NIH), where he continues to work. At NIH, Alter worked at the blood bank and had access to a large collection of blood samples which facilitated his investigations into cases of hepatitis caused after blood transfusion. It was Alter, along with some of his colleagues, who was able to define the characteristics of the then unknown virus. But despite over 10 years of effort, Alter and his collaborators were not able to establish the identity of the virus. That work was accomplished by Houghton, who was working independently at Chiron Corporation, a US biotechnology firm. After painstaking work screening over a million DNA sequences, Houghton was able to identify the new virus in 1982, after which it was named Hepatitis C. In 1997, Rice, then working at Washington University, was able to conclusively show that it was indeed this virus that was causing chronic hepatitis in human beings.

Why is it significant?

Shahid Jameel, a virologist who has worked extensively on Hepatitis E virus (discovered later), said the simplest way to understand the importance of the work of these scientists was to know that the blood that is given to all kinds of patients has now become a lot safer. "Three main causes of blood-borne infections — Hepatitis B, Hepatitis C and HIV — all have been identified, and they no longer infect the blood that is required by patients. This has been a direct result of scientists like them. From a public health point of view, their discovery of the Hepatitis C virus was therefore a very big breakthrough," said Jameel, now director of Trivedi School of Biosciences at Ashoka University.

It was a team led by Dr. Houghton, then working for pharmaceuticals firm Chiron, which was able in the mid-1980s to create a clone of a new virus from fragments found in the blood of an infected chimpanzee. This virus, belonging to the *Flavivirus family*, was named Hepatitis C. Its identification made it possible to develop tests to screen bloodbank supplies and greatly reduce the spread of the disease, which can cause cirrhosis and liver cancer. The final piece of the jigsaw puzzle came when Dr. Rice, then at Washington University in St. Louis, was able to use genetic engineering to generate a version of the Hepatitis C virus and demonstrate that it alone could cause symptoms in a chimpanzee comparable to an infection in humans.