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International

US - Taliban Afghan Deal

→ The long-awaited deal between the United States and the Taliban was finally signed in Doha by U.S. Special Envoy Ambassador Zalmay Khalilzad and former Taliban deputy leader Mullah Abdul Ghani Baradar. On the same day, U.S. Defence Secretary Mark Esper visited Kabul to conclude the Joint Declaration for Bringing Peace to Afghanistan between the two governments. Gaps and inconsistencies between the two only add to the confusion. But two facts are clear. The U.S. is on its way out and second, this does not ensure peace for the Afghan people. As former U.S. Defence Secretary General Mattis put it, "The U.S. doesn't lose wars, it loses interest." But since a major power cannot be seen to be losing a war, certainly not in an election year, a re-labelling of the withdrawal becomes necessary.

Shades of Vietnam

Nearly a half century ago, U.S. President Richard Nixon had faced a similar dilemma. With more than half-a-million U.S. soldiers deployed in Vietnam, it was clear that a military solution was out of guestion. Seeking an exit, his National Security Adviser Henry Kissinger, during his secret visit to Beijing in July 1971, assured Premier Zhou Enlai that the U.S. was prepared to withdraw completely from Vietnam in return for release of U.S. prisoners of war and a ceasefire lasting "a decent interval". Kissinger and Nixon knew that the deal would leave their ally, the South Vietnamese government led by President Thieu, vulnerable. In declassified 1972 White House tapes, Nixon and Kissinger acknowledge that "South Vietnam is not going to survive and the idea is to find a formula that can hold things together for a year or two". The ploy worked. Nixon was re-elected with a record margin in November 1972 on the platform that peace was at hand. In January 1973, the Paris Peace Accords were signed, and by end March, the U.S. had completed its withdrawal ending direct military involvement. U.S. prisoners of war were released but by end-1973, the ceasefire was in tatters. Saigon fell to the North Vietnamese forces on April 30, 1975. Approximately 20,000 U.S. soldiers died during 1972-73 (Nixon cemented the understanding during his visit to China in February 1972) and 80,000 South Vietnamese soldiers died after the collapse of the ceasefire, following the decent interval. To win his re-election, Nixon had promised an honourable peace and delivered a delayed defeat, but by then the world had moved on. Dr. Kissinger won the Nobel Peace Prize in 1973 (joint winner). The secret assurances of 1971-72 only surfaced after four decades. Mr. Khalilzad is no stranger to Washington politics having served in Republican administrations since the Reagan era. He understood his job perfectly when Secretary Pompeo appointed him the Special Envoy for Afghan Reconciliation in September 2018. An Afghan by birth (he came to the U.S. in his teens) and having served as U.S. Ambassador in Afghanistan, he knew full well that he was not negotiating an Afghan peace deal; he was negotiating a "managed" U.S. exit. The timeline too was clear. U.S. President Donald Trump had repeatedly declared that "great nations do not fight endless wars"; his re-election is due in the fall of 2020.

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The Road to Doha

Mr. Trump's 2017 policy aimed at breaking the military stalemate in Afghanistan by authorising an additional number of up to 5,000 soldiers, giving U.S. forces a freer hand to go after the Taliban, putting Pakistan on notice and strengthening Afghan capabilities. Within a year, it was clear that the policy was not working because no insurgency can be defeated as long as it enjoys safe havens and secure sanctuaries. Pakistan's help was necessary to get the Taliban to the negotiating table. A three-way negotiation ensued. First was the Doha track with the Taliban; a second was with Islamabad/Rawalpindi and the third was with Kabul to ensure that the Afghan government would accept the outcome. The dice was loaded because Taliban and Pakistan negotiated as a team. Within six months, they had whittled down Mr. Khalilzad's four objectives: a ceasefire, an intra-Afghan peace dialogue, cutting ties with terrorist organisations such as al-Qaeda, and finally, U.S. troop withdrawal —to just the last one, with some palliatives regarding the third. The deal was ready to be signed last September when Mr. Trump abruptly called it off, stalling the process. National Security Adviser John Bolton's dismissal (he was opposed) and the release of three high-level Taliban militants including Anas Haggani (Sirajuddin Haggani's brother) in November helped smoothen issues. The key features of the Doha deal are:

- i) U.S. troops to be reduced from the current 14,000 to 8,600 by June 15 (in 135 days);
- ii) withdrawal of all remaining U.S. and foreign forces by April 29, 2021 (in 14 months);
- iii) Removal of the Taliban from UN Security Council sanctions list by May 29;
- iv) Up to 5,000 Taliban prisoners and 1,000 Afghan security forces prisoners to be released from Afghan and Taliban custody respectively by March 10;
- v) U.S. sanctions against Taliban leaders to be lifted by August 27;
- vi) intra-Afghan talks to begin on March 10.

Whither Afghanistan?

Nothing reflects the fragility of the deal signed between the U.S. and the Taliban in Doha better than the title: "Agreement for Bringing Peace to Afghanistan between the Islamic Emirate of Afghanistan which is not recognised by the United States as a state and is known as the Taliban and the United States of America". This is repeated more than a dozen times in the agreement. Ironically, the U.S. has committed to getting UN Security Council <mark>end</mark>ors<mark>ement fo</mark>r th<mark>e deal with an entity</mark> t<mark>hat</mark> it does not recognise. The leader of the Haqqani network and the number two of the Taliban, Sirajuddin Haggani, who recently wrote an oped in The New York Times, remains on the U.S.'s wanted list with a reward of \$10-million for information leading to his capture or death. This hardly squares with the notion that the Taliban is now a U.S. counter-terrorism partner against the Islamic State. The Kabul Declaration states that Afghan government will "participate in US facilitated discussion with Taliban on CBMs, to include determining the feasibility of releasing significant number of prisoners on both sides". There is no reference to numbers to be released or a deadline of March 10 linking it to commencing intra-Afghan talks, as in the Doha deal. No wonder President Ghani angrily declared a day later that release of prisoners will be part of the agenda for the intra-Afghan talks, provoking the Taliban to declare that the truce would no longer cover Afghan security forces, creating the first of many obstacles ahead. There is no mention of what will happen to the Taliban fighters whose numbers have suddenly inflated from earlier range of 30,000 to 50,000 to 60,000 to 1,50,000. Are they to be disarmed and

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demobilised; prepared for civilian life or integrated with the Afghan security forces? Who is expected to provide stipends to those opting for peace? Mr. Trump maintains that it is "time that the war on terror is fought by someone else" so it will not be the U.S. The U.S. has described itself as a "facilitator", a responsibility that it will be glad to share with others. The idea of a ceasefire, which is normally the starting point for any peace process, has been made an outcome of the intra-Afghan dialogue, together with a political road map for the future, but without any time frame. There is no reference to preserving the gains of the last 18 years and with the Taliban intent on reviving the Islamic Emirate, the shape of things is clear. Remember the duck test — if it looks like a duck, walks like a duck and quacks like a duck, it probably is a duck.

→ Mr. Trump can sell the deal to his domestic audience by stating that American troops can return home as the Taliban will not support any other international terrorist groups in Afghanistan. After all, the U.S. troops entered Afghanistan to neutralise al-Qaeda and Osama bin Laden after 9/11. Undoubtedly, the biggest beneficiary of the Doha deal is the Taliban. First, the deal legitimises the Taliban as the primary factor in deciding the future of Afghanistan. The Taliban has been waiting for this moment, waiting for this deal. It was fully aware that the U.S. troops would not stay on indefinitely in Afghanistan. Perhaps, the Taliban's advisers also knew how desperate Mr. Trump would become and therefore decided to play the strategy of 'hit and wait'. The Taliban increased the intensity of violence in the last few years, without breaking off negotiations with the U.S. It never agreed to a ceasefire; even when the proposed deal in 2019 was cancelled in the last minute by President Trump, it continued with this strategy. The Taliban also did not yield to the intra-Afghan dialogue proposal by the U.S. It consistently stated that it does not recognise the elected government in Kabul led by Mr. Gh<mark>ani</mark>. It continued targeting the Afghan security forces making 2018-19 one of the most violent years in recent Afghan history. The Taliban has also been consistent with another position — that any dialogue within Afghanistan will take place only after the foreign troops leave. The Taliban leadership will be smiling now as they have not yielded to any of the American demands. True, they have agreed not to support al-Qaeda and the IS, but there is no al-Qaeda today in Afghanistan. Moreover, the Taliban is fighting the IS internally. Hence, yielding to this American demand will not affect its position in Afghanistan. The Taliban will wait and watch the American troops draw down further in the next three months. It may not target them but it will continue fighting the Afghan security forces. The U.S. will watch this drama and perhaps use it as a strategy to retain a residue force. It could do this to watch Iran. This would be acceptable to the Taliban.

The Taliban's objective would be to capture Kabul, and not share power there with anyone. An intra-Afghan dialogue should have preceded the Doha deal. The Taliban never wanted to negotiate with Kabul. Had it wanted to; such a negotiation would have taken place earlier. After all, the Afghan High Peace Council was established with the same purpose. The Taliban targeted many of the Afghan High Peace Council members, including the chairman of the Council, Burhanuddin Rabbani, in 2011. The Taliban will probably scuttle any attempt towards an intra-Afghan dialogue. Even if it agrees to a dialogue, it may use some pretext or the other to walk away from it — for example, the prisoner swap clause in the Doha deal (which would see the government release 5,000 Taliban prisoners and the Taliban release 1,000 captives), which President Ghani says his government never agreed to. Hence, a principal objective of the deal would be a non-starter. Finally, the deal came at the wrong time. Kabul remains deeply divided. Instead of ushering in political stability, the 2019 elections situated Mr. Ghani and Mr. Abdullah in opposite camps. Both have declared victory, and both have announced

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formation of their own governments. The U.S. should have brought both the leaders on a common platform and negotiated a deal, as it did after the presidential election in 2014. As a result, a national unity government was formed with Mr. Ghani as the President and Mr. Abdullah as the Chief Executive. However, this time, neither did Zalmay Khalilzad, the U.S. Special Representative for Afghanistan Reconciliation, pursue a serious strategy nor did President Trump have the patience to negotiate with two regional satraps, far away from Washington. Instead, they decided to deal with the Taliban and leave Kabul to its own fate. To be fair to Mr. Trump and Mr. Khalilzad, Mr. Abdullah and Mr. Ghani should have realised the futility of their internal divide. Perhaps, both saw it as part of their final push to have their authority stamped on Kabul. That move backfired. Now they have to face the onslaught of the Taliban either individually or together. The question now is not whether there will be another civil war in Afghanistan, but when. With the divide between Mr. Ghani and Mr. Abdullah in Kabul, any announcement on government formation is likely to increase the fault lines in the bureaucracy and the Afghan security forces. This is what the Taliban is probably expecting. Instead of engaging in any internal dialogue, the Taliban will attempt to impose itself on Kabul and the rest of Afghanistan. The Afghan security forces may not collapse in the immediate withdrawal; they will fight back. The Taliban will want to capture the cities one after another, as it did in the 1990s. The Afghan security forces will try to prevent this from happening. All this will probably lead to what the majority of the Afghans want to avoid — a return to chaos.

The government is a perfect picture of disunity with President Ashraf Ghani and his primary challenger Chief Executive Abdullah Abdullah threatening to set up parallel governments. What makes this rivalry very dangerous is that Mr. Ghani belongs to the largest ethnic group, the Pashtun, and Mr. Abdullah's base is among his fellow Tajiks, the second largest group in Afghanistan. Concessions made by Mr. Ghani's government to the Taliban will likely be interpreted by Mr. Abdullah's supporters as an intra-Pashtun deal reached at the expense of other ethnic groups, especially the Tajiks and the Uzbeks, who formed the bulk of the anti-Taliban Northern Alliance from 1996 to 2001. Consequently, ethnic fissures may descend into open conflict.

The Many Faces of Taliban

Similarly, the Taliban, despite appearances to the contrary, is not a well-knit force. It is composed of various regional and tribal groups acting semi-autonomously. All of them may not be amenable to following the directions of its top leadership. It is, therefore, possible that some of them may continue to engage in assaults on government troops and even American forces during the withdrawal process. What the U.S.-Taliban agreement has accomplished in reality is to help the leaders on both sides achieve their primary objectives. The Taliban has pledged not to allow any terrorist organisation, such as al-Qaeda and the Islamic State, to operate from the territory it controls. Although important for American security interests, this was secondary to the Donald Trump administration's key concern. Mr. Trump's main goal was to demonstrate to his domestic constituency that he was serious about bringing American troops back home. According to the timeline set out in the agreement, all U.S. and NATO troops will withdraw from Afghanistan within 14 months. More important, the joint statement declared that the U.S. would reduce the number of U.S. military forces in Afghanistan to 8,600 within 135 days. This means that a substantial number of American troops will return to the U.S. well before the presidential election, thus giving a boost to President Trump's odds for re-election. The Taliban leadership has also achieved its

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primary goal, namely, the withdrawal of foreign troops within a reasonable time frame. The Taliban already controls or contests half the country's territory and the American and NATO withdrawal will help it expand its territorial base at the expense of the government's poorly trained forces.

India and Taliban

For New Delhi, too, it is a tough task ahead. Quite predictably, Mullah Baradar did not name India among the countries that supported the peace process, but specially thanked Pakistan for the "support, work and assistance" provided. India and the Taliban have had a bitter past. New Delhi nurses' bitter memories from the IC-814 hijack in 1999, when it had to release terrorists — including Maulana Masood Azhar who founded Jaish-e-Mohammed that went on to carry out terror attacks on Parliament (2001), in Pathankot (2016) and in Pulwama (2019). The Taliban perceived India as a hostile country, as India had supported the anti-Taliban force Northern Alliance in the 1990s. India never gave diplomatic and official recognition to the Taliban when it was in power during 1996-2001. In recent years, as US-Taliban negotiations picked up momentum, New Delhi has been in touch with all stakeholders. But its foreign policy establishment has shied away from engaging with the Taliban directly. Even when former envoy to Afghanistan Amar Sinha and former envoy to Pakistan T C A Raghavan were sent as "non-official representatives" to talks with the Taliban in Moscow in November 2017, they went as "observers" and did not engage in direct talks, although some conversations are learnt to have taken place on the side-lines.

New Delhi and Kabul

India has been backing the Ghani-led government and was among very few countries to congratulate Ghani on his victory. India's proximity to Ghani also drew from their shared view of cross-border terrorism emanating from Pakistan. The government sent Foreign Secretary Harsh Vardhan Shringla to Kabul on Friday and Saturday to meet with Ghani and the senior political leadership, while its envoy in Doha went for the US-Taliban ceremony. Shringla has reiterated India's consistent support for an "independent, sovereign, democratic, pluralistic and inclusive" Afghanistan in which interests of all sections of society are preserved. He also conveyed India's support for "enduring and inclusive" peace and reconciliation which is "Afghan-led, Afghan-owned and Afghan-controlled". His reference to an "end to externally sponsored terrorism" is a signal that the state and non-state actors must keep Pakistan-sponsored terrorism at bay. To convey India's commitment, agreements for road projects in Bamyan and Mazar-e-Sharif provinces with Indian development assistance were signed during the visit. Many Indian diplomats say although there has not been formal contact with top Taliban leaders, the Indian mission has a fair amount of access to the Pashtun community throughout Afghanistan through community development projects of about \$3 billion. Due to these high-impact projects, diplomats feel India has gained goodwill among ordinary Afghans, the majority of whom are Pashtuns and some may be aligned with the Taliban as well. So, although Pakistan military and its ally Taliban have become dominant players in Kabul's power circles, South Block insiders insist that it is not all that grim for New Delhi.

India has a major stake in the stability of Afghanistan, however tenuous it may be, as it has invested considerable resources in the country's development. India has a major stake in the continuation in power of the present dispensation, which it considers a strategic asset vis-à-

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vis Pakistan. An increased political and military role for the Taliban and the expansion of its territorial control should be of great concern to India since the Taliban is widely believed to be a protégé of Islamabad. Therefore, any celebration in New Delhi will be highly misplaced.

New Delhi has signalled its acceptance of the U.S.-Taliban and U.S.-Afghanistan peace agreements in Doha and Kabul that aim to end the 18-year war in Afghanistan, by sending envoys to witness them.

Does the Term "U.S. And Allies" Include India?

In the Doha agreement, the Taliban has guaranteed "enforcement mechanisms that will prevent the use of the soil of Afghanistan by any group or individual against the security of the United States and its allies". However, it is unclear whether India, which is not a U.S. ally, is included in this definition, and whether Pakistan-backed groups that threaten India, would still operate in Afghanistan. The Kabul declaration with the Ghani government more specifically commits to stopping "any international terrorist groups or individuals, including al-Qa'ida and ISIS-K, from using Afghan soil to threaten the security of the United States, its allies and other countries."

Impact of Prisoner Release and Lifting Sanctions

Officials worry most about the "mainstreaming of the Haqqani network", which Lashkar-e-Taiba terrorists reportedly fight alongside and were responsible for the 2008 bombing of the Indian embassy in Kabul. According to the agreements, 5,000 Taliban prisoners will be released by March 10, 2020, the first day of intra-Afghan negotiations, and the remainder in another three months. Officials also point out that the U.S. has committed to taking Taliban leaders off the UN Security Council's sanctions list by May 29, 2020, which could considerably bring down the number of terrorists Pakistan is accused of harbouring, according to the FATF greylist conditions. This might benefit Pakistan during the June 2020 FATF Plenary, when it faces a blacklist for not complying.

How Serious Is Germany's Far-Right Problem?

The killing of nine people at two shisha lounges in Hanau, Germany, last week by a person suspected to have a far-right background has heightened concerns about the country's right-wing extremism. The Hanau attacker had released a manifesto before the assault, targeting mainly those of Kurdish origin, which called for extermination of people in several West Asian countries. In recent years, Germany, like several other European countries, has seen twin far-right problems — growing street violence by extremists against minorities and immigrants and the rapid political rise of the far-right party Alternative for Germany (Alternative für Deutschland or AfD), which has normalised to an extent anti-immigrant rhetoric in the country's political discourse. The growing popularity of the AfD, which is already represented in all regional parliaments in the country, is what makes Germany more vulnerable to far-right threats than other countries in the continent.

How Many Far-Right Groups Are There?

Post-war Germany has been wary of nationalist politics and has shown zero tolerance to anti-Semitism and race-related crimes. The Nazi-era crimes are remembered in Germany and taught in schools. The public are banned from using Nazi slogans or symbols and there are

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laws against Holocaust denial. But despite this culture of atonement and strong legislation to prevent racist crimes, Germany has seen the resurgence of xenophobic groups, especially after the German reunification in 1990. Many of these extremists use the *Nazi salute*, carry *swastikas* and even sing the Die Fahne hoch, the anthem of Hitler's Nazi Party. If the NSU had worked underground for years, far-right extremists are no longer hiding in Germany. The rise of the AfD, which broke with Germany's post-war consensus on pluralism and multilateralism and took an overly German nationalist approach at all issues, from internal and external security to economic policy, has shaken up the political climate in the country. The AfD's growth has coincided with a sharp jump in the number of far-right attacks in Germany. A week before the Hanau shooting, police arrested 12 members of a far-right terror cell, who were plotting to attack mosques in 10 States. The AfD does not have proven direct links with these groups. As a mainstream political party, it does not endorse violence either. But when it comes to immigrants, Muslims, Germany's past crimes and German nationalism, both AfD leaders and the neo-Nazis often speak the same language.

What Does the AfD Want?

The AfD was founded in 2013 by a group of conservative leaders, many of whom were part of Angela Merkel's Christian Democratic Union (CDU). Their plan was to occupy the political vacuum created by the CDU's shift towards the centre from the right under Ms. Merkel's leadership. Initially the AfD was focused on its anti-euro agenda and staunchly opposed German taxpayer's money being used to bail out debt-trapped countries in the euro zone, mainly Greece. But German politics would undergo a sea change after Ms. Merkel decided to welcome a million immigrants, mostly from the war-torn Arab world, to the country. The AfD quickly transformed itself into a nationalistic, populist, anti-immigrant and anti-Muslim party. In 2016, Frauke Petry, the then leader of the AfD, called on police to shoot illegal migrants on Germany's border. Bjoern Hoecke, another AfD leader, once termed Berlin's memorial to the victims of the Nazi rule a "monument of shame". The party's 2017 manifesto read "Islam does not belong to Germany" and called Muslims "a big danger for our state, our society and our system of values." These extreme views helped the AfD turn around its fortunes. If it had won 4.7% of the vote in the 2013 federal election, the vote share jumped to 12.6% in 2017. With 89 seats, the AfD is now the third largest party in the 709-member Bundestag, the federal Parliament.

What Is Next?

If the AfD was seen as a political untouchable by the establishment parties till recently, that is also slowly changing. And with the AfD's rise and its open embrace of racist and anti-Muslim rhetoric, the many sleeper neo-Nazi cells which were till now resisted by the post-war consensus feel emboldened. That consensus is now under attack.

Advantage Bibi

→ No bloc managed to win a clear majority in Israeli parliamentary election, the third in 12 months, but Prime Minister Netanyahu has emerged the clear leader to bid for government formation. When 99% of the votes were counted, his Likud party won 36 seats, while its rival, former General Benny Gantz's Blue and White got 33. The Prime Minister's right-religious coalition, which includes Shas, United Torah Judaism and Yamina, has 58 seats, three shorts of a majority in the 120-member Knesset. Yisrael Beiteinu, led by secular nationalist Avigdor

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Lieberman — kingmaker after the last two polls but who chose not to support any side — got 7 seats. For Mr. Netanyahu, this was a referendum of sorts. If he fought the last two polls under the threat of being charged for corruption, this time he had already been charged. He is expected to appear in court later this month. Still, Likud improved its tally from 32 in September to 36 now. While Mr. Netanyahu, as leader of the largest party and the coalition, is expected to be invited to form the government, it will not be easy for him to prove a majority in Parliament. Mr. Gantz has ruled out a unity government under Mr. Netanyahu's leadership. Mr. Lieberman too has dismissed joining the Likud coalition, not wanting to share power with the bloc's Jewish religious parties. The Joint List, the coalition of Arab parties, has won 15 seats, but Israel's mainstream Zionist parties will not have any tie-up with them. Despite these challenges, there are two factors favouring Mr. Netanyahu. One, unlike the September election in which Mr. Gantz's party got more seats, this time only Mr. Netanyahu is in the race to form the government. It is either a Likud government or a fourth poll. Second, after three back-to-back elections, some rival lawmakers could actually back Mr. Netanyahu's claim to avoid another round of polling. Likud leaders have already signalled that their coalition would prove a majority in the Knesset with dissenters' votes. While Mr. Netanyahu remains the only option for providing Israel a stable government, his return to power with a majority could spell more trouble for the Palestinians. The peace process has been stalled for years. The Palestinians have rejected the U.S.'s peace plan, which they say favours the Israeli positions. During the campaign, Mr. Netanyahu had pledged to annex Jewish settlements on the Palestinian West Bank. If his coalition returns to power with a clear majority, he is likely to press ahead with the annexation, deepening the crisis. If he fails to win the vote of confidence, Israel will go to another election and during the campaign, Mr. Netanyahu and his allies will step up their right-wing agenda and attacks on the Palestinians, like they did during the last two campaigns. Either way, troubled times lie ahead for the region.

Russian Dream Island vs US Disneyland

→ Russia opened a grand theme park that is being seen as its answer to the United States' Disneyland. Called Ostrov Mechty (Dream Island) and built at \$1.5 billion, it spans 30 hectares in southern Moscow. It is the culmination of six decades of ambition to rival Disneyland, opened in California in 1955. The Moscow Times described it as a "fairy-tale theme park" and said all the stories, characters and attractions in Dream Island are Russian-themed.

Dream of 1959

The Soviet Union's first proposal to build such a theme park came way back in 1959. A 2018 article in the publication Russia Beyond the Headlines (RBTH) recounts what happened during the Cold War atmosphere. Soviet leader Nikita Khrushchev travelled to the US in 1959 but was barred from visiting Disneyland. Very upset, he decided to build a better Soviet version. The project, named "Wonderland", was meant to be very different from Disneyland with its American characters. Wonderland, spanning 260 hectares beyond western Moscow, was planned to showcase the Soviet Union. The plot was to match the map of the Soviet Union, with specific zones. The best architects and even leading Soviet science fiction authors Aleksander Kazantsev and Ivan Yefremov were involved in the project. Specialists were sent to the US on fact-finding missions, RBTH says. The budget was 600 million rubles, enormous





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for those times. The first tranche of funding was allocated. But when Khrushchev was removed from power in 1964, most of his projects were cancelled, the article says.

The New York Times observes that Dream Island may remind some visitors of Disneyland. In place of Elsa from Frozen, there will be the Snow Queen, while The Jungle Book is replicated by a version in which the jungle is populated by talking dinosaurs.

Fallout of Syrian – Turkish Conflict

- Turkey announced the launch of an offensive against the Moscow-backed Syrian regime. Tensions have soared between Russia and Turkey — who back opposing forces in the Syria's civil war — after an airstrike blamed on Damascus killed dozens of Turkish soldiers in *Idlib* last week. Turkish and Syrian military exchanged fire over the weekend with Syrian forces targeting a Turkish drone and artillery and Ankara claiming to have shot down two Syrian fighter jets. The situation in rebel-held Idlib was already volatile as the regime supported by Russian air power pressed an assault on the region, killing hundreds of civilians, in a bid to retake the last opposition enclave in an eight-year civil war. The confrontation between the Russia-backed Syrian military and NATO-member Turkey, which supports Syrian rebels, has prompted worries over a wider conflict. Migrant numbers have already surged along the rugged frontier after Turkey's President Recep Tayyip Erdogan, seeking to pressure the EU over Syria, said the country had "opened the doors" to Europe. "Following the heinous attack on February 27 in Idlib, operation 'Spring Shield' successfully continues," Turkish Defence Minister Hulusi Akar said in a video shared by the Defence Ministry. Turkish forces hit Syrian regime positions after Mr. Erdogan warned Damascus would "pay a price" for the air strike that killed 34 Turkish troops inside Idlib. Under a 2018 deal with Russia meant to bring calm to Idlib, Turkey has 12 observation posts in Syria — but several have come under fire from Syrian President Bashar al-Assad's forces.
- Greece placed its borders on maximum security footing after hundreds of migrants used porous crossing points to enter the country from Turkey, with thousands behind them seeking entry after Ankara relaxed curbs on their movement. Turkey said it would no longer restrain hundreds of thousands of asylum seekers in its territory from reaching Europe despite a deal to do so reached with the EU in 2016. Turkey's turnabout came after an air strike killed 33 Turkish soldiers in neighbouring northwest Syria, where Ankara has deployed forces to help secure its border against a new influx of refugees from the Syrian civil war. Turkey has said funds promised by the EU to help it deal with 3.7 million Syrian refugees already in the country has been slow to arrive; Ankara had threatened several times in the past to open the floodgates if it did not receive more support. Its announcement that it had stopped containing migrants within the country triggered an almost instant rush to the borders it shares with EU member Greece. The crisis poses the toughest test for Greece since a 2015 financial crisis.

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Truly Malay

The drama behind the developments that catapulted Muhyiddin Yassin to Malaysia's premiership could go on, unless his predecessor Mahathir Mohamad decides to call it guits. But Mr. Mahathir, who resigned last week, seems no less determined to fight on than when he staged a spectacular comeback as Premier in 2018 after spending nearly two decades in political retirement. On that occasion, Mr. Mahathir forged the Pakatan Harapan (PH), a multi-ethnic coalition, with his erstwhile arch-rival Anwar Ibrahim. The sole mission of that alliance was to remove the government of United Malay National Organisation (UMNO), the party of Malay nationalism which was at the time embroiled in a multibillion-dollar scandal. But the PH collapsed last week when some splinter groups tried to form an alliance with UMNO, leading to Mr. Mahathir's resignation. But as soon as Mr. Muhyiddin, Interior Minister in the previous administration, was sworn in as the new Premier, his ex-boss challenged the legitimacy of his appointment. While claiming the support of 112 MPs in Kuala Lumpur's 222member legislature, Mr. Mahathir has also objected to Mr. Muhyiddin taking the support of the UMNO. Given the UMNO's overt assertion of Malaysia's majority Muslim interests, Mr. Mahathir's claim appeared to resonate among sections of the country's diverse ethnic <mark>min</mark>orit<mark>ies. Mea</mark>nwh<mark>ile, the PH is organ</mark>isi<mark>ng</mark> roa<mark>ds</mark>ho<mark>ws t</mark>o explain to supporters and voters the events that led to the breakup of the coalition, ahead of its attempt to move a vote of no confidence in Mr. Muhyiddin's leadership. But the plan could hit a roadblock following the Speaker's announcement on Wednesday of postponement of the next parliamentary session until May. But Mr. Mahathir's capacity to convert the coming weeks to his advantage cannot be underestimated. Few would have taken seriously his launch of a comeback bid in 2017, when he aligned with Mr. Anwar, his one-time protege whom he had incarcerated on politically motivated charges of sodomy in the 1990s. Crucially, the latter appears to stand by his mentor now, even though the promise of being handed the baton has not materialised so far.





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Foreign Affairs

Trump 2.0 May See More Slash-And-Burn Unilateralism (Sourabh Gupta - Senior Fellow at The Institute for China-America Studies in Washington, D.C.)

Not since Richard Nixon's 24-hour state visit 50 years ago has a U.S. President spent as little time on Indian soil as Donald Trump did. During that first term in office, Nixon had proceeded to throw the international monetary order under the bus — tearing down the gold-dollar link that had sustained the Bretton Woods system. With equal alacrity, Mr. Trump has gone about gutting the international trading order with his beggar-thy-neighbour mercantilism and flagrant disregard for multilateral trade law. Given India's post-1990 globalising reforms and the imperative for an enabling and development-friendly external environment, the country will find it hard to escape unscathed. The government has already, fleetingly, been burnt by Mr. Trump's slash-and-burn unilateralism. In March 2018, 'national security' tariffs of 25% and 10% were imposed on \$1.01 billion worth of Indian steel and aluminium exports, respectively.

'National Security' Claim

This use of Section 232(b)-based 'national security' authority was clearly at odds with WTO/GATT law, which requires that such action be "taken in time of war or other emergency in international relations" and should touch upon the member state's "essential security interests." The tariffs were followed by New Delhi's eviction from the Generalized System of Preferences (GSP) programme in June 2019 — in turn, affecting an additional \$5.7 billion of exports. In December 2019, Mr. Trump took his wrecking ball to Geneva, incapacitating the World Trade Organization's (WTO) dispute settlement function. As a result, a successful Indian challenge against the U.S.'s imposition of countervailing duties against Indian steel exports, which was pending a final compliance panel appeal, has now been kicked into the long grass. With the U.S. Commerce Department recently publishing a new — and wildly WTO non-complaint — regulation that treats an undervalued currency as a countervailable subsidy, more such arbitrarily arrogated duties on Indian primary goods exports can be expected. On February 10, at the same time as the White House was announcing Mr. Trump's visit, the U.S. Trade Representative (USTR) was stripping India of its 'developing country' classification for 'special and differentiated treatment' purposes. A U.S.-European Union-J<mark>ap</mark>an <mark>led</mark> effort is <mark>cur</mark>rently <mark>un</mark>de<mark>r w</mark>ay to in<mark>tro</mark>duc<mark>e s</mark>tark new industrial subsidies and technology transfer disciplines that will inevitably crimp India's development policy space even as the trio luxuriate in multi-billion-dollar trade distorting agricultural subsidies.

More Punitive Action

With WTO dispute settlement having been disembowelled, should Mr. Trump get re-elected, the Narendra Modi government could well be staring at punitive Section 301 action. It has escaped the Section 301 dragnet during Mr. Trump's first term — despite the USTR's inclinations, owing to the agency's lack of time and bandwidth. The government may not be as fortunate next time. It must brace for its consequences and craft next moves wisely. In addition to winnowing the bilateral trade deficit, Commerce Ministry mandarins would be well-advised to thumb through the intellectual property, technology transfer, financial

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services and agricultural biotechnology product approvals-related chapters of the U.S.-China Phase One agreement.

Pushing the Wrong Energy Buttons (M.V. Ramana And Suvrat Raju - Physicists With The Coalition For Nuclear Disarmament And Peace)

→ For more than a decade, no major meeting between an Indian Prime Minister and a U.S. President has passed without a ritual reference to India's promise made in 2008 to purchase American nuclear reactors. This was the case in the latest joint statement issued during U.S. President Donald Trump's first official two-day visit to India (February 24-25), which stated that "Prime Minister Modi and President Trump encouraged the Nuclear Power Corporation of India Limited and Westinghouse Electric Company to finalize the techno-commercial offer for the construction of six nuclear reactors in India at the earliest date".

Red Flags in The U.S. Deal

Because of serious concerns about cost and safety, the two organisations should have been told to abandon, not finalise, the proposal. Indeed, it has been clear for years that electricity from American reactors would be more expensive than competing sources of energy. Moreover, nuclear reactors can undergo serious accidents, as shown by the 2011 Fukushima disaster. Westinghouse has insisted on a prior assurance that India would not hold it responsible for the consequences of a nuclear disaster, which is effectively an admission that it is unable to guarantee the safety of its reactors. The main beneficiaries from India's import of reactors would be Westinghouse and India's atomic energy establishment that is struggling to retain its relevance given the rapid growth of renewables. But Mr. Trump has reasons to press for the sale too. His re-election campaign for the U.S. presidential election in November, centrally involves the revival of U.S. manufacturing and he has been lobbied by several nuclear reactor vendors, including Westinghouse, reportedly to "highlight the role U.S. nuclear developers can play in providing power to other countries". Finally, he also has a conflict-of-interest, thanks to his son-in-law and adviser, Jared Kushner, who accompanied him during the India visit. In 2018, the Kushner family's real-estate business was bailed out by a Canadian company that invested at least \$1.1-billion in a highly unprofitable building in New York. Earlier that year, Brookfield Business Partners, a subsidiary of that Canadian company, acquired Westinghouse Electric Company. It violates all norms of propriety for Mr. Kushner to be anywhere near a multi-billion-dollar sale that would profit Brookfield enormously.

What Renewables Can Offer

Analysts estimate that each of the two AP1000 units being constructed in the U.S. state of Georgia may cost about \$13.8 billion. At these rates, the six reactors being offered to India by Westinghouse would cost almost ₹6 lakh crore. If India purchases these reactors, the economic burden will fall upon consumers and taxpayers. In 2013, we estimated that even after reducing these prices by 30%, to account for lower construction costs in India, the first-year tariff for electricity would be about ₹25 per unit. On the other hand, recent solar energy bids in India are around ₹3 per unit. Lazard, the Wall Street firm, estimates that wind and solar energy costs have declined by around 70% to 90% in just the last 10 years and may decline further in the future.

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How safe?

Nuclear power can also impose long-term costs. Large areas continue to be contaminated with radioactive materials from the 1986 Chernobyl accident and thousands of square kilometres remain closed off for human inhabitation. Nearly a decade after the 2011 disaster, the Fukushima prefecture retains radioactive hotspots and the cost of clean-up has been variously estimated to range from \$200-billion to over \$600-billion. The Fukushima accident was partly caused by weaknesses in the General Electric company's Mark I nuclear reactor design. But that company paid nothing towards clean-up costs, or as compensation to the victims, due to an indemnity clause in Japanese law. Westinghouse wants a similar arrangement with India. Although the Indian liability law is heavily skewed towards manufacturers, it still does not completely indemnify them. So nuclear vendors have tried to chip away at the law. Instead of resisting foreign suppliers, the Indian government has tacitly supported this process. Starting with the Tarapur 1 and 2 reactors, in Maharashtra, India's experiences with imported reactors have been poor. The Kudankulam 1 and 2 reactors, in Tamil Nadu, the only ones to have been imported and commissioned in the last decade, have been repeatedly shut down. In 2018-19, these reactors produced just 32% and 38%, respectively, of the electricity they were designed to produce. These difficulties are illustrative of the dismal history of India's nuclear establishment. In spite of its tall claims, the fraction of electricity generated by nuclear power in India has remained stagnant at about 3% for decades. The idea of importing nuclear reactors is a "zombie idea" that, from a rational viewpoint, should have been dead long ago. In fact an earlier plan to install AP1000s in Mithi Virdi, Gujarat was cancelled because of strong local opposition. In 2018, Gujarat Chief Minister Vijay Rupani declared that the reactors "will never come up" in Gujarat. The Prime Minister should take a cue from his own State and make a similar announcement for the rest of the country.

Nation

NPR 2020 Skids

On February 25, the Bihar Assembly passed a unanimous resolution stating that there is no need for a National Register of Citizens in the State and that the implementation of the National Population Register (NPR) would be done strictly according to the 2010 format. An ally of the ruling National Democratic Alliance (NDA), Bihar Chief Minister Nitish Kumar made it clear that the 2020 format of the NPR has several contentious clauses.

What Is the National Population Register (NPR)?

The NPR is a database of usual residents in the country who have stayed in a local area for the past six months or more and who intend to remain in the same place for the next six months or more. The NPR is individual and identity specific unlike the Census which only provides information on the status of the residents of India and population swings. The NPR database was first created in 2010. The electronic database of more than 119 crore usual residents of the country has already been created under the NPR in English as well as the regional languages. The data collection is done under the aegis of the Office of the Registrar General and Census Commissioner of India. The NPR is undertaken under the provisions of

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The Citizenship Act, 1955 and The Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003. The NPR was last updated, except in Assam and Meghalaya, in 2015-16.

How Is the NPR Linked to The National Register of Citizens?

Successive governments have said that the NPR is the mother database for "identity purposes". The Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003 mandates that particulars of "every family and individual" in the NPR would be used for verification in the National Register of Citizens (NRC) process. The Local Registrar is empowered, during verification, to mark out the particulars of individuals whose citizenship is doubtful, with "appropriate remarks" for further enquiry. The individual concerned has to then appear before the Sub-district or Taluk Registrar of Citizen Registration to prove he or she is a citizen before a formal decision is taken to include or to exclude their particulars in the National Register of Indian Citizens. The onus to prove he or she is a citizen is entirely on the individual concerned. Thus, the data collected through NPR becomes the crux for determining the citizenship of a person.

What is The NPR Format of 2010?

Fifteen identity particulars of the individual members of the household are sought in the 2010 format. These include name, relationship to the head of the household, sex, date of birth, marital status, educational qualification, occupation/activity, names of parents, place of birth (of everybody staying in the household at the time), nationality, present address of usual residence, duration of stay at the present address and permanent residential address.

What Does the Updated Manual Of 2020 Say?

The NPR 2020 enumeration exercise will be undertaken during April–September this year. Certain new information will be collected by enumerators in a house-to-house collection exercise such as Aadhaar, mobile, voter ID, passport and driving licence, if available with the residents on a voluntarily basis. Unlike in the 2010 NPR, the new format for NPR 2020 requires residents to disclose their mother tongue and the places and dates of birth of their parents even if they are not living in the same household at the time or not alive. Individuals have to disclose the districts and States of their parents' birth.

What Is the Problem?

Besides Bihar, several State governments such as Kerala, West Bengal, Punjab have already objected to the implementation of NPR 2020, saying it is a harbinger for a nationwide National Register of Citizens (NRC) to identify illegal migrants. The NRC exercise in Assam alone has seen the exclusion of over 19 lakh people from the citizens' list in the State. Petitions have also been filed in the Supreme Court of India, describing the NPR as a facilitator for the NRC. State governments are nervous that the NPR data would be used to target citizens on the basis of their identity and deprive them of their citizenship. Fears about the NPR-NRC have been compounded with the passage of the controversial Citizenship (Amendment) Act, or the CAA of 2019, which fast-tracks citizenship-by-naturalisation process of persons from six religious' communities, other than Muslims, who have fled persecution from Pakistan, Bangladesh and Afghanistan. The NPR 2020 Manual says "date of birth is one of the important items of information being collected in the NPR". But in a country where a

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large part of the population is underprivileged and where people have not been able to formalise their birth due to lack of access to health care, the task of disclosing the exact birth and place of birth, especially of their aged parents and orphans, would prove to be a daunting task, point out experts.

What Lies Ahead?

The workforce for updation of NPR 2020 has to be provided by the State governments. With more States objecting to the new format and its contentious clauses, the exercise may reach an impasse. Widespread doubts about the intentions behind the NPR may also affect the smooth conduct of the Census.

Office of The High Commissioner for Human Rights in Supreme Court On CAA

→ The application on behalf of the Office of the High Commissioner for Human Rights, seeking to be heard as amicus curiae in the pending litigation in the Supreme Court against the Citizenship (Amendment) Act, 2019, is undoubtedly an unusual step. As expected, the government sees it as unwarranted interference. It does appear that the move is unnecessary as the global human rights perspective that High Commissioner Michelle Bachelet Jeria hopes to present is most likely to be raised by some of the petitioners themselves. After all, most of the 140-odd petitions argue that the CAA fails to extend the equal protection of law to all immigrants in the country. But, to be fair, the High Commissioner is not seeking to be a petitioner. On the contrary, she is offering the undoubted expertise that the premier UN body possesses in aid of the Court. She has appreciated the amendment's positive side, noting its potential to redress the "irregular" condition of some migrants through a quicker citizenship process. It must be noted that the Court has relied on principles contained in international legal instruments in some of its judgments. The moot question is whether the UN High Commissioner ought to be given an opportunity to assist the Court in the matter, or whether, even without such assistance, the Court will countenance arguments based on the salutary provisions of international conventions that India is a party to. Needless to say, the amicus brief may not be necessary in the latter situation. The Modi government may be unhappy with the UN rights body's "overreach", but it will have to be underscored that the CAA's flawed structure and the aggressive manner in which it was initially linked with a post-implementation exercise to purge the country of illegal immigrants have contributed to the present situation. The political Opposition, sections of the legal fraternity, academicians and commentators have made a strong case that making religion a factor to include certain categories for a fasttracked naturalisation process is violative of secular principles.

Behind Meghalaya Violence

→ Last week, Ethnic violence left three dead in Meghalaya. A Khasi tribal was killed in a clash in a village near the Bangladesh border, followed by a stabbing spree by masked attackers in Shillong and attacks elsewhere, leading to the death of two non-tribal men, both Muslims. The violence underlined the ethnic complexities of Meghalaya, with tensions coming back to the fore following the passage of the Citizenship (Amendment) Act.

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Multi-Ethnic Meghalaya

Meghalaya became a state in 1972, when it was carved out of Assam. Before that, Shillong, now Meghalaya's capital, used to be the capital of Assam. Sharing a 443-km border with Bangladesh, Meghalaya has seen decades of migration from areas that are now in Bangladesh, as well as from various Indian states via Assam. Besides the indigenous groups, Meghalaya's residents include Bengalis, Nepalis, Marwaris, Biharis and members of various other communities. Meghalaya is a tribal majority state, and the indigenous Khasis, Jaintias and Garos are entitled to 80% reservation in government jobs. Groups such as the Khasi Students' Union (KSU), established in 1978, have continuously expressed concerns that illegal migration from Bangladesh and growth of "outsiders" from other states would overwhelm the indigenous communities.

The CAA Context

The CAA, passed by Parliament in December, relaxes the norms for Hindus from Bangladesh (among six religious' groups from three countries) for eligibility to apply for Indian citizenship. Long before that, the legislation was already facing protests in the Northeast, including Meghalaya. Eventually, the Centre decided the CAA will not apply in Sixth Schedule areas. The Sixth Schedule of the Constitution has special provisions for administration of certain areas in the Northeast, including almost the whole of Meghalaya. Despite the large exemption, the concerns have persisted in Meghalaya, and demands for an Inner Line Permit (ILP) regime have gathered fresh momentum. If the ILP system is introduced, every Indian citizen from any other state would require a time-bound permit to visit Meghalaya. The violence last week has an immediate context in the anti-CAA campaign and ILP demand. On Friday last week, a KSU team went to Ichamati village, near the Bangladesh border, to hold a meeting on these two issues. It was during this campaign that a clash took place between student activists and non-tribal villagers, leading to a Khasi man being killed. This sparked violence in other parts of the state, with non-tribal persons targeted. In Shillong, at least 10 persons were stabbed by masked persons, leading to the death of a Muslim from Assam. Another Muslim (married to a Khasi woman) was killed in a village called Pyrken.

Border Flashpoint

Ichamati houses mixed communities, largely Bengali Hindus but also Manipuris and Hajongs. Five Bengalis and three Manipuris have been arrested after the killing of the Khasi activist. A KSU member said non-tribals in Ichamati neither oppose the CAA nor want the ILP, hence the delegation was attacked. "The CAA-ILP cocktail has just exacerbated the problems and sharpened the divide even between people who traded with each other in normal times," said Patricia Mukhim, editor of The Shillong Times. She also cited a link between the violence in Ichamati and the mechanics of a limestone business across the border, and cattle smuggling. Mukhim said that in Ichamati and nearby Bholaganj, there are more Bengali residents than there are Khasis and Garos. "This is what happens when new borders are drawn between countries that were once part of each other... In fact, there have been occasions last year when people allegedly from across the border attacked tribals in Shella, Ichamati etc."

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Shillong, Then and Now

Shillong has seen violence against "outsiders" several times in the last four decades. The targets were Bengalis in 1979, Nepalis in 1987, and Biharis in 1992. In 2018, Shillong saw clashes between Khasis and Punjab-origin Dalit Sikhs whose ancestors had settled there over 100 years ago. In an essay in 2013, historian Binayak Dutta, who teaches at the North-Eastern Hill University, described how Bengalis, Assamese, Nepalis, Marwaris and Biharis came together to develop the "multi-ethnic space of Shillong". All that began collapsing after Independence, Dutta wrote. "Constitutional institutions set up to safeguard the interest of the tribes came to be popularly perceived as opportunities to convert these tribal areas into exclusive zones of tribal hegemony." In 2003, political scientists C R Lyngdoh and L S Gassah wrote in the Economic and Political Weekly: "The issue of 'foreigners' illegally residing in the state of Meghalaya was one of the most important issues which dominated state politics in the 1970s and 1980s. In 1979, the state was plunged into a crisis for the first time since it was created." They added, "In all these incidents, the non-tribal community was always at the receiving end."

Old Concerns, Revived

In the recent violence, Jaddu Choudhury, 52, was stabbed twice in the shoulders. Hailing from Assam's Bengali-dominated Silchar town, he has been selling vegetables in Shillong since 1982. Yet, he said, this was the first time he had seen masked men going around knifing people in Shillong. Social activist Angela Rangad stressed the need for knowing "each other" better and overcoming suspicions. "We also need to challenge the idea of 'threat from the outsider'. We have to understand what exactly is the threat. People coming here to earn a living, are they threatening the indigenous people? We should have strict labour laws for outsiders to come and work and earn a living without posing a threat to the indigenous people and also so that they may have rights as migrant workers, who in a sense also contribute to the local economy, and their security is also ensured. Our people also go out to work and earn." Mukhim said: "Our young people are moving out for work and education too. How would we react if they are assaulted or asked to go back because they don't belong to Delhi or Bengaluru?" she said. "... To address the threats and insecurities of tribals, there have to be enough employment opportunities for them and that could have happened if those entrusted with governance have the vision and commitment to serve that larger purpose."

SC Upholds 2018 Order on Land Acquisition

→ The Supreme Court reaffirmed its February 2018 ruling on Section 24 on land acquisition compensation awards, given by a three-judge bench, led by Justice Arun Mishra, in the Indore Development Authority case. A Constitution Bench, also led by Justice Arun Mishra, has overruled an earlier co-ordinate Bench ruling in the Pune Municipal Corporation case of 2014 under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act of 2013. The five-judge Bench was interpreting Section 24 (2) which concerns land acquisition compensation awards made five years "prior or more" to the coming of existence of the 2013 Act, which replaced the 1894 law. The new Act, which came into existence on January 1, 2014 replaced the colonial 1894 law. The provision said that in such cases, if the physical possession has not been taken "or" the compensation is not paid, the acquisition proceeding is "deemed to have lapsed". The government, if it so wishes,

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would have to initiate "fresh acquisition proceedings" under the new Act of 2013, which provides for "fair compensation". The 319-page judgment authored by Justice Mishra, however, said compensation would be considered paid if the amount is put in the Treasury. There was no obligation that the amount should be deposited in the court in order to sustain the land acquisition proceedings under the 2013 Act. Further, the court held that a land acquisition proceeding under Section 24(2) would only lapse if the authorities have neither taken physical possession nor paid the compensation due to the landowner for five or more years prior to January 1, 2014. For this, an "or" in the Section was "interpreted" as an "and". Thus, there is no lapse if possession has been taken and compensation has not been paid. Similarly, there is no lapse if compensation has been paid and possession not taken of the land. Further, the Bench held that Section 24(2) of the Act of 2013 does not give rise to a new cause of action to question the legality of concluded proceedings of land acquisition.

Pleas, Safeguards: Why the Delay in Delhi Gangrape Convicts' Hanging (Pranay Modi - Research Fellow at Vidhi Centre For Legal Policy, New Delhi.)

→ The four convicts in the 2012 Delhi bus gangrape case — Mukesh Kumar Singh, Pawan Gupta, Vinay Sharma, and Akshay Kumar Singh — will be hanged at 5.30 am on March 20, a Delhi court said. The mercy plea filed by Pawan was rejected by the President. The fresh date is in line with the requirement of a gap of 14 days between the date of rejection of the mercy petition and the date of hanging.

Fourth Date In 2 Months

This is the fourth time since January that a date has been set for the executions. Multiple petitions have been filed and rejected during this period, and multiple death warrants have been issued and postponed. This is because the regular legal procedure in death penalty cases has multiple checks, and because the realisation of past failures has resulted in the addition of an extra layer of protections for death row convicts.

The Process of The Law

It is a principle of criminal law that it is preferable to exonerate 10 criminals to condemning even a single innocent. The legal procedure by which a convict is sent to his death is complex, and packed with safeguards. Thus, a trial court may pronounce the death sentence only in the "rarest of the rare" cases — and such a sentence is automatically referred to the High Court for confirmation. A warrant of execution may only be issued once the sentence has been confirmed by the High Court. The convict then has the option of approaching the Supreme Court against the High Court's decision. After the Supreme Court's decision, the convict may file a review petition, and a separate curative petition before the Supreme Court. Both are standard legal processes, meant to rectify egregious errors in judgments. Thereafter, a mercy petition before the President may be filed. Such a petition is disposed of after a process involving a recommendation from the relevant state government, and sanction from the Home Ministry. The convict may then approach the Supreme Court again by filing a petition questioning the legitimacy of the President's decision in the mercy petition. The disposal of this petition ends the process, and the death sentence may be executed thereafter. This adds up to four separate petitions available to a convict even after the Supreme Court has confirmed the conviction. Thus, while a death warrant may be issued

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once the High Court has confirmed the sentence, it may not be executed until all these remedies have been exhausted.

Additional Complications

In 1975, three persons sentenced to death for the same crime ended up suffering different punishments because separate legal processes had been followed for each convict. Shocked by the inconsistency that resulted in one convict being hanged while another had his sentence commuted, and in order to ensure that this does not happen again, the Supreme Court directed that convicts in the same crime must be executed together. This meant that as long as a convict's petition remained pending before any forum, all co-convicts were protected by default. This safeguard has been invoked by the convicts in the Delhi bus gangrape case to secure extensions — and the four petitions available to them after confirmation of the conviction by the Supreme Court have in effect, become 16 — four for each convict, one followed by the other.

Current Status of the Case

The first death warrant was issued on January 7, two years and eight months after the Supreme Court confirmed the sentences. Thereafter, each convict filed separate petitions, typically moving just before the scheduled date of execution, and thereafter approaching the court to secure a postponement on grounds of pendency of the petition. Thus, Pawan's mercy petition was filed on Monday, with the hanging scheduled. As of now, all remedies up to the mercy petition stage have been filed and rejected for all convicts. Petitions in the Supreme Court by Mukesh and Vinay challenging the rejection of their mercy petitions have been rejected. However, similar petitions have not yet been filed for Pawan and Akshay. Counsel for the convicts, A P Singh, has indicated that he intends to file a curative petition against the Supreme Court's rejection of Pawan's plea of juvenility. He is also likely to challenge the rejection of the mercy petitions of Pawan and Akshay before the Supreme Court. Given the record in this case, however, these two remaining remedies could be exhausted quickly. Mukesh had preferred a petition against the rejection of his mercy petition on January 28, three days before the hanging scheduled for February 1 by the second death warrant — however, the Supreme Court had dismissed it the very next day. The date of execution was postponed only after Vinay preferred a mercy petition on January 29.

Whither Tribunal Independence? (Rahul Unnikrishnan - Advocate in The Madras High Court.)

→ In November 2019, a Constitution Bench of the Supreme Court, in Rojer Mathew, declared the Tribunal, Appellate Tribunal and other Authorities (Qualification, Experience and other Conditions of Service of Members) Rules, 2017 as unconstitutional for being violative of principles of independency of the judiciary and contrary to earlier decisions of the Supreme Court in the Madras Bar Association series. In Rojer Mathew, there was also a direction to the Central government to reformulate the rules strictly in accordance with principles delineated by the Court in its earlier decisions. The reframed rules, notified on February 17 by the Ministry of Finance, however, suffer from the same vices. Through Part XIV of the Finance Act, 2017, around 26 Central statutes were amended, and the power to prescribe eligibility criteria, selection process, removal, salaries, tenure and other service conditions pertaining to various members of 19 tribunals were sub-delegated to the rule-making powers of the

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Central government. Describing the search-cum-selection-committee as an attempt to keep the judiciary away from the process of selection and appointment of members, vice-chairman and chairman of tribunals, the Court held that the executive is a litigating party in most of the litigation and hence cannot be allowed to be a dominant participant in tribunal appointments. Further, reiterating its previous decision in Madras Bar Association (2010), the Court held that the tenure of three years for members will "preclude cultivation of adjudicatory experience and is thus injurious to the efficiency of the Tribunals". In the 2017 rules, as noted by the Court in Rojer Mathew, barring the National Company Law Appellate Tribunal (NCLAT), the selection committee for all other tribunals was made up either entirely from personnel within or nominated by the Central government or comprised a majority of personnel from the Central government. While the selection committee for NCLAT consisted of two judges and two secretaries to the Government of India, all other committees comprised only one judge and three secretaries to the Government of India. Now, in the 2020 rules, by default, all committees consist of a judge, the president/chairman/chairperson of the tribunal concerned and two secretaries to the Government of India.

An Equal Say for Judiciary

The common thread in the Madras Bar Association series and Rojer Mathew decisions is that judiciary must have an equal say in the appointment of members of the tribunals. In other words, to deny the executive an upper hand in appointing members to tribunals, the court ordered to have two judges of the Supreme Court to be a part of the four-member selection committee. In Madras Bar Association (2010), a Constitution Bench dealing with the validity and appointment of members to the National Company Law Tribunal (NCLT) under the Companies Act, 1956, held that the selection committee should comprise the Chief Justice of India or his nominee (chairperson, with a casting vote), a senior judge of the Supreme Court or Chief Justice of the High Court, and secretaries in the Ministry of Finance and Ministry of Law and Justice respectively. Subsequent Constitution Bench decisions in Madras Bar Association (2014), Rojer Mathew and the decision of the Madras High Court in Shamnad Basheer have repeatedly held that the principles of the Madras Bar Association (2010) are applicable to the selection process and constitution of all tribunals in India. Under the 2020 rules, the inclusion of the president/chairman/chairperson of the tribunal as a member in the selection committee is in the teeth of previous decisions of the Supreme Court. For instance, now, in the Income Tax Appellate Tribunal (ITAT), Customs Excise and Service Tax Appellate Tribunal (CESTAT), Central Administrative Tribunal (CAT), Debt Recovery Appellate Tribunal etc., a non-judicial member can president/chairman/chairperson, as the case may be. Therefore, when a non-judicial member becomes a member in the selection committee, the Supreme Court judge will be in minority, giving primacy to the executive, which is impermissible. In Madras Bar Association (2010), the Court explicitly held that only judges and advocates can be considered for appointment as judicial member of the tribunal and that persons from the Indian Legal Service cannot be considered for appointment as judicial member. Recently, in Revenue Bar Association (2019), the Madras High Court, while dealing with selection and composition of the Goods and Services Tax Appellate Tribunal (GSTAT), declared Section 110(1)(b)(iii) of the CGST Act, 2017 as unconstitutional for allowing members of Indian Legal Service to be judicial members in GSTAT.



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Tenure Violations

In Madras Bar Association (2010), the Court had held that the term of office "shall be changed to a term of seven or five years". Based on this, in Rojer Mathew, the Court held that the term of three years is too short, and by the time members achieve a refined knowledge, expertise and efficiency, one term will be over. Now, in the 2020 rules, the tenure of members has been increased from three years to four years, thereby blatantly violating the directions of the Supreme Court. Since Madras Bar Association (2010), the government has repeatedly violated the directions of the Supreme Court. One by one, the traditional courts, including the High Courts, have been divested of their jurisdictions and several tribunals have been set up. When the National Taxation Tribunal was struck down as unconstitutional by the Supreme Court, it was hoped that the government would stop experimenting with tribunals. The reality was different. The Madras High Court had to then deal with selection of members to the Intellectual Property Appellate Board. Then came the rules of 2017 and the GST Appellate Tribunal and Advance Authorities under the CGST Act. The sinister plan is obvious: divest courts of their powers, vest those powers with new tribunals, and fill them with civil servants. Now, only if an advocate has more than 25 years of experience, can he apply to the post of judicial member of various tribunals such as ITAT, CESTAT, Appellate Board under the Trade Marks Act, 1999, Appellate Tribunal for Electricity, etc. This 25-year eligibility is unheard of even for an appointment as a High Court judge. It seems absurd to even think that a lawyer with more than 25 years of successful practice would apply for the post of judicial member with a tenure of just four years. Further, as odd as it sounds, an advocate can no longer apply to the post of judicial member of CAT, DRAT, etc. The exclusion of advocates was first judicially noticed in Revenue Bar Association (2019) wherein the Madras High Court merely proceeded to recommend to Parliament to reconsider this proposal. By eliminating chances of bright advocates applying for the post of judicial members, the government surely intends to fill them with candidates from the Indian Legal Service. The 2020 rules are, thus, in contempt of several Constitution Bench decisions of the Supreme Court. Unless the Court comes down heavily on the Central government, we will see these encroachments over and over again.

Two Bills Passed Amid Opposition Protest

The Lok Sabha passed the Insolvency and Bankruptcy Code (Second Amendment) Bill and the Mines and Mineral Laws (Amendment) Bill. The Insolvency and Bankruptcy Code (IBC) Bill seeks to protect successful bidders of insolvent companies from any risk of criminal proceedings for offences committed by previous promoters of the companies concerned. The amendments in the law seek to remove bottlenecks and streamline resolution process of insolvent companies. The IBC that came into force in 2016, has already been amended thrice and is seen as an important law to help insolvent companies utilise their assets. The Mines and Mineral Laws (Amendment) Bill, which was passed before the IBC, proposes to remove end-use restrictions for participating in coal mine auctions and will open up the coal sector fully for commercial mining for all domestic and global companies.

India Among Least-Free Democracies

→ India has become one of the world's least free democracies, according to a global survey, which warned that "the Indian government's alarming departures from democratic norms under Prime Minister Narendra Modi's BJP could blur the values-based distinction between Beijing and New Delhi". The Freedom in the World 2020 report ranks India at the 83rd position,

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along with Timor-Leste and Senegal. This is near the bottom of the pile among the countries categorised as "Free", with only Tunisia receiving a lower score. India's score fell by four points to 71, the worst decline among the world's 25 largest democracies this year. The annulment of autonomy and the subsequent shutdown of Kashmir, the National Register of Citizens and the Citizenship (Amendment) Act, as well as the crackdown on mass protests have been listed as the main signs of declining freedom in the report, released by Freedom House, a U.S.-based watchdog, which has been tracking global political and civil liberties for almost half a century. The report slammed the Internet blackout in Kashmir, terming it the longest shutdown ever imposed by a democracy. It said freedom of expression was under threat in India, with journalists, academics and others facing harassment and intimidation when addressing politically sensitive topics. India scored 34 out of 40 points in the political rights category, but only 37 out of 60 in the civil liberties category, for a total score of 71, a drop from last year's score of 75. The report treats "Indian Kashmir" as a separate territory, which saw its total score drop precipitously from 49 to 28 this year, moving it from a status of "Partly Free" to "Not Free".

Centre Working on Exclusive Body for River-Linking Projects

→ The Central government is working on the establishment of an exclusive body to implement projects for linking rivers. To be called the National Interlinking of Rivers Authority (NIRA), the proposed body is expected to take up both inter-State and intra-State projects. It will also make arrangements for generating up funds, internally and externally. The proposal for an apex body on river linking has been under discussion for the past 18 months. However, the official said that as of now, no specific timeline has been determined for the constitution of the Authority. Also, the earlier idea of framing a Bill, envisaging the creation of the NIRA, is not being pursued now. The subject of establishment of the Authority was discussed at the last meeting of the Special Committee on Inter-Linking of Rivers (ILR) last week in New Delhi. Headed by Union Minister of Jal Shakti Gajendra Singh Shekhawat, the panel includes Irrigation or Water Resources Ministers and Secretaries of States. Since its formation, the Committee has held 17 meetings. It is being assisted by a Task Force for ILR, which is a committee of experts essentially drawn from the Jal Shakti Ministry, Central Water Commission and the NWDA. A Tamil Nadu government official said the Centre has not yet shared with States details regarding the new body though it has conveyed to them that it is planning to have an implementation agency for ILR projects.

Fishy Claims About Cows

→ Recently, the Science and Technology Ministry called for R&D proposals under the interministerial programme SUTRA-PIC India (Scientific Utilization through Research Augmentation-Prime Products from Indigenous Cows). The programme calls for research proposals under five themes. Opening with the statement, "Indian cows are believed to process unique qualities and characteristics," the document invites "systematic scientific investigation of uniqueness of pure indigenous Indian cows".

Are Indigenous Cows Unique?

Evolutionary biology tells us that multiple species can co-evolve and become highly suitable for each other. For instance, some humans are lactose intolerant. Lactose intolerance is a digestive disorder caused by the inability to digest lactose, a primary component of milk and

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dairy products. Studies have shown that people living in northern and western India are more tolerant to lactose compared to south Indians. As northern and western Indians have lived with cows for hundreds of years, breeding them and feeding on their products, they are able to digest milk better. This reasoning would hold for other domesticated animals too. The co-evolution argument holds good for all breeds of cow and their local human populations across the world.

Can Cow Urine and Panchgavya (Cow Dung, Urine, Milk, Curd, Ghee) Help Treat Cancer and Other Diseases?

The call invites applications for research on cowpathy — treatment based on products obtained from indigenous cow as used in ayurveda. It lists many illnesses for which it claims that ancient ayurvedic texts suggested pharmacological applications of products from indigenous cows. The listed diseases are those associated with exclusive symptoms such as psoriasis, eczema and diarrhoea as well as those without particular symptoms such as blood pressure (primary hypertension) and asymptomatic diabetes mellitus. This at the outset strikes a jarring note. For one, many symptoms of high blood pressure such as giddiness may be attributed to other diseases. Hypertension cannot really be measured without a BP apparatus which came into being later. Experts in Ayurveda acknowledge this. "Ayurveda does not have a clear approach for the management of diseases that do not manifest symptoms. While it does deal with eczema or psoriasis, which have symptoms, it does not have a clear protocol for the management of primary hypertension and diabetes when it is asymptomatic," says G.L. Krishna, a practising ayurvedic doctor from Bengaluru, who is interested in Vedanta and Vedic literature. "Further, cancer is a generic term used to describe a spectrum of diseases that result from abnormal cells that are rapidly proliferating. It is not a single disease. The concept of cell in Vedic times was still nascent. Therefore, it would be wrong to presume that ancient ayurvedic texts could have discussed a generic disease entity that results from abnormal cell proliferation," he says.

Why Is Cow Urine Not Exclusive?

Cow urine was used in Ayurveda, but so was goat, camel and elephant urine. Ayurveda practioners use beers, wines and meat, even that of cows, for different medical preparations and conditions. (The Legacy of Vagbhata, M.S. Valiathan). While cow milk was generally preferred over goat's milk, the latter was used to treat tuberculosis. Rather than glorify cow excreta and urine, a more scientifically valid enterprise would be to have the Ministry of Ayush undertake a serious review of ayurvedic texts and subject them to a scientific scrutiny. Many concepts may get falsified, but a true science should not be afraid of falsification. And, as Dr. Krishna says, "A strict scientific attitude and a sympathy with traditional systems are both required in approaching our ancient medical classics. An approach bereft of the former leads to pseudoscience masquerading as traditional wisdom while that bereft of the latter leads to a hasty undermining of valuable medical experience."

How Will In-Flight Wi-Fi work?

→ The government has permitted airlines operating in India to provide in-flight WiFi services to passengers. The pilot "may permit the access of Internet services by passengers on board an aircraft in flight, through Wi-Fi on board, when laptop, smartphone, tablet, smartwatch, e-reader or a point of sale device is used in flight mode or airplane mode", an official

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notification said. The Telecom Commission had given its green signal to in-flight connectivity of Internet and mobile communications on aircraft in Indian airspace in 2018.

THE TECHNOLOGY: Broadly, in-flight connectivity systems use two kinds of technologies. One, an onboard antenna picks up signals from the nearest tower on the ground, and unless the aircraft flying over a large space with no towers (such as a water body), the connection will remain seamless up to a certain altitude. Otherwise, satellites can be used to connect to ground stations in the same way that satellite TV signals are transmitted. Data is transmitted to a personal electronic device through an onboard router, which connects to the plane's antenna. The antenna transmits the signals, through satellites, to a ground station, which redirects the traffic to a billing server that calculates the data consumption. It is then relayed to the intercepting servers, and to the World Wide Web. Once flight mode is activated, the plane's antenna will link to terrestrial Internet services provided by telecom service providers; when the aircraft has climbed to 3,000 m (normally 4-5 minutes after take-off), the antenna will switch to satellite-based services. This way, there will be no break in Internet services to passengers, and cross-interference between terrestrial and satellite networks will be avoided.

THE COST: Airlines will have to bear the initial cost of installing antennae on aircraft. Some airlines have said it would be easier to have the equipment installed on their new aircraft rather than taking planes out of service for retrofitting. The additional cost could find a way into ticket prices. Apart from the equipment, airlines will have to bear additional fuel costs, given the extra weight and drag aircraft will face due to the antenna. Globally, some airlines offering onboard Wi-Fi offer a small volume of free Internet before asking the customer to buy a pack. Some others provide limited or unlimited Internet in Business and First class. Price plans may be volume-based or volume- and time-based. In any case, Internet in the sky is not likely to be cheap.

<u>THE USES</u>: In general, Wi-Fi on a plane is slower than on the ground — even though this is changing with newer technologies. Technology and laws allow calls to be made from aircraft, but many airlines do not want noisy cabins. A TRAI paper from a couple of years ago said over 30 airlines offer onboard connectivity.

How Geologists Detected Gold in Sonbhadra, Estimated Its Value

→ In a recent statement, the Geographical Survey of India (GSI) provided estimates for the amount of gold that can be extracted from a site in Sonbhadra district of Uttar Pradesh. The probable resource is 52,806.25 tonnes of ore, with an average grade of 3.03 grams per tonne, which means the total gold that can be extracted is 160 kg, it said. The statement came after news reports stated that the gold available is 3,350 tonnes; the GSI clarified that its estimates are 160 kg.

What Is This Site with Ore?

It is near a village called Mahuli, around 70 km from Sonbhadra district's headquarters of Robertsganj, and just 10 km from Jharkhand. The land is mainly forest area and inhabited mostly by tribals and members of backward classes. Locals said stories of gold underground

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have been passed down generations, giving rise to the name Son Pahari, the hill where the reserves have been estimated. The site is part of the Mahakoshla region that includes parts of UP, Madhya Pradesh and Jharkhand. It is known to be potentially mineral-rich.

How Long Has the GSI Known About the Ore and Its Mineral Content?

The GSI Northern Region carried out exploration in 1998-99 and 1999-2000, GSI director general M Sridhar said. The results, however, were not encouraging enough to suggest major resources for gold in Sonbhadra. "We found that there is an estimated resource of 52,806.25 tonnes of ore with 3.03 grams per tonne gold. This information was not significant for us as we know that extracting 160 kg gold, or even less, from more than 52,000 tonnes can cost a lot," said Ashish Kumar Nath, director & PRO, GSI Central Headquarters. The GSI compiled a report but did not forward it to the state government at the time. It submitted the report in 2019, following an amendment to the Mines and Minerals (Development and Regulation) Act in 2015. "(It) had a clause that we have to share all our reports with the state government. As we had thousands of such reports, this particular report was sent to the UP government last year," said Ashish Kumar Nath, director & PRO, GSI Central Headquarters.

How Does the GSI Arrive at Such Estimates?

Two basic processes are involved — a study of rocks, and drilling of the ground. Laboratory analysis of the rocks indicates the possibility of these containing a particular mineral, in this case gold, said Tiwari, the GSI Lucknow director. Another indicator is the age of the rocks, which is determined by radiometric dating processes. For high possibility of containing such metals and minerals, the rocks need to be at least 700 million years old, Tiwari said, while also citing exceptions. "The rocks in Sonbhadra are in the Mahakoshla region and from the Proterozoic era, which started 2,500 million years ago," Tiwari said. The GSI drilled the ground at some 30 places between 1998 and 2000, before compiling the report. This eventually provides a three-dimensional image of the area, which is necessary for determining the quality of the resource and the amount available.

Will It Be Worthwhile to Extract the Gold from The Ore?

The GSI classifies ore into categories based on the viability of extraction, which is determined from density. Tiwari said the gold ore found in Sonbhadra is in the "economic" category, which means that extraction will cost less than the cost of the gold that is extracted. The cost of extraction also depends on the grade of gold; the higher the gold concentration, the easier its extraction. At the same time, GSI officials pointed out that the findings are two decades old and the possible gold present is just 160 kg. GSI director & PRO Nath said they have thousands of such findings, and this particular report was never a priority.

So, What Happens to The Ore Now?

Once the GSI gives an estimate, the state government conducts an auction and the winner undertakes the extraction. UP government officials said that before e-auctioning, a team of officials from the state mining department and the district administration have been asked to conduct a survey of the area and identify the land containing ore, by superimposing GSI's geological maps on khasra maps from revenue records. District Magistrate (DM) S Rajalingam said that reserves of other minerals — andalusite, potash and iron ore — have

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been estimated in various parts of Sonbhadra. A preliminary survey also suggested a possibility of uranium deposits, he said.

Business & Economics

Monetary Policy Can't Combat The COVID-19 Impact

→ The huge 50 basis points cut in rates by the U.S. Federal Reserve to lift economic sentiment hit by COVID-19 has disrupted central banking worldwide. Even as analysts debate whether a monetary policy response is the right strategy, central banks across the world are feeling the pressure to follow suit to the largest rate cut by the Fed since 2008. Central banks of Australia and Malaysia have cut rates already while others such as the Bank of Japan, Bank of England and the European Central Bank are contemplating joining the caravan.

First Line of Defence

With monetary policy turning out to be the de facto first line of economic defence against the ill-effects of the virus, the focus in India has turned to the Reserve Bank of India's response. Yields on 10-year government securities fell by as much as 0.12% in the hope of a rate cut by the RBI and they stayed soft. But what are the central bank's options? Unlike other countries, the legal framework in India after the setting up of the Monetary Policy Committee (MPC) is such that the RBI cannot unilaterally adjust rates. The MPC will have to meet and deliberate on the situation before the call to cut rates is taken and such a call will have to be based on an assessment of inflation in the economy. But is a rate cut the right response? The first order impact on the global economy of the spreading virus is disruption to trade and to global supply chains. With China being the factory of the world, the clampdown in that country has already disrupted supplies of products ranging from cell phone components to bulk drugs and auto components. Factory lines across the world could freeze as supply chains get disrupted. The United Nations Conference on Trade and Development has estimated that global merchandise exports could shrink by \$50 billion due to the impact of the virus. Compared to the total world merchandise exports of \$19.48 trillion (2018) the shrinkage appears small but it could just be the beginning. Monetary policy is excellent to address demand shocks but is a blunt tool when it comes to addressing supply-side issues. People may be encouraged to spend more due to a rate cut but what will they spend on if products go scarce, travel convulses and public spaces such as movie theatres and malls become no-go areas?

Pressure on RBI

A rate cut can, at best, help to boost sentiment but that again will be transient as the market's reaction after the Fed rate cut proves. The Swedish central bank's deputy governor Anna Breman has rightly questioned the logic of a rate cut as a response to the coronavirus impact pointing out that an expansionary monetary policy cannot improve the situation. Yet, sentiment being what it is, the RBI may find itself under increasing pressure to act. Given the MPC constraint, it may well choose to do what it did in the February monetary policy-- unleash other weapons in its armoury to give the same effect as a rate cut. Thus, we may well see the central bank announcing another tranche of long-term repo operation, akin to the ₹1 lakh

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crore that it announced in February. That will mean that banks will gain access to three-year funds at the repo rate of 5.15%, much lower than the market rate. And then, there's Operation Twist which the RBI employed to good effect in December, softening rates at the long end of the yield curve. But it's doubtful if any of these measures can address the hit to economic growth. The virus has undoubtedly surfaced at a very wrong time for the Indian economy which is showing hesitant signs of a return to growth. The impact will be felt on more than one front. Industries such as pharmaceuticals, electronics and automobiles could be headed for trouble given their high dependence on Chinese inputs. While the government is said to be formulating a response, including the possibility of airlifting supplies, the practicality of this solution needs to be watched as also its impact on costs for the industries concerned.

Possible Fall in Exports

The bigger problem could be from a fall in exports, which accounts for 20% of the GDP. If the developed world tips into recession due to the virus, exporters of products ranging from petroleum and textiles to leather and gems and jewellery will feel the heat. The offsetting factor, of course, will be a lower oil import bill due to the sharp fall in oil prices. This may also have a benevolent effect on inflation. But there will be other headaches for the central bank if the developed world embarks on monetary expansion. The RBI will be faced with the challenge of staunching inflows of hot money coming in search of the higher returns available in India. But as with every crisis, there's also opportunity here. Economic growth is bound to suffer in the short-term but there could be long-term spin-offs if domestic industry and government get their acts right. Supply chains can be localised through fresh investments and India can bid to be an alternative to China in the global value chain. The COVID-19 crisis has only underlined in red the lesson that global corporations learnt when trade war broke out between the U.S. and China-- the global supply chain needs alternative options to China. India is eminently qualified to assume that role. If only our policymakers and industrialists rise up to the challenge.

An Unrest, A Slowdown and A Health Epidemic (Dr. Manmohan Sigh)

→ It is both futile and puerile to point to past instances of such violence in India's history to justify the present violence in the country. Every act of sectarian violence is a blemish on Mahatma Gandhi's <mark>India. Ju</mark>st in a matte<mark>r o</mark>f fe<mark>w years,</mark> India has slid rapidly from being a <mark>glo</mark>bal <mark>sho</mark>wcase of a model o<mark>f ec</mark>on<mark>om</mark>ic devel<mark>opment t</mark>hrough liberal democratic methods to a strife ridden majoritarian state in economic despair. At a time when our economy is floundering, the impact of such social unrest will only exacerbate the economic slowdown. It is now well accepted that the scourge of India's economy currently is the lack of new investment by the private sector. Investors, industrialists and entrepreneurs are unwilling to undertake new projects and have lost their risk appetite. Social disruptions and communal tensions only compound their fears and risk aversion. Social harmony, the bedrock of economic development, is now under peril. No amount of tweaking of tax rates, showering of corporate incentives or goading will propel Indian or foreign businesses to invest, when the risk of eruption of sudden violence in one's neighbourhood looms large. Lack of investment means lack of jobs and incomes, which, in turn, means lack of consumption and demand in the economy. A lack of demand will only further suppress private investments. This is the vicious cycle that our economy is stuck in. Adding to these self-inflicted woes is the

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real threat of the COVID-19 epidemic that has originated in China. It is still unclear how far this global health hazard will spread and impact the world. But it is very clear that we should be fully prepared and ready to counter it. A health epidemic is one of the most dangerous threats that a nation can face. It is imperative that all of us collectively prepare to face this threat. We have not faced a public health crisis in contemporary times at the scale that the current crisis threatens to unfold. It is therefore important to launch a full-scale, mission-mode operation to counter this threat immediately.

International bodies such as the World Bank and the Organization for Economic Cooperation and Development (OECD) have already pronounced a sharp slowdown in global economic growth. There are reports that China's economy may even contract, which, if it happens, will be the first time since the Cultural Revolution of the 1970s. China today accounts for nearly a fifth of the global economy and a tenth of India's external trade. The forecast for the world economy is quite dire. This is sure to impact India's economic situation too. Millions of small and medium businesses in India that account for more than three-quarters of all formal employment are part of the global supply chain. In such an integrated global economy, the COVID-19 crisis can further slow India's GDP growth by half to one percentage point, other things being constant. India's economic growth was already tepid and this external health shock is bound to make things much worse.

Bringing in Reforms

I recall that in 1991, India and the world faced a similar grave economic crisis, with a balance of payments crisis in India and a global recession caused by rising oil prices due to the Gulf War. But we were able to successfully turn this into an opportunity to reinvigorate the economy through drastic reforms. Similarly, the virus contagion and the slowing down of China can potentially open up an opportunity for India to unleash second -generation reforms to become a larger player in the global economy and vastly improve prosperity levels for hundreds of millions of Indians. To achieve that, we must first rise above divisive ideology, petty politics and respect institutional salience. It is not my desire to offer a dire prognosis or to exaggerate fears. But I believe it is our solemn duty to speak truth to the people of India. The truth is that the current situation is very grim and morose. The India that we know and cherish is slipping away fast. Wilfully stoked communal tensions, gross economic mismanagement and an external health shock are threatening to derail India's progress and standing. It is time to confront the harsh reality of the grave risks we face as a nation and address them squarely and sufficiently.

Banking on Bailouts

→ Just one day after it placed the financially troubled Yes Bank under a moratorium, the Reserve Bank of India announced a draft 'Scheme of Reconstruction' that entails the State Bank of India (SBI) investing capital to acquire a 49% stake in the restructured private lender. The alacrity with which the bailout has been proposed is commendable, given that Yes Bank's stock tumbled 56% on the BSE, eroding shareholders' holdings and dragging the 10-bank S&P BSE Bankex down with it, an indicator of the contagion risk that a sudden bank resolution can pose to the financial system. However, the decision to suspend normal business operations raises several worrying questions, both about the health of the banking sector, and the adequacy of the oversight role that regulators essay. Yes, Bank's troubles are not exactly new or unique and its problems with mounting bad and dodgy loans reflect the

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underlying woes in the borrower industries, ranging from real estate to power and nonbanking financial companies. The continued inability of several corporates to repay their loans resulting in many landings up in insolvency proceedings has meant that lenders have been the hardest hit. Yes Bank, which is yet to report third-quarter financials, suffered a dramatic doubling in gross non-performing assets over the April-September six-month period to ₹17,134 crore, even as it scrambled to raise capital to shore up its balance sheet. With the economy in the throes of a persistent slowdown, the prospects of banks' burden of bad loans easing soon are limited. The fact that the lender ended up at the resolution stage, without ever being placed under the central bank's Prompt Corrective Action (PCA) framework, also raises a question mark over how and why Yes Bank eluded the specifically tailor-made solution to address weakness at banks. While some have pointed to the fact that the lender's stated operational metrics had not breached the pre-set thresholds for triggering the PCA action, the central bank had in recent years flagged several concerns, including a distinct divergence between the reported and RBI's own findings on the bank's financials. This could then be a good opportunity for the RBI to review its PCA guideposts and revise them to ensure that such a slipping under the radar does not recur. The choice of SBI as the investor to affect the bailout reflects the paucity of options the government has. With several other public sector banks currently engaged in merging with weaker peers as part of the Centre's plan, it has fallen on the country's largest bank to play the role of a white knight to a private rival. While Yes Bank's depositors are sure to heave a huge sigh of relief, India's banking sector is still far from out of the woods. Clearly, the RBI and Centre have their task cut out in ensuring that the need for such bailouts is obviated.

SC Frees Trade in Cryptocurrencies, Annuls RBI Curb

→ That the Supreme Court struck down as "disproportionate" a 2018 circular by the Reserve Bank of India (RBI) that directed entities not to provide services to those trading in "virtual currencies" (cryptocurrencies) is understandable. After all, despite ministerial committee recommendations, and warnings by institutions such as the RBI about the problematic nature of their payment and exchange methods, the use of virtual currencies over the Internet continues to remain legal in India.

In a circular in 2018, the RBI had banned banks from dealing with virtual currency exchanges and individual holders on the grounds that these currencies had no underlying fiat and that it was necessary in the larger public interest to stop banks from providing any services related to these. The immediate effect of the RBI circular was to choke the agencies that sought to provide a platform to facilitate trading in cryptocurrencies by cutting them off from banks. This, the petitioners claimed, had a chilling effect on the fledgling cryptocurrency exchanges industry in India and went against their entrepreneurial right to operate a business enshrined in Article 19(1)(q). The Court conceded this limited point saying that the "RBI has not come out with a stand that any of the entities regulated by it... have suffered any loss... on account of [cryptocurrency] exchanges" and this provides relief to the firms providing the virtual exchanges. After a decade or so of deployment and use, the pros and cons of cryptocurrencies are now well known. The primary misgiving with cryptocurrencies such as Bitcoin has remained the highly speculative nature of assessing their value. From humble beginnings, the cryptocurrency traded at a peak of \$20,000 in mid-2018 before crashing to \$3,000 by the end of the year, signalling the volatility that came to be associated with this instrument. This limited its original purpose of becoming an alternative and stable currency that is not backed by any central institution but derives trust from its intricate

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blockchain ledger system. Moreover, reports suggest that bitcoins, with their assured anonymity, remain popular with currency speculators, and in use in illicit transactions over the "dark web". But their utility due to the robust nature of the blockchain algorithm is also not to be sneezed on. Cryptocurrencies have now been adopted by international trading firms for use in lending, raising funds for other crypto projects besides facilitating easier cross-border payments. It is for these utilities that the Indian government should err on the side of jurisdictions such as the European Union which have not outrightly banned the instrument and have sought to regulate its functioning. The 2019 Bill even proposed the creation of a "digital rupee" as official currency. It is now imperative on authorities to find the right "regulatory balance" on cryptocurrencies, a task that is easier thought than done, considering their ever-evolving nature due to technological innovation.

What Are Virtual Currencies? Are They Different from Cryptocurrencies?

There is no globally accepted definition of what exactly is virtual currency. Some agencies have called it a method of exchange of value; others have labelled it a goods item, product or commodity. In its judgment on Wednesday, the Supreme Court observed, "Every court which attempted to fix the identity of virtual currencies, merely acted as the 4 blind men in the Anekantavada philosophy of Jainism, who attempt to describe an elephant, but end up describing only one physical feature of the elephant." Satoshi Nakamoto, widely regarded as the founder of the modern virtual currency bitcoin and the underlying technology called blockchain, defined bitcoins as "a new electronic cash system that's fully peer-to-peer, with no trusted third party". This essentially meant there would be no central regulator for virtual currencies as they would be placed in a globally visible ledger, accessible to all the users of the technology. All users of such virtual currencies would be able to see and keep track of the transactions taking place. Virtual currency is the larger umbrella term for all forms of non-fiat currency being traded online. Virtual currencies are mostly created, distributed and accepted in local virtual networks. Cryptocurrencies, on the other hand, have an extra layer of security, in the form of encryption algorithms. Cryptographic methods are used to make the currency as well as the network on which they are being traded, secure. Most cryptocurrencies now operate on the blockchain or distributed ledger technology, which allows everyone on the network to keep track of the transactions occurring globally.

Why Did the RBI Ban Virtual Currencies?

Owing to the lack of any underlying fiat, episodes of excessive volatility in their value, and their anonymous nature which goes against global money-laundering rules, the RBI initially flagged its concerns on trade and use of the currency. Risks and concerns about data security and consumer protection on the one hand, and far-reaching potential impact on the effectiveness of monetary policy itself on the other hand, also had the RBI worried about virtual currencies. In its arguments in the Supreme Court, the RBI said it did not want these virtual currencies spreading like contagion, and had therefore, in the larger public interest, asked banks not to deal with people or exchanges dealing in these non-fiat currencies. The RBI argued that owing to a "significant spurt in the valuation of many virtual currencies and rapid growth in initial coin offerings", virtual currencies were not safe for use.

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What Did the Petitioners Say?

The petitioners, who included virtual currency exchanges operational in the country, told the Supreme Court that the RBI action was outside its purview as the non-fiat currency was not a currency as such. They also argued that the action was too harsh and there had been no studies conducted either by the RBI or by the central government. Arguing that the ban was solely on "moral grounds", the petitioners said the RBI should have adopted a wait-and-watch approach, as taken by other regulators such as the Directorate of Enforcement or the Securities and Exchange Board of India.

Tapping the LIC Source (R. Ramakrishnan - Retired Chief Actuary, LIC Of India)

→ More than 64 years after former Finance Minister C.D. Deshmukh called for the nationalisation of insurance, the government is considering partial disinvestment of its holding in the Life Insurance Corporation of India (LIC). It plans to accomplish this in the second quarter of 2020-21. This begs the question: why now? The simple answer is, the partial disinvestment of LIC is a source of income to the public exchequer to make up for the loss in tax revenue over successive cycles of corporate tax cuts, most of which were aimed at spurring domestic industrial development.

Two Groups of Policies

The policies of LIC can be divided broadly into two groups: participating and nonparticipating. Participating policies are eligible for not less than 95% of the profits (surplus) emerging each year. Bonus is declared from this profit, Non-participating policies are not eligible for this bonus. As compensation, the premium rates under these policies are significantly lower. If Section 28 of the LIC Act, 1956, which prescribes the share of profits to participating policyholders, is not amended to reduce this share, then there will likely be no issues in carrying out disinvestment. However, if the government tries to reduce the percentage of profit going to participating policyholders, there could be a host of problems. Since rights of existing policyholders cannot be taken away, this amendment can be made applicable only to policies issued in future and not to existing policies. This can create administrative problems. Two books of accounts must be maintained in each branch office: one with respect to old policies and another with respect to new policies. The bifurcation of administrative expenses between the two groups may also be a major problem. We can therefore assume that no change will be made to Section 28 of the LIC Act. The value of a life i<mark>ns</mark>urance company is assessed by finding the present value of future profits generated by the current business, the probable flow of new business in the future, and the present value of profits from this new business. This is a complex and time-consuming process. There is another method known as the Dividend Discount Model. This method is generally applicable only in the case of companies that pay regular dividends. The LIC has a long and uninterrupted history of dividend payments from inception. Under this method, if it is assumed that if the dividend increases by 3% each year, the present value of future dividends will be ₹300,000 crore (₹3 trillion). If the rate of increase of dividends is 4% or more, then the present value of future dividends will be very high and, theoretically, be equal to infinity. The average annual rate of increase of dividend over the last 30 years is 14.32%, so one can imagine what would be the present value of future dividends.

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Many Products

The Corporation has a wide range of products. Its agents are reluctant to sell the high profit margin unit linked products since these do not guarantee maturity value. Its portfolio of Group, Pension and Annuity products, which have very low profit margin, is quite substantial. Shareholder's share of profits is only 5%. It is not even 50% of the share of profits of shareholders of private insurers. Still, its dividend to shareholders is substantial. LIC is also introducing unit linked products, which generally have good profit margins. So, its dividends may go up even further. It is my considered view that its value today will be anywhere between ₹3 trillion and ₹5 trillion. Its overall cost ratio compares favourably to that of any private insurer. With a capital of just ₹100 crore, it is managing a life fund of about ₹30 trillion and has built up, in the policyholders' account, a solvency reserve of ₹1.5 trillion. Its millionstrong dedicated agency force can be the envy of any insurer. About 96% of LIC's new business comes from this group. On every count, it is a dream organisation. The government should ensure that a fair return is realised from the proposed partial disinvestment.

Life & Science

Why Do Women Live Longer Than Men? Sex Chromosomes Hold Key

→ Men outnumbered women by 37 million in the 2011 Census of India, but among those over the age of 60, there were more than 1 million more women than men. In general, men live shorter lives than women worldwide, and scientists have proposed various theories as to why that is so — men take bigger risks, they drink and smoke more. Now, new research has tested one of many hypotheses — that the real reason is related to the sex chromosomes — and it appears to hold up.

What Are Chromosomes?

The human body is made up of cells, and in the centre of each cell is the nucleus. Chromosomes, which are located inside the nucleus, are structures that hold the genes. It is the genes that determine the various traits of an individual, including eye colour, blood type — and sex. The human cell has 23 pairs of chromosomes. One pair is of the sex chromosomes, named X and Y, which determine whether an individual is male or female. A female has two X chromosomes (XX) while a male has one X and one Y (XY).

<u>Unguarded X Hypothesis</u>: This hypothesis suggests that the Y chromosome in XY is less able to protect an individual from harmful genes expressed on the X chromosome. In a male, as the Y chromosome is smaller than the X chromosome, it is unable to "hide" an X chromosome that carries harmful mutations, which may later expose the individual to health threats. On the other hand, the hypothesis goes, there is no such problem in a pair of X chromosomes (XX) in a female. If one of the X chromosomes has genes that have suffered mutations, then the other X chromosome, which is healthy, can stand in for the first, so that the harmful genes are not expressed. This maximises the length of life, according to the hypothesis. And this is what the UNSW researchers set out to examine.

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Testing the Hypothesis:

"We looked at lifespan data in not just primates, other mammals and birds, but also reptiles, fish, amphibians, arachnids, cockroaches, grasshoppers, beetles, butterflies and moths among others," she said. "And we found that across that broad range of species, the heterogametic sex (XY in humans) does tend to die earlier than the homogametic sex (XX in humans), and it's 17.6 per cent earlier on average." While the pattern is the same across species, the sexes affected are sometimes the reverse. In birds, butterflies and moths. it is the male that has an identical pair of sex chromosomes (ZZ) while the female has ZW chromosomes. Female birds, butterflies and moths were usually found to die earlier than their male counterparts, giving more credence to the unguarded X hypothesis (strictly speaking, unguarded Z in this case). "In species where males are heterogametic (XY), females live almost 21% longer than males. But in the species of birds, butterflies and moths, where females are heterogametic (ZW), males only outlive females by 7%,".

How Does the Swamp Wallaby Stay Pregnant All Its Life?

Researchers reported that the swamp wallaby, a marsupial related to the kangaroo, is pregnant throughout its adult life. It typically conceives a new embryo days before delivering the new-born from its previous pregnancy. The swamp wallaby is likely the only mammal pregnant and lactating all lifelong.

How is it possible? wallabies and kangaroos uteri and two separate the end of a pregnancy in a new embryo develops other uterus. Kangaroos wallabies regularly have in the uterus, a young pouch, and third semi-young at foot, still mother's milk. There is a however. In kangaroos, embryo is conceived a



Female
have two
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one uterus,
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and
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day or two

after the previous birth. In the swamp wallaby (Wallabia bicolor), the new conception happens one or two days before the previous joey is delivered, the researchers said, after having used high-resolution ultrasound to track pregnancy and mating in 10 female swamp wallabies.

<u>What Happens After:</u> As soon as the mature foetus is born and settles in the pouch, the swamp wallaby arrests the development of the new embryo. This is called embryonic diapause, which happens in many animals to pause reproduction until the conditions are right — season, climate, food availability. For wallabies, this is also to ensure that the new one is born only when the pouch is free again. If this did not happen, the swamp wallaby would be birthing new young every 30 days — it has a short gestation period — and its pouch could not support that.

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<u>The Hare Parallel</u>: There is only one other mammal, the <u>European brown hare</u> (Lepus europaeus), that conceives additional embryos before giving birth. There are, however, two key differences. In the hare, the new embryos are conceived in the same uterus that is already supporting foetuses in late stages — which, the researchers note, may be all the more remarkable. The other difference is that only the swamp wallaby is pregnant all its life. "The hare is only pregnant with the possibility of conceiving new embryos during distinct breeding seasons over about 5-6 months of the year. The rest of the time it is not pregnant or lactating at all,".

Why It Matters: Apart from the general finding, it can tell us much about the broader evolution of reproductive trends in mammals, Menzies said. Most mammals have long pregnancies that surpass the length of the oestrous cycle — the fertile period when they mate and conceive. "Here we can see there is a marsupial that has continued pregnancy through the oestrous cycle for the first time, which tells us definitely that marsupials are not constrained by this time relative to all other mammals. It is not the general pattern in mammals to conceive during active pregnancy for many reasons," he said. "... So by studying the swamp wallaby or animals that do things differently or uniquely, we can discover novel molecules or mechanisms that might have applications for human pregnancy or disease."

India Is Host To 457 Migratory Fauna

→ With new additions to the wildlife list put out by the Convention on the Conservation of Migratory Species (CMS), scientists say that the total number of migratory faunae from India comes to 457 species. Birds comprise 83% (380 species) of this figure. The Zoological Survey of India (ZSI) had for the first time compiled the list of migratory species of India under the CMS before the Conference of Parties (COP 13) held in Gujarat recently. It had put the number at 451. Six species were added later. They are the Asian elephant, great Indian bustard, Bengal florican, oceanic white-tip shark, urial and smooth hammerhead shark.

India's Role

Globally, more than 650 species are listed under the CMS appendices and India, with over 450 species, plays a very important role in their conservation, Mr. Chandra said. Before COP 13, the number of migratory bird species stood at 378 and now it has reached 380. According to Mr. Maheswaran, the bird family Muscicapidae has the highest number of migratory species. "The next highest group of migratory birds is raptors or birds of prey, such as eagles, owls, vultures and kites which are from the family Accipitridae," he added. Mr. Maheswaran said that the country has three flyways (flight paths used by birds): The Central Asian flyway, East Asian flyway and East Asian-Australasian flyway. Another group of birds that migrate in large numbers are waders or shore birds. In India, their migratory species number 41, followed by ducks (38) belonging to the family Anatidae. The estimate of 44 migratory mammal species in India has risen to 46 after COP 13, said Lalit Sharma, who heads the wildlife section of the ZSI. The Asian elephant was added to Appendix I and the urial to Appendix II. "The largest group of mammals is definitely bats belonging to the family Vespertilionidae. Dolphins are the second highest group of mammals with nine migratory species of dolphins listed," he added. Mr. Sharma pointed out that COP 13 has focussed on transboundary species and corridor conservation. Fish make up another important group of

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migratory species. Before COP 13, the ZSI had compiled 22 species, including 12 sharks and 10 ray fish. The oceanic white-tip shark and smooth hammerhead shark were then added, said K.K. Bineesh, a ZSI scientist. The total number of migratory fish species from India under CMS now stands at 24. Seven reptiles, which include five species of turtles and the Indian gharial and salt water crocodile, are among the CMS species found in India. There was no addition to the reptiles list.

Eurasian Otter Found in Chilika Lake

Researchers conducting a study in Odisha's Chilika Lake have found the presence of a viable, breeding population of a fishing cat in the brackish water lagoon. It is a globally endangered species that is elusive and found in very few places in south and south-east Asia.



Extant Species

Wild cat species usually hunt on ground. But the fishing cat hunts in water. It has specialised features like partially webbed feet and waterresistant fur that helps it to thrive in wetlands. The flat-headed cat of south-east Asia is the only other feline that shares similar features. This makes them unique among all 39 extant cat species. Another globally endangered species, smooth-coated otter, has also been

recorded from the study's data. Both the species are supposed to enjoy conservation measures of the highest accord in India according to the country's laws, much like the tiger and elephant. The study has also recorded presence of Eurasian otter in Chilika. "This is significant. Despite being a widely-spread and common species globally, very little is known of the species distribution and abundance in India and especially along the eastern coast," said Nisarg Prakash of IUCN Otter Specialist Group.

The Cause and Concerns Over Red Snow in Antarctica

Over the last few weeks, photographs of "red snow" around Ukraine's Vernadsky Research Base, off the coast of Antarctica's northernmost peninsula, have gone viral. "Red snow" or "watermelon" is a phenomenon that has been known since ancient times. Now, it raises concerns about climate change.

Why It Happens

Aristotle is believed to be one of the first to give a written account of red snow, over 2,000 years ago. In History of Animals, Aristotle wrote: "And, by the way, living animals are found in substances that are usually supposed to be incapable of putrefaction; for instance, worms are found in long-lying snow; and snow of this description gets reddish in colour, and the grub that is engendered in it is red, as might have been expected, and it is also hairy." What Aristotle described as worms and grub; the scientific world today calls algae. The Greek philosopher was right: it is the algae that give the snow its red tinge. This alga species, *Chlamydomonas Chlamydomonas nivalis*, exists in snow in the polar and glacial regions, and carries a red pigment to keep itself warm.

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What Watermelon Snow Signals

In turn, the red snow causes the surrounding ice to melt faster, a 2017 study from Alaska Pacific University said. The more the algae packed together, the redder the snow. And the darker the tinge, the more the heat absorbed by the snow. Subsequently, the ice melts faster. While the melt is good for the microbes that need the liquid water to survive and thrive, it's bad for glaciers that are already melting from a myriad of other causes, the study said. These algae change the snow's albedo — which refers to the amount of light or radiation the snow surface is able to reflect back. Changes in albedo lead to more melting. In the melting of snow in the Arctic, the key drivers have been snow and ice albedo, according to a 2016 study in the journal Nature.

NCBS Method to Detect Virus Associated with A Rare Skin Cancer

→ A team from National Centre for Biological Sciences, Bengaluru, has developed a diagnostic system to detect the presence of Merkel cell polyomavirus in Merkel cell carcinoma tumours. Merkel cell carcinoma is a rare and aggressive type of skin cancer. The researchers have developed a test using the CRISPR-CAS12 technology that can identify the virus in the tumour and give off a fluorescence to indicate the presence of the virus. This is an important development, both, from the point of view of diagnostics and giving a prognosis for the condition. Merkel cell carcinoma is associated with old age, excessive exposure to ultraviolet light and a weak immune system.

Crucial Association

A virus that is part of the normal skin flora – the Merkel cell polyomavirus – can get integrated in the human genome and undergo a mutation which causes it to promote the cancer. In studies, in about 60-80% of Merkel cell carcinoma patients, the tumours were found to test positive for the virus. It is important to know this from the point of view of targeting treatment as well as for giving a prognosis. Earlier studies have shown that the Merkel cell carcinoma caused by the virus is less aggressive and progresses slower than that caused by excessive exposure to ultraviolet light.

DETECTR System

The team adapted a system named DETECTR (DNA endonuclease-targeted CRISPR trans reporter) to help them in this endeavour. The system consists of three components: identifier, switch and reporter. The identifier is a "guide RNA" which can recognise and bind to a section of the Merkel cell polyoma virus. The switch is a DNA-cutting enzyme known as Cas-12a which gets attached to the guide RNA after it finds its target DNA. The reporter consists of a single stranded DNA tagged with a fluorescent molecule. When the guide RNA attaches itself to the viral DNA segment, the attached Cas-12a enzymes get activated and start cutting the "target" virus DNA. They also are enabled to cut up the single-stranded DNA tagged with fluorescent molecule. This then causes the fluorescent molecules to glow, which can be detected.

Presence of Colistin-Resistant Bacteria of Food Origin in The Gut Is Cause for Worry

→ A small study involving 65 stool samples taken from patients from a single hospital in Chennai found 51% of them harbour colistin-resistant bacteria. This reflects the presence of

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such bacteria in the gut as stool samples represent gut colonisation. This is the first study from India which has found indirect evidence of colistin-resistant bacteria in the gut and was published in the journal Diagnostic Microbiology & Infectious Disease. Colistin is the last-resort antibiotic used to treat highly drug-resistant bacterial infections. Colistin-resistant bacteria can be of hospital origin or food origin. Colistin-resistant bacteria of hospital origin do not respond to any of the antibiotics, including carbapenem while colistin-resistant bacteria of food origin will respond to *carbapenem*.

Stool Samples

Of the 65 stool samples 77% were found to be food-acquired and the remaining 23% had an antibiotics resistance pattern suggestive of hospital origin. In a paper published in the Journal of Global Antimicrobial Resistance in 2018, Dr. Ghafur and his team found that colistin-resistant Klebsiella bacteria were widely present in poultry and raw vegetables. The main cause of colistin resistance in food is due to the rampant use of colistin in poultry. Since poultry litter is used as manure to grow vegetables, colistin-resistant bacteria are found in vegetables as well.

Usage in Poultry

"Most of the colistin-resistant Klebsiella bacteria in the gut is from food and not hospital-acquired," says Dr. Ghafur. "Colistin usage in poultry plays a bigger role than its usage in hospitals for the bacteria to develop widespread colistin resistance." Dr. Ghafur adds: "So even if hospital usage of colistin is rationale and scientific that will hardly make any difference in the generation of colistin resistance. The only way out is to control the use of colistin in poultry."

How Resistance is Conferred

In clinical practice, it is the mutation in the mgrB gene or other chromosomal genes that confers colistin resistance to Klebsiella bacteria. In their 2018 study, the authors found mgrB gene mutation in food Klebsiella bacteria. Till date, there is no evidence to suggest that the mgrB gene mutation spreads from food to human Klebsiella bacteria. The only colistin resistance mechanism that is known to spread from food to human Klebsiella bacteria is through mcr gene transfer. However, only a minority (less than 3%) of colistin-resistant Klebsiella bacterial infections in humans is contributed by the mcr gene. "Majority of infections by colistin-resistant Klebsiella in humans are due to mutations in the mgrB gene or other chromosomal genes," Dr. Ghafur says.

The Gene and Its Mutation

The mcr gene is located in the plasmid and so can spread quickly to other bacteria. The mgrB gene mutation too can spread quickly but through insertion sequences. The cause of colistin resistance in majority of bacteria of food origin in human gut is due to mgrB gene mutation. "Our study provides additional evidence to the hypothesis that colistin resistance due to mgrB mutation in food Klebsiella has the potential to spread to human Klebsiella in the gut and hence may contribute colistin-resistant infections in humans," he says. In light of that, the finding that a large number of individuals carry colistin-resistant bacteria of food origin in the gut is therefore worrying.

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Hackers May Have Access to Your Smart Device

f you've been using an iPhone, iPad, Amazon Echo or Kindle or certain handsets from Google, Samsung or Xiaomi, there is a chance that your device has been accessed or taken over by hackers, thanks to a recently discovered vulnerability in the Wi-Fi chips used in these devices. ESET, a Slovak cybersecurity firm, has for the last one year been working in collaboration with manufacturers of two specific Wi-Fi chips, which were found to have been vulnerable to attack by hostile parties. The manufacturers have since released for all the vulnerable devices security patches that users can install to address the vulnerability. According to a report released by ESET, the vulnerability named Kr00k was discovered while the firm was conducting research into KRACK, a series of attacks on Wi-Fi devices that was detected last year. In subsequent investigations, ESET discovered that Wi-Fi chips manufactured by Broadcom ad Cypress had the Kr00k vulnerability. Chips from both these companies have a high market share and are used in a wide range of Wi-Fi-enabled devices. "Simply put, any device with a WiFi chip manufactured by these two companies is vulnerable to attack, as long as the device is connected to a Wi-Fi network and the hacker is within the range of the same network,". "Once a hacker gets access to any device for even a short period of time, they can do anything, including planting a malware or intercepting sensitive information that is being sent or received via the Internet," the official added.

COVID-19

China's High-Tech Battle Against COVID-19

→ What has particularly stood out is the role of technology in this effort. One example is a new COVID-19 app that tells people whether they have been in close contact with anyone confirmed infected, based on flight and train records. A government-run close contact detector platform allows companies to check if any employees have been in contact with those infected by checking their national identification numbers. The main telecom operators are sharing location data with authorities to help contact tracing. In the southern city of Wenzhou, which saw a burst of cases because of the city's traditional business links with Wuhan, more than 3,000 people who visited a noodle shop whose owners contracted the virus were traced through phone data. An app called Pingan Good Doctor, which has 300 million users and connects patients at home with doctors and pharmacies, has noted a surge i<mark>n the nu</mark>mb<mark>er</mark> of u<mark>sers this pa</mark>st <mark>mo</mark>nt<mark>h. I</mark>n <mark>Han</mark>gz<mark>hou</mark>, a city famous for its technology companies, e-commerce giant Alibaba's Alipay app has rolled out a health QR code system, assigning colour codes to citizens marking their risk level, drawing on their travel history and contacts. A green code means you can travel freely, yellow requires seven days of guarantine, while red requires a 14-day quarantine. Chinese media have reported of numerous cases of wrong codes being assigned, preventing many low-risk citizens from using public transport or going to work. Then there are the privacy issues, with Chinese technology companies and mobile operators freely sharing users' information with the authorities and police without their consent in the effort to trace and track possible patients. China, which has invested billions of dollars in new Artificial Intelligence technologies, is deploying some of them in fighting the outbreak. Beijing-based Face++ has come up with a sophisticated temperature screening tool that can work in crowded places and screen thousands of people. It is now deployed in some of Beijing's subway stations and government offices. In Sichuan province,

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doctors are using a new 5G telecom network to help remote hospitals — as well as overburdened doctors in the Hubei province epicentre — promptly assess CT scans to detect COVID-19 cases. Two other prominent AI players, Baidu and SenseTime, are helping police identify people who aren't wearing masks in public places and offices. In north western Yinchuan, authorities have deployed drones armed with loudspeakers — reminding residents to keep a distance from each other and to wear masks — and to spray sanitisers. Technology is also, in less direct ways, helping a hunkered down population cope with the many stresses of living amid an outbreak. While schools remain closed, classes haven't stopped, with millions of students receiving lessons every day through live-streaming apps. Food delivery apps, enabled by a legion of delivery workers who are the unsung heroes of China's COVID-19 crisis, are delivering essentials on a daily basis. While the outbreak has crippled much of China's economy, some businesses have thrived. Virtual classes are booming, whether for fitness, cooking or music. And one of the most popular selling items during China's COVID-19 crisis? Yoga mats.

'Need Not Stop Playing Holi For Fear Of COVID-19, But Do Avoid Crowds'

- You have to understand that this is an infection that spreads by droplets and not, say, through the breath of the person who is carrying it, like TB. You cannot just stand next to someone and get infected unless you are close enough for the droplets to reach you. The most common method of transmission right now seems in fact, to be through infected surfaces. So, it is important to avoid touching, to wash hands repeatedly, and to avoid touching your own face with unwashed hands. The elderly should avoid crowds as far as possible. But unless there is a specific advisory asking people to refrain from sending children to school or using public transport, or unless there is a cluster of cases reported from one particular school or college, in which case the institution will have to be closed down and students followed up for 14 days, such precautions are not necessary. Based on the available data, there is no reason to panic 28 cases in a country the size of India is not worrying. As for whether schools, public transport etc. are safe, the (Health) Ministry should make recommendations based on the situation. It would be different from state to state or city to city. Even in China, the graded approach worked. The kind of containment measures put in place in Hubei were not replicated everywhere.
 - So far, what we know of corona, all of the evidence is from China. The evidence that we have from the largest sample so far suggests that less than 2% of the infections are among people of age less than 20 years; 1% cases are in people ages less than 10 years, and another 1% in people between ages 11 and 20 years. What we do not know is whether children were carrying the virus but were asymptomatic. This is a very important epidemiological question impinging on the decisions about closure of schools, etc.
- → There is absolutely no evidence whatsoever on the efficacy of any medicines in preventing coronavirus infection. Yoga is good for you in a general way. But it is not effective in preventing corona. I would urge all these people to work with scientists and hospitals to implement clinical trials to find out whether these are indeed effective. The WHO has put out on its website the protocol for clinical trials. WHO busts 12 myths about the infection
- → There are about 20 vaccine candidates in early stages of development. There is one that can go into phase-I trial perhaps as early as next month. This is an mRNA vaccine being developed by Moderna Biotech, and the phase-I trials will be carried out by the National Institutes of Health in the US. So, if everything goes really well, we would probably have a

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vaccine in the next 12-18 months — but even after that, there would be the question of availability of sufficient doses. We are probably looking at an 18-24 -month window for that.

- There is work taking place on that using monoclonal antibodies from people who have recovered from the disease. Several trials are taking place in China, Japan, Korea, and the US. The most promising one is of Remdesivir. Some trials are on for the second-line HIV drugs lopinavir and ritonavir, but some small trials in China have already reported negatives. (The Indian Council of Medical Research has obtained approval for use of the lopinavir and ritonavir combination in coronavirus patients in case of a public health emergency. They have not been used in any patient so far.)
- → It is the practice of animal markets, the way they are set up; there are many different animals, some of them live, capable of transmitting infections. China has now started looking at regulating these markets and to put in place biosafety rules.

How to Handle COVID-19 Scare

Since Monday, new cases of confirmed coronavirus infection in Delhi, Hyderabad and Jaipur have led to a series of precautionary measures by government and school authorities, and panic particularly among residents of the National Capital Region. Much of the panic has been spread by alarmist messages via WhatsApp. What actions are safe or unsafe, and what measures are necessary or unnecessary?

What Test Is Done for Coronavirus? Are Private Laboratories Equipped?

The first test that samples of all suspected patients are sent for is the polymerase chain reaction (PCR) test. If that is positive, the sample is sent to the National Institute of Virology in Pune, which is the only government laboratory currently doing genome sequencing, for final confirmation. This final confirmatory test specific for the novel coronavirus was developed virtually overnight after the emergence of the disease. There are many viral research and diagnostic laboratories such as the ones in AIIMS, Delhi, King George's Medical University in Lucknow, Sawai Man Singh Hospital in Jaipur, National Institute of Cholera and Enteric Diseases in Kolkata, and Indira Gandhi Government Medical College in Nagpur, where the PCR test can be done. Many private laboratories are equipped to do the tests but, because of the risk of spreading the infection and the possibility of treatment/isolation delays, it is considered better to go to designated government centres.

Can Masks Contain the Coronavirus Infection?

Masks are effective in containing the spread of infection. Any person with a history of travel to affected areas or of contact with infected persons, and showing symptoms of the disease, should use a mask. It is also important for medical staff to use masks. For the general population, it is not essential to use masks at the current moment. In fact, masks come with their own hazards. For a person with an existing medical condition, wearing a mask may inadvertently complicate the situation. Many experts have noted that people may wear a mask incorrectly, and they can increase the risk of infection by touching their face more often.



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Is It All Right to Send Children for Birthday Parties and Other Such Gatherings? Is It Okay to Use Public Transport?

Only if someone among the party's guests or hosts has a history of exposure to an infected person, or a history of travel to a country where cases have been reported, is it advisable to avoid throwing or attending a party. The same holds for passengers on public transport. If there is no such history, there is no bar on gatherings or public transport at the current moment. At the same time, it is of paramount importance to maintain basic coughing and sneezing etiquette, and to repeatedly wash or sanitise hands.

Are Hand Sanitisers Effective?

They are, provided they are alcohol-based and the alcohol content is more than 60%. The US Centres for Disease Control "recommends washing hands with soap and water whenever possible because handwashing reduces the amounts of all types of germs and chemicals on hands. But if soap and water are not available, using a hand sanitizer with at least 60% alcohol can help you avoid getting sick and spreading germs to others." Hand-washing, though, remains the first and best step, preferably with warm water.

Is It Safe to Shake Hands?

The virus can transmit itself via hand contact, especially if the infected person has coughed or sneezed into his own hands. As the number of people exposed to the virus goes up, and given the 14-day incubation period during which a person can stay asymptomatic but spread the disease, it may be better to use a hands-off greeting, such as a namaskar.

Is Sexual Contact Safe?

It is, but again, it may be better not to kiss. Also, whatever the act, hand-washing remains the cardinal safety measure at all times.

How Prepared Is the Government to Tackle Coronavirus?

So far, the government has not been challenged by the detection of any case of local transmission. However, if and when that happens, and the contact tracing process gets more and more complicated as the net widens, the health systems will be tested hugely. The government has already introduced travel restrictions and suspended visas from affected countries. A detailed containment plan has been shared with states. States have been asked to identify possible isolation areas in hospitals that can accommodate larger numbers. They have been asked to augment existing isolation wards and include facilities of the Labour Department, armed forces, paramilitary forces, medical colleges and PSUs within their jurisdiction.

How Did the Delhi Cases Slip Airport Screening?

Screening of passengers from Italy started from February 26. The cases now detected had entered the day before. With large numbers coming in from across the world, airports are always a hotspot, given the fact that in the last 24 hours the virus's footprint has expanded from 66 to 75 countries.

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Should You Stop Eating Out?

Not yet. If you had to start avoiding public places, then it would have extended to schools and workplaces too. That situation has not arisen yet. Also, avoiding public places, or advising others to do so, may create unnecessary panic. In fact, even for the Noida school where the children of the Delhi patient study, officials of the National Centre for Disease Control say it is all right for children to return to school once fumigation is done and the school reopens next week. There is a need to keep privacy concerns of patients in mind, without compromising on necessary, verified information — for example, the Noida schools have not given out the identity of the students but they have shared the fact that one parent has tested positive. It is important to refrain from spreading random social media messages, especially from perpetuating doomsday messaging.

Why Not Everyone Needs to Wear A Mask

At his special briefing on coronavirus on Monday (March 2), Health Minister Harsh Vardhan said that as a doctor, he did not think there was any need to wear masks in order to ward off infection; observing basic cough etiquette and basic hygiene was sufficient. Dr Harsh Vardhan echoed the advice of the United States Surgeon General Jerome M Adams, the top federal spokesperson on matters of public health, who expressed his frustration on Twitter on Saturday: "Seriously people — STOP BUYING MASKS! They are NOT effective in preventing general public from catching #Coronavirus, but if healthcare providers can't get them to care for sick patients, it puts them and our communities at risk!" Dr Adams's tweet came in the context of panicked Americans rushing to buy masks online, including the so-called N95 masks, leading to an increase in prices and, according to media reports, some counterfeit products appearing in the market. Until Monday, two Americans had died after contracting the dreaded virus on US soil.

"The average healthy person does not need to have a mask, and they shouldn't be wearing masks. There's no evidence that wearing masks on healthy people will protect them. They wear them incorrectly, and they can increase the risk of infection because they're touching their face more often." It is important to recognise that the coronavirus is transmitted through droplets (like when you sneeze or cough), and not through the air, so that you can just breathe it in. And since surgical masks are designed to keep droplets in (rather than keep them out), they work when used by a wearer who is likely to spray around droplets while sneezing or coughing. In fact, you are probably more likely to get infected by touching a contaminated surface than from a droplet travelling through the air.

"The one time you would want a mask is if you're sick and you have to leave the house," Dr Perencevich said in the Forbes article. "If you have the flu or think you have COVID, that's when you'd put on a mask to protect others. In your house, if you feel like you're sick, you should wear a mask to protect your family members." The WHO and health officials around the world have been asking the public to stop buying masks if they are healthy or not caring for someone who is ill. This is critical to prevent a shortage for the people who really need them — medical professionals who are in direct contact with infected patients, and must change their masks frequently.