



## The Indian EXPRESS

FOUNDED BY  
RAMNATH GOENKA

BECAUSE THE TRUTH INVOLVES US ALL

### MONEY AND POWER

Recent disclosures on electoral bonds raise troubling questions. Government must review political finance reform

**W**ITHOUT DOUBT, POLITICAL funding in India needs to be made more transparent. Attempts to alter the mechanism of political funding, to move it away from opaque cash donations, need to be at the forefront of political finance reform in India. Yet, the manner in which the electoral bonds scheme was first introduced, and then implemented, raises grave questions over whether the instrument, in its current form, can facilitate a shift towards a more transparent system.

A disturbing picture of the government riding roughshod over the concerns voiced by the Reserve Bank of India and the Election Commission has come to light. Reservations were expressed on whether providing anonymity to the donor was in line with the intended objective of the scheme to clean up political funding. Concerns were also voiced that the scheme could lead to unlimited and untraceable corporate donations, including by foreign companies, through shell companies to political parties. An argument can be made that anonymity shields donors from future retribution. But, in a democracy, in which transparency should be the guiding principle, voters should be aware of the contributions to parties by various entities. No public purpose is served by protecting the confidentiality of donors. Further, allowing the SBI, a government-owned bank, rather than the RBI, to be the issuer of these bonds raises questions over the influence the government can exert on the functioning of this rather opaque system. As the bank has to maintain details of the donor, and has to furnish these details to enforcement agencies upon request, it invites the charge that these details can be accessed by the government and used to its advantage. The ad hoc manner in which the rules of the scheme were tweaked to change the time-period when these bonds can be purchased and deposited lends further credence to the narrative of an uneven playing field — of a system that has been geared to give the ruling party enormous and unfair advantage. Data compiled by the Association for Democratic Reforms shows that the BJP garnered 95 per cent of the Rs 222 crore bonds issued in the first tranche. The lopsided nature of the scheme is further revealed in a report in this paper which showed that electoral bonds with denominations of Rs 1 crore accounted for more than 91 per cent of the Rs 5,896 crore raised in the first 11 phases over which the bonds were sold.

Reforms to address the nature of political funding should pass the basic tests of transparency and accountability. In this case, it would seem that these basic tenets have not been adhered to. This has serious repercussions for the functioning of democracy, and therefore warrants a clearer and deeper look at political funding and its instruments.

### SADHVI, AGAIN

Pragya Thakur's membership of a parliamentary panel is yet another reminder of impunity she enjoys, BJP's ambivalence

**P**RAGYA THAKUR, THE saffron-clad BJP MP from Bhopal, is back in the limelight following her nomination to the parliamentary consultative committee on defence. The Congress has termed it an insult "to our nation's defence forces, to our nation's esteemed parliamentarians and to every Indian". The Opposition contends that Thakur is a dismal choice for the defence panel since she faces trial in the 2008 Malegaon blasts case, in which six people were killed. The ruling party is yet to respond to the criticism.

However, the controversy has drawn attention yet again to the action the BJP promised to take against her — and did not take — following her deeply offensive remarks in support of Nathuram Godse, the assassin of Mahatma Gandhi. Campaigning in Bhopal during the general election earlier this year, Thakur had said that "Nathuram Godse was a patriot, is a patriot, and will remain a patriot. Those who call him a terrorist should look within. They will get a reply in this election". She found support from at least two BJP MPs from Karnataka, Union minister Anant Kumar Hegde and Nalin Kumar Kateel. Following widespread outrage, the party made her withdraw the statement and apologise. BJP president Amit Shah said he had initiated disciplinary action, and Prime Minister Narendra Modi stated that he would not be able to forgive Thakur for her remarks insulting Gandhi. Of course, the promised disciplinary action never happened. But Thakur went on to call Jawaharlal Nehru a "criminal" and attributed the death of decorated police officer Hemant Karkare during the 26/11 terror strike to her "curse".

Members of Parliament are nominated by the ministry of parliamentary affairs to consultative panels, which, unlike standing committees, have a minimal role in influencing policies, on the recommendation of their respective parties. All legislators are likely to make it to some parliamentary panel or the other on the basis of being an MP, and as per their preference. In the case of Thakur, however, the BJP seems caught in a predicament of its own making. It first offered a ticket to Parliament to a person who stands accused of a grave crime and who has, at the very least, shown no respect for the democratic process. And then it has done nothing to follow up on its own top leaders' public criticism of Thakur. The presence of Pragya Thakur MP in Parliament, and now on a parliamentary panel, can be seen as a reproach to a party that has sworn to uphold the Constitution, in letter and in spirit.

### MONKEY BAAT

Mathura MP Hema Malini has come out in support of the rights of monkeys. In the divine menagerie, homo sapiens are losing out

**I**N PARLIAMENT, ON Thursday, BJP MP from Mathura, Hema Malini, raised an issue concerning a sub-section of her constituents. Apparently, Mathura's monkeys are falling prey to the scourge of junk food — "samosa and kachori" and "Frooti", in particular — having picked up the vice from their human cousins. Malini's solution is to create "monkey safaris" to address the issue of loss of habitat, and to ensure the simians go back to eating "natural" and healthy.

Hema Malini must be congratulated for caring so much for those that don't even have a vote. However, her approach is not novel: The cow has occupied centre stage in national politics for some time now, and especially in Uttar Pradesh. The state government's approach has been to promote gaushalas, and earlier this year, it announced Besahara Govansh Sahbhagita Yojana, under which those adopting stray cattle — on the rise for the last few years, destroying crops and causing other kinds of damage — will be given up to Rs 3,720 per month. Monkeys, like cows, enjoy a sacred status among the majority community.

The problem with monkeys, though, especially the samosa-eating ones, is that like people, they are neither domesticated nor wild. They attack, snatch, chatter and conspire, and pick up unhealthy habits. It seems unlikely that they will return to a state of nature — what is a fruit salad when compared to a lip-smacking kachori? But the lovers of holy animals need not worry. There are enough of them left to protect. The swan is Saraswati's vahana, the humble mooshak supports the rotund Ganesh and even the buffalo carries the god of death. There are, in fact, animals enough to turn all of UP into a gigantic divine safari of otherwise mundane fauna. The only ones left out are poor old homo sapiens. But, then, when have they mattered to the powers-that-be anyway?



MRINAL PANDE

"India belongs to the Hindus, the Mohammedans, the Sikhs, the Parsis and others. No single community can rub over the rest. One day's fight brings permanent loss to the country. It brings disgrace upon us."  
(MM Malaviya at Congress Session, Calcutta 1933)

**ONE WONDERS HOW** this fierce upholder of unity and equality, founder of the Banaras Hindu University, would have felt at the sight of some 20 students sitting outside the university's Sanskrit Vidya Dharma Vigyan, raising slogans against the appointment of a fully qualified assistant professor, Firoze Khan, on grounds that he is a Muslim — they reiterated their protest but called off the 15-day dharna on Friday. Their leader, Chakrapani Ojha, says that as per Hindu shastras, a Muslim cannot teach dharma vigyan (theology). Never mind the fact that Khan was shortlisted from 30 applicants, duly interviewed by a (mostly Hindu) panel of experts from the university and finally selected on the basis of proven merit and learning.

It is obvious that these students and their faceless instigators are not aware of the 1962 collection of the BHU founder's speeches on the concept of dharma. The learned educationist says, again and again, that ultimately there is only one Supreme Being whom peoples following different religions worship under different names, but the concept of dharma must undergo a constant and vigorous churning of philosophical ideas, traditions and practices prevalent at the time. The truth, he writes, will rise to the surface on its own.

Holding on to this inclusive concept of dharma, he travelled through the country, raising funds for realising his dream. Among the generous donors for the cause of learning, there were Indians from all communities. Among the royals was the then Nawab of Rampur, a Muslim who donated Rs 1 lakh, a host of Hindu and Muslim students of Darbhanga who donated a purse of Rs 1,000, a Muslim beggar who gave Re 1 and many chhapris and patwaris at Bilhour, many of them Muslim, who donated a month's salary each.

"Universities", said Annie Besant, at the court meeting of December 12, 1920, "are

Students' agitation against a Muslim teaching Sanskrit in BHU is symptomatic of a greater narrowing

Contrast the indulgence shown towards the disruptors with the severe beatings to the JNU students in Delhi when they demanded a roll-back of the steep increase in their annual fees. It is obvious that dharma in the context of Sabarimala, Ram Mandir and the BHU agitation can be a near obsolete idea but, boy, look how it will command the joint forces of custom, tradition, money and institutions of a secular state. Subjected to scrutiny, each time the state blessed version of Hindu dharma turns out to be basically a cluster of several unformed and half-formed idea atoms, swirling furiously without a God particle of their own.

made by love, love of beauty and learning". "For students," Malaviya ji wrote, "their religion is acquiring knowledge".

So why these protests at the BHU, whose founder's "spirit of accommodation" and selfless service Gandhiji mourned on his death, as he grappled with communal fires in Noakhali? Why was this motley crowd permitted to use a redundant scriptural ruling to bar all non-savarna, non-Hindu males, and by extension, also all females, from the teaching and learning of Sanskrit and/or debating the veracity of the so-called scriptures and rules they quote? How could a handful of agitators dare to block a duly appointed professor, force him to return to his native city of Jaipur?

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Semantically, the word dharma emerges from the Sanskrit verb "dhr", which means to carry and to protect, call it a set of universal principles of justice. This is the dharma that, in Mahabharata, a Brahmin is ordered to go learn from a lowly meat-seller selling dog meat in a drought ravaged town. But in India, over the centuries, as Pali, Prakrit and then Persian became court languages, Sanskrit gradually came to be understood by very few and spoken by even fewer, most of them Brahmins. Sanskrit scriptures began, then, to be glibly quoted by this inbred circle that guarded their language as though the laws of Rta and those of Manu had all been divinely created at the same time. They were not.

Concepts such as the superiority of brahminical forms of learning, the inferiority of women and Shudras were mostly shaped and consolidated during the medieval period by the priestly classes. This was the

Hindu response to the challenges of Islam. With this firewalling of old texts, the concrete and open-ended live public discourses between Indian peoples of various faiths became obsolete. And this epistemology went on to create discriminatory caste, gender laws for various communities.

As a Brahmin woman with some firsthand knowledge of this version of Hindu tradition and Sanskrit, I watch the TV discussions on recent incidents in Ayodhya, Varanasi, Sabarimala and Delhi with shame and alarm as the grand concept of dharma as timeless fundamental laws of justice, is reduced to political fodder by divisive agendas. Doesn't the Rig Veda talk of dharma as Rta, fundamental laws of Nature that bind and protect the universe, including not just a variety of life forms but also the stars, suns and moons? Hasn't the Prithvi Sukta (Atharva Veda) further underscored that the earth (Prithvi) that carries followers of various communities and faiths is itself held together by dharma? It is to dharma as the timeless and universally applicable arbiter that Vyas bows in the Mahabharata. How many of us care to recall that at the end of the great fratricidal war, a guilt-ridden Yudhishtira renounces the throne of blood and leaves on foot, accompanied by dharma, in the form of a dog?

The Varanasi agitation is proof that Hindutva has force fed many with an atrophied concept of Hindu dharma. Debates raging in Parliament further underscore that many of those who have, for centuries, existed outside the pale of Hindutva, shall now fit within no NRC, have no allies. No politician shall represent their case. No state they can appeal to would dare support their demands for compensation, or even political asylum. They were even described as deemak, woodworms, by a major political leader.

When Heinrich Boll was laid to rest, writes close friend, Gunter Grass, a band of Europe's most unwanted, the gypsies, led the pallbearers. "It was Boll's wish. It was what he wanted to play him into the grave, that deeply tragic, despairingly gay music." Some ideas are not new but keep being used to be affirmed from the ground up, over and over again.

The writer is a senior journalist and author

## A BROKEN WATCHDOG

Pakistan's National Accountability Bureau has stifled decision-making



KHALED AHMED

**PAKISTAN IS BEING** torn asunder by the National Accountability Bureau (NAB), empowered to arrest its victims on suspicion. Those who get picked up and rot in NAB prisons without bail have to prove themselves not guilty. The NAB targets politicians and it arrests businessmen suspected of siding with politicians. Shahid Khaqan Abbasi, the 21st prime minister of Pakistan from August 2017 to May 2018, is being kept in a cell while the NAB looks for something to pin on him.

The businessmen saw the end coming under the NAB, which had no clue about how the economy runs these days. Recently, Pakistan's harassed businessmen had a good meeting with the army chief. The NAB thereafter publicly excused itself from subjecting them to its brand of accountability which meant billionaires rotting in its smelly jails.

Then the bureaucracy wanted to protest too because the NAB was nabbing the top civil servants in charge of taking big decisions, and keeping them in the doghouse till they pleaded guilty. At the National Institute of Public Policy, Lahore, two civil servants, Shahid Rahim Sheikh and Saifullah Khalid, have come out with a study — "Bureaucratic Decision-making amid Multiple Accountability" — explaining why the civil servants had stopped helping the elected government in the implementation of public projects.

The study begins thus: "Turbulent political developments also destabilised the Principal-Agent relationship between politicians and civil servants. This relationship had taken

Bureaucrats are answerable to parliamentary scrutiny, and the propriety of their actions and expenditures is subject to statutory audit by the Auditor General's Office. They also have to defend themselves before the Public Accounts Committees of the national and provincial assemblies. With so much punitive scrutiny in operation, is Pakistan doing well economically? The verdict is in: Pakistan is ranked 136 out of 190 countries on the Ease of Doing Business index.

shape over a decade of democratic dispensation (2008-18). In the whirlwind of political upheaval, the civil servants, it appears, also became increasingly insecure, defensive and indecisive. A very strong feeling [of] receiving an unfair deal took root among civil servants. They feel that while political bosses pressurise them into taking difficult and controversial decisions — often informed by political-economy considerations — when it comes to accountability... regarding the propriety of those decisions, the political bosses disown them."

The study took account of the number of anti-corruption hounds the civil servants have to defend against while helping politicians with "big decisions". Bureaucrats are answerable to parliamentary scrutiny, and the propriety of their actions and expenditures is subject to statutory audit by the Auditor General's Office. They also have to defend themselves before the Public Accounts Committees of the national and provincial assemblies. With so much punitive scrutiny in operation, is Pakistan doing well economically? The verdict is in: Pakistan is ranked 136 out of 190 countries on the Ease of Doing Business index.

That is not the end of the matter. The bureaucrats have to face grilling by additional accountability organisations like "the National Accountability Bureau (NAB), the Federal Investigation Agency (FIA), and the Provincial Anti-Corruption Establishments (PACEs)". These outfits are used by the politicians in power to punish their opponents and it hardly matters if they are competent and honest or

not. "The ineptitude and incompetence of the staff and agents of the accountability organisations compound the gravity of the difficulty suffered by civil servants."

The authors posit that the bureaucratic indecision in Pakistan is due to the impact of the following factors: Multiple accountability bodies; internal conduct and disciplinary procedures and media trial; public interest litigation by superior judiciary; pressures of political economy and the diminishing social respect for the bureaucracy in society.

It all began with a draconian measure. Political accountability (Ehtesab Commission) was thought up by the caretaker government set up by President Farooq Leghari in November 1996 after he dismissed Prime Minister Benazir Bhutto from office. Revenge was uppermost in the mind of the now deceased Leghari. The draconian NAB was continued for purposes of political revenge by Prime Minister Nawaz Sharif. Now Sharif is serving a long sentence for corruption and suffering from seemingly grave ill-health.

General Pervez Musharraf seized power in 1999 and immediately beefed up the NAB to punish his political opponents in the two major parties, PPP and PMLN. Now the NAB is taking orders from two quarters to further doom its identity as an instrument of justice. One, of course, is the government of Imran Khan. The other remains unnamed.

The writer is consulting editor, Newsweek Pakistan

## NOVEMBER 23, 1979, FORTY YEARS AGO

**PAK SPY FIASCO**  
NEW DELHI IS feeling rather concerned at the recent increase in efforts by Pakistan to gather military intelligence from India. During the last few weeks, India is believed to have asked Islamabad to withdraw as many as three of its officials working in the Pakistani embassy in New Delhi. The three officials — reportedly non-diplomats — are said to have indulged in gathering vital military secrets. Two of these officials — Gustaf Rana and Nur Khan — have already left the country. The third Pakistan embassy official, Anwar Ahmad, may also be on the way back home. Pakistan on its part has asked India to

pull out two of its employees working in the Indian embassy in Islamabad.

**ASSAM TENSE**  
SHOOT-AT-SIGHT order was issued in the trouble-torn Lumbding town, in Nowgong district of Assam, as the situation worsened, according to the chief minister, J N Hazarika. He said that additional police force had been rushed to the town to strictly enforce the curfew as the government had received reports that despite the curfew, certain sections of the people were being threatened and their lives were in danger. The CM said the deputy superintendent of police posted at Lumbding

had been transferred with immediate effect.

**MECCA SEIGE**  
MOST OF THE gunmen who seized the Grand Mosque in Mecca have been arrested and only a few are still holding out in the sacred compound, the Saudi information minister, Mohammed Abdo Yamani, declared. In a new statement broadcast by the Saudi state radio, Yamani said the situation was under complete control and is expected to end within the next few hours. "The group could have been flushed out any moment had we not been concerned for the lives of innocent Muslims," Yamani added.



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## WHAT THE OTHERS SAY

"Labour's 2019 general election manifesto, launched on Thursday by Jeremy Corbyn, is its most radical in more than 35 years. It will strike a chord with millions who want categorical change in Britain." — THE GUARDIAN

# Starting afresh in the Valley

In Kashmir, people's fears about loss of identity must be addressed, economic links with other parts of country established and ideology of jihad made redundant



ABHINAV KUMAR

FOR MANY WEEKS since August 5, a vocal and influential section of our self-styled Kashmir experts have been preaching doom and gloom. They have drawn fanciful comparisons with Nazi Germany — strangely never with Stalin's Russia or Mao's China — by invoking images of concentration camps and genocide. They have regularly breast-beating on prime time TV and in the opinion pages of newspapers about the death of Indian democracy and about violations of the Constitution. For this constituency, the weeks leading to October 31 — when the decisions announced by the Government of India on August 5 took effect — must have felt distinctly anti-climactic.

The two key elements of the worst case scenario propagated by our desi and videshi Cassandras have failed to materialise. Kashmir has not risen up in a bloody mass protest. Neither have the prime instigators of separatism in Kashmir in Pakistan, the country's army and its terrorists proxies, felt confident enough to indulge in large-scale adventurism using conventional or non-conventional means. At the international level, the usual suspects like China and Turkey have made the usual noises. But given China's own challenges in Xinjiang and Hong Kong, not to mention Tibet, and Turkey's own challenges in Syria and with Kurdish nationalism, we can safely ignore the posturing of these two great defenders of democratic norms and international law. There were a few surprises too. Malaysia, that is supposedly liberal, voiced criticism, and Saudi Arabia, that is supposedly theocratic, was supportive. That's international politics for you.

The democracies of the West faced a different dilemma over Kashmir. An influential section of their civil society is sold on the narrative that violence in Kashmir is primarily an issue of human rights violations by the Indian state. However, post 9/11, their governments are more appreciative of India's concerns about Islamist terror, especially with reference to Pakistan. So while the editorial pages of *The New York Times*, *The Washington Post*, *The Guardian* may spew fire and brimstone against India's actions in Kashmir, this media rhetoric has not had a significant impact on the diplomacy of the Western powers.

It is in this background that we must assess what has transpired in the Valley in the three months since August 5. Already, 15 civilians have been killed in 30 different attacks by militants. They include a shopkeeper, an apple grower, truck drivers and labourers. Some were local people, most were migrant workers from other parts of India. The pattern is clear. First, terrorise the locals into submission and bring normal life to a halt by forcing them to shut shops and close schools, thereby attempting to create a narrative that the entire Valley is participating in some sort of a peaceful satyagraha against the Government of India's decisions. Second, create an atmosphere of fear for all non-locals so that the two pillars of the Valley's economic linkages with other parts of the country, tourism and horticulture, take a huge hit and cause widespread economic hardship that finally leads to an intifada-like situation in Kashmir.

Meanwhile, the apologists for jihad and azaadi go on making one absurd claim after another. First, we were told of a massive healthcare crisis. The hospitals and pharmacies across the Valley have functioned uninterruptedly. Then we were told of widespread



C.R. Sasikumar

torture and concentration camps. The security forces have stuck to a deployment grid guided by preventive considerations and performed their job with professionalism and restraint. Then, we were told of an economic crisis caused by a shortage of essential commodities and neglect in harvesting apple. I recently travelled extensively across South Kashmir. The apple orchards were bereft of fruit. Unless the farmers had plucked the apples and decided to let them rot in their houses and barns, this too seemed to be a bunch of lies. Clearly, the jihadi sympathisers in the local media will have to think up a better propaganda to further the separatists' cause.

Many have expressed concern about the hurt caused to Kashmiri sentiments by the decisions announced on August 5 and the manner in which they were implemented. Hurt is a two-way street. The security personnel are in Kashmir precisely due to the excessive importance given to Kashmiri sentiment at the expense of the sentiments of the other stakeholders as well our national interest for the past 70 years. The Kashmiri civil society must understand that in today's India, there is no respect or protection for sentiments based on azaadi and jihad.

Some others have expressed concern about the damage done to India's democracy and constitutional values by the style and substance of the decisions announced on August 5. I think that they have a very shaky faith in our democracy and a somewhat shallow understanding of the relationship between a Constitution and the nation state it guides. A Constitution is meant to ensure the territorial integrity and sovereignty of the nation state. And, if there is a purely non-violent democratic way of fighting separatism and jihad, then it must be the world's best kept secret.

October 31 has come and gone. The state of Jammu and Kashmir has been bifurcated into the two union territories of Ladakh and J&K. Led by newly appointed lieutenant governors,

What Kashmir needs, above all else, is the restoration of the rule of law. Those propagating violence or supporting it must face the full force of the lawful authority of the state. Those who wish to carry on with their lives peacefully must be accorded every possible protection and incentive from the state. This will require nurturing a culture and grammar of political mobilisation that, thus far, has had few takers in the Valley. However, it is hoped that with the empowering of the panchayati raj system on the one hand, and the creation of the UT model of administration on the other, the earlier style of politics that incentivised separatist and jihadi posturing will slowly wither away.

the practical task of implementing these decisions on the ground has begun. The challenges are huge. An entire political and administrative system that nurtured separatism for 70 years, and had a two-faced approach to jihadi violence for the last 30 years, has to be now reoriented towards national integration, grass roots performance and better delivery of public services. We have to ensure that the irrational fears in the Valley about loss of cultural identity and about losing land and job opportunities are addressed. At the same time, we have to ensure that the cult of death and violence, celebrated by the ideology of jihad, that has long had a hold on a section of Kashmiri youth and civil society, is made to lose its appeal through a careful mix of incentives and penalties.

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What the post October 31 changes also mean is that all the agencies of the state operating in Kashmir, civilian and uniformed, face a greater burden of responsibility. It is a huge opportunity to prove to the people of Kashmir and to ourselves that the long dark night of violent hatred that began in 1989 is coming to an end in 2019. Naya Kashmir can finally look forward to a new dawn of prosperity and peace in the heart of India.

The author is an IPS officer serving in Kashmir. Views are strictly personal

# The way of the majority

Supreme Court's Ayodhya verdict has not upheld the law, nor delivered justice



ABDUL KHALIQ

NOVEMBER 9, 2019 WILL go down in history as the darkest night for justice and Indian democracy. On this day, the five-judge Constitution Bench of the Supreme Court announced that the site of the vandalised Babri Masjid in Ayodhya would be handed over to the deity, Ram Lalla, for construction of the Ram Temple. The cruel irony is, while acknowledging the destruction of the masjid as a "violation of the law", the SC had no compunctions about giving that site to the community that brought down the mosque: The justification being, Hindus considered it to be the birthplace of Lord Ram. Clearly, *aastha* or faith has trumped justice and the law.

The idea of India as expressed in our Preamble may be as good as dead. Our secularism has hitherto meant the recognition and celebration of a multicultural ethos, equality and respect for all religions but not the expelling of religion altogether from the public sphere. In fact, Mahatma Gandhi's secularism was motivated by his faith that imbued him with a strong religious belief in truth, tolerance of other religions and non-violence — these values deeply influenced his actions. But today, the deadly cocktail of politics and religion is used as a weapon against minorities. Last month, our defence minister, in full international glare, conducted shastra puja when taking over the first Rafale fighter jet from France. The overt symbolism of intertwining national security with muscular Hinduism in a country that boasts of numerous religions was also an affirmation of the undisputed primacy of the majority religion. Hindutva is now the official creed.

The Ayodhya verdict has not come as a surprise. In the days leading up to the judgment, we were witness to a meticulously orchestrated campaign to pressurise the SC Constitution Bench into delivering a decision favourable to the construction of the Ram Mandir. Sundry Hindu religious leaders had harnessed the electronic media to triumphantly proclaim victory for Lord Ram and the Hindu samaj. It was reported how BJP MP Sakshi Maharaj raised the pitch with his announcement that the construction of the Mandir will begin before December 6, the day when the Babri Masjid was brought down. Most remarkable were the anticipatory celebrations which saw five lakh diyas illuminating Ayodhya on Deepavali, raising expectations to a crescendo. Yogi Adityanath and the RSS appealed for restraint — an obvious dog-whistle aimed at the SC that a verdict unfavourable to Hindus would result in massive social unrest. The underlying message was clear: The Mandir has overwhelming social sanction and the Court must play ball.

Evidently, the SC needed no such coercion. In the past, our apex court has not only acknowledged the social power of supremacist Hindutva, but has even justified it. In fact, in a 1996 judgment, the SC went so far as to

say that Hindutva was "a way of life" and synonym for "Indianisation, i.e. development of a uniform culture by obliterating the differences between all the cultures co-existing in the country." This view sits perfectly with the Hindutva ideology that talks of the supremacy of the Hindu religion and cultural ethos. The SC has repeatedly passed over the opportunity to revisit and amend this controversial judgment, thereby vindicating *Organiser's* triumphant assertion that "the Supreme Court has put its seal of judicial imprimatur on the Sangh ideology of Hindutva". The SC's overindulgence of the faith of the majority is matched by cavalier indifference to the sensibilities of Muslims. The SC judgment of 1994 stating that "praying in a mosque is not an essential part of Islam and namaz by Muslims can be offered even in the open" left Muslims out in the cold. The Ayodhya verdict may have been a foregone conclusion considering that it has come at a time when Hindutva and its advocates control the public square and the institutions of governance.

The Allahabad High Court bench, in 2010, tasked with deciding the issue on the basis of a melange of empirical reality, malleable historical data, dodgy reports and *aastha*, took recourse to what can be termed "the King Solomon solution", dividing the disputed site into three equal parts for the contending parties. The litigants and their supporters were stunned by the ingenuity of the even-handed and impractical order that pronounced no winners, and, in effect, maintained status quo. Predictably, the aggrieved parties appealed to the SC, thereby giving the country a nine-year reprieve.

The SC was conscious of being entangled in a double-bind regarding the deeply contentious issue of ownership of the disputed site and, therefore, sought in parallel, a mediated solution involving the main parties to the dispute. It appears that a settlement had been worked out but was then scuttled by hardliners on both sides. The broad contours of the agreement were: a) Muslims would give up claims over the disputed site; b) Muslims will get an alternative site and funds for a new mosque; and c) the state would ensure implementation of the Places of Worship Act, 1991 which prohibits the conversion of any place of worship. The SC has essentially endorsed this template.

Muslims are aware that those in favour of the Mandir occupy the commanding posts in the social, political and legal structure. They know that their only hope of living in peace, albeit temporary, was to cede their rights to the disputed site, justice be damned. They now pray that their other places of worship will be safeguarded by the Places of Worship Act 1991. But they must also contend with the fact that the Kashmiris once believed that Article 370 was inviolable. Muslims realise only too well that in today's India, the point of view of the majority will prevail, regardless.

Justice O W Holmes had famously remarked that the SC was "a court of law and not a court of justice." In the Ayodhya case, however, our SC has upheld neither law nor justice. It has consecrated the faith of the majority whose God has been bestowed the disputed site.

The writer, a former civil servant, is secretary general of the Lok Janshakti Party. Views are personal

# With a mask and shield

How the Delhi government is battling air pollution



SATYENDAR JAIN

AIR POLLUTION ON Diwali declined in Delhi this year relative to the last four years due to the Delhi government's extensive preventive measures, including a mega laser show. From an average PM2.5 level of 958 in 2016 to 289 in 2019, Delhi witnessed a 70 per cent decline in the four-year period. However, 1,276 stubble-burning incidents, mostly in Punjab, Haryana and Uttar Pradesh, were recorded a day before Diwali. Alas, many areas of Delhi recorded an Air Quality Index of 999 on the night of Diwali. As a result, curative measures to reduce the risk of air pollution are required, and the Delhi government is undertaking one such measure through the distribution of 50 lakh masks among school students.

Prevention has always been, and continues to remain, the best cure. Cognisant of this, the Delhi government undertook various steps in the last four years, including making diesel generator sets redundant through the provision of 24x7 electricity, closure of coal-

based power plants (thereby becoming a model state), controlling vehicular pollution through the Odd-Even Scheme, and banning a large number of dirty fuels. The Supreme Court's ban on conventional firecrackers in 2018 added to the drive for clean air. Nonetheless, stubble burning in the neighbouring states has negated somewhat the effectiveness of our preventive initiatives.

While we appeal to our neighbouring states to urgently undertake measures to control stubble burning — through provision of alternate machinery and equipment — we are also going to ensure that the health of our citizens is not affected by the actions of a few. As a result, the Delhi government is distributing N95 masks to the students of government as well as private schools in Delhi.

While simple paper masks may not be as useful, global studies have proved the effectiveness of N95 masks. Two studies in China showed that blood pressure was

lower amongst those participants who wore N95 masks and walked in the centre of Beijing, than those who did not wear the masks. This finding was true for both healthy participants as well as those with heart diseases. Recently, as a recommendation for protection against the compromised air quality in California (due to the wildfires), experts suggested a respirator mask — such as an N95 facemask, which is designed to filter out 95 per cent of airborne particles. In line with these recommendations and findings, the Delhi government is distributing N95 masks as well.

In previous years, it was noted that face masks were not a successful solution to the air pollution problem in Delhi because the most effective N95 and N99 masks were unaffordable for lower-income groups. There was a lack of awareness and access to good quality masks. Research conducted at the Energy Policy Institute at the University of Chicago in India (EPIC India)

last year showed that even at a 50 per cent discount, less than one in 10 residents of Delhi stated that they will purchase a mask.

The Delhi government has consistently stressed and worked on increasing provisions for free and quality healthcare. Our constant efforts to reduce the bottlenecks related to the affordability and availability of masks and our endeavours to promote awareness among students should be seen in that light. We will encourage the students, who receive the masks, to act as change agents and raise awareness about the types, use and health benefits of masks.

As we continue to work towards reducing air pollution in Delhi and urge our neighbouring states to cooperate in this endeavour, it is important that individuals are provided the necessary healthcare provisions. Distribution of the masks is a testament to this imperative.

The writer is health minister of Delhi

## LETTERS TO THE EDITOR

### IN WRONG SPIRIT

THIS REFERS TO the report, 'In Jharkhand, Shah brings up Ram temple: Cong tried to stall' (IE, November 22). Prime Minister Narendra Modi told the nation before Ayodhya verdict that it is not a victory or defeat of anyone. The same sentiment was echoed by the RSS and VHP chiefs. Raking up the dispute for political mileage is not conducive for peace and harmony.

LR Murmu, Delhi

### LANGUAGE MATTERS

THIS REFERS TO the article, 'In our own words' (IE, November 22). Language is the true vehicle of self-expression. Recent studies have shown that education in the mother tongue leads to better academic performance. Such education might also make learning of a second language easier.

Abhijit Chakraborty, Howrah

### JUGGLING ASSETS

THIS REFERS TO the editorial, 'Push for the better' (IE, November 22). The government, on Wednesday, approved sales of stakes in five PSUs. The government's 74.23 per cent holding in THD-CIL along with management control will be transferred to state-owned NTPC, which means government is merely juggling its assets.

Sanjay Chopra, Amritsar

### LETTER OF THE WEEK

#### BE CAREFUL

THIS REFERS TO the editorial, 'Fraught course' (IE, November 16). By asking a larger bench to review its 2018 verdict on the entry of women to Sabarimala, the Supreme Court has made the matter more complicated. The primary issue before the SC was to seek a balance between the tradition of the temple trust and the constitutional mandate of equality, freedom and right to practice one's faith. The Court has enlarged the scope of the enquiry which renders it beyond the narrow remit of the review permitted under law.

Ravi Mathur, Ghaziabad

### BRING CALM

THIS REFERS TO the editorial, 'Bully on campus' (IE, November 21). The impasse in JNU can be resolved by having a graded fee structure. For students of economically weaker sections (EWS), the fee may not be hiked. Alternatively, EWS students may be given a scholarship.

Anoop Kumar Srivastava, Greater Noida



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If there are questions of current or contemporary relevance that you would like explained, please write to [explained@indianexpress.com](mailto:explained@indianexpress.com)

## TELLING NUMBERS

### 42,000 killed in 3 decades of J&K militancy; 14,000 were civilians

Year	Incidents	Civilians killed	Security forces killed	Militants killed
<b>PEAK YEARS</b>				
1992	4817	634	189	819
1993	5247	747	198	1310
1994	5829	820	200	1596
1995	5938	1031	237	1332
1996	5014	1341	184	1209
<b>RECENT YEARS</b>				
2015	208	17	39	108
2016	322	15	82	150
2017	342	40	80	213
2018	614	39	91	257
2019*	365	23	78	136
<b>TOTAL</b>				
1990-2019	71,038	14,038	5,292	22,536

\*Until September 4  
Source for all data: Ministry of Home Affairs

SINCE 1990, 41,866 persons have lost their lives in 71,038 incidents of militant violence in Jammu & Kashmir (now Jammu & Kashmir and Ladakh Union Territories), according to data shared by Home Ministry sources. Those killed include 14,038 civilians; 5,292 security personnel and 22,536 militants.

From the peak years of militancy during the 1990s, when between 3,000 and 6,000 incidents of violence were being reported each year, the annual number of incidents has been below 500 each year in the last 10 years, the data show.

At a time when the Centre has been stressing that normalcy has returned to the Valley, the Home Ministry data show that all landline connections have been restored since September 4, restrictions under CrPC Section 144 lifted at all police stations since September 27, all schools have reopened since October 23, and mobile phone connections have been restored in all districts since October 14. These dates for restoration of facilities are for the Kashmir Valley.

Jammu did not face snapping of landline connections from August 5. The other restrictions were lifted on earlier dates than in Kashmir, according to the data. Ladakh region did not face any of these restrictions. While orders under CrPC Section 144 CrPC have been removed from all 195 police stations (the two UTs have 202 including those in Ladakh), restrictions are imposed at some places at night, according to the Ministry.

All 93,247 landline phones are said to be functioning now. While mobile phone connections have been re-

stored in all districts, not every connection has been restored. Out of 59,76,359 mobile phones, 20,05,293 post-paid mobile phones (voice) are functioning in the Valley, the data showed. Also, 280 e-terminals with Internet facilities have been arranged for the public in all 10 districts of the Valley, which have benefited more than 2 lakh people so far.

The data showed there has been no loss of life on account of any police firing in law and order incidents after August 5, the day when the government announced the bifurcation of Jammu and Kashmir state. There has been a decrease in incidents of stone pelting reported — from 802 incidents in 2018 to 544 so far in 2019, including 190 incidents after August 5.

All 20,411 schools in J&K and Ladakh are open and examinations are going on as per schedule, the data showed. Out of 50,537 students of Class XI in Kashmir Valley, 50,272 (99.48%) appeared in examinations. Further, 99.7% students are writing the 10th and 12th class examinations.

The data showed that in Srinagar City, 7,67,475 OPD patients were treated in September 2019, and 7,91,470 in October.

In this period, the data set says, the government has issued: 43,998 kilolitres petrol 37,129 kilolitres diesel 4,921 kilolitres kerosene 15,74,873 cylinders LPG.

The data showed 11.59 lakh tonnes of apples have been exported out of Jammu and Kashmir. NAFED has procured 8960 tonnes at Rs 38 crore so far from those farmers who are not able to sell their apples.

## RESTORATION OF FACILITIES (KASHMIR VALLEY)

Date	Landline restoration	Restriction relaxation (P/S)	School opening	Mobile restoration (districts)
Aug 5	0	0	0	0
Aug 8	0	0	0	0
Aug 16	0	0	0	0
Aug 17	8,365	35	6,897	0
Aug 18	9,371	50	6,897	0
Aug 24	14,500	69	9,807	1
Aug 27	15,951	81	10,450	1
Sept 4	43,114	81	10,450	1
Sept 9	43,114	93	10,442	1
Sept 27	43,114	105	10,442	1
Oct 14	43,114	105	10,442	10
Oct 23	43,114	105	10,777	10
Nov 2	43,114	105	10,777	10
<b>Total</b>	<b>43,114 (100%)</b>	<b>105 (100%)</b>	<b>10,777 (100%)</b>	<b>10 (100%)</b>

# What's going up in ISRO's next

On Wednesday, ISRO will launch the indigenous Cartosat-3 besides 13 foreign satellites. What is the function of Cartosat-3, and how is it an improvement from previous satellites of the series?

## SIMPLY PUT

AMITABH SINHA  
NEW DELHI, NOVEMBER 22

AFTER Chandrayaan-2, it is back to business for the Indian Space Research Organization. On Wednesday, ISRO will launch Cartosat-3, and 13 other foreign satellites, aboard a PSLV (Polar Satellite Launch Vehicle). This will be ISRO's fifth launch this year and the first since the July 22 launch of the Chandrayaan-2 Moon mission.

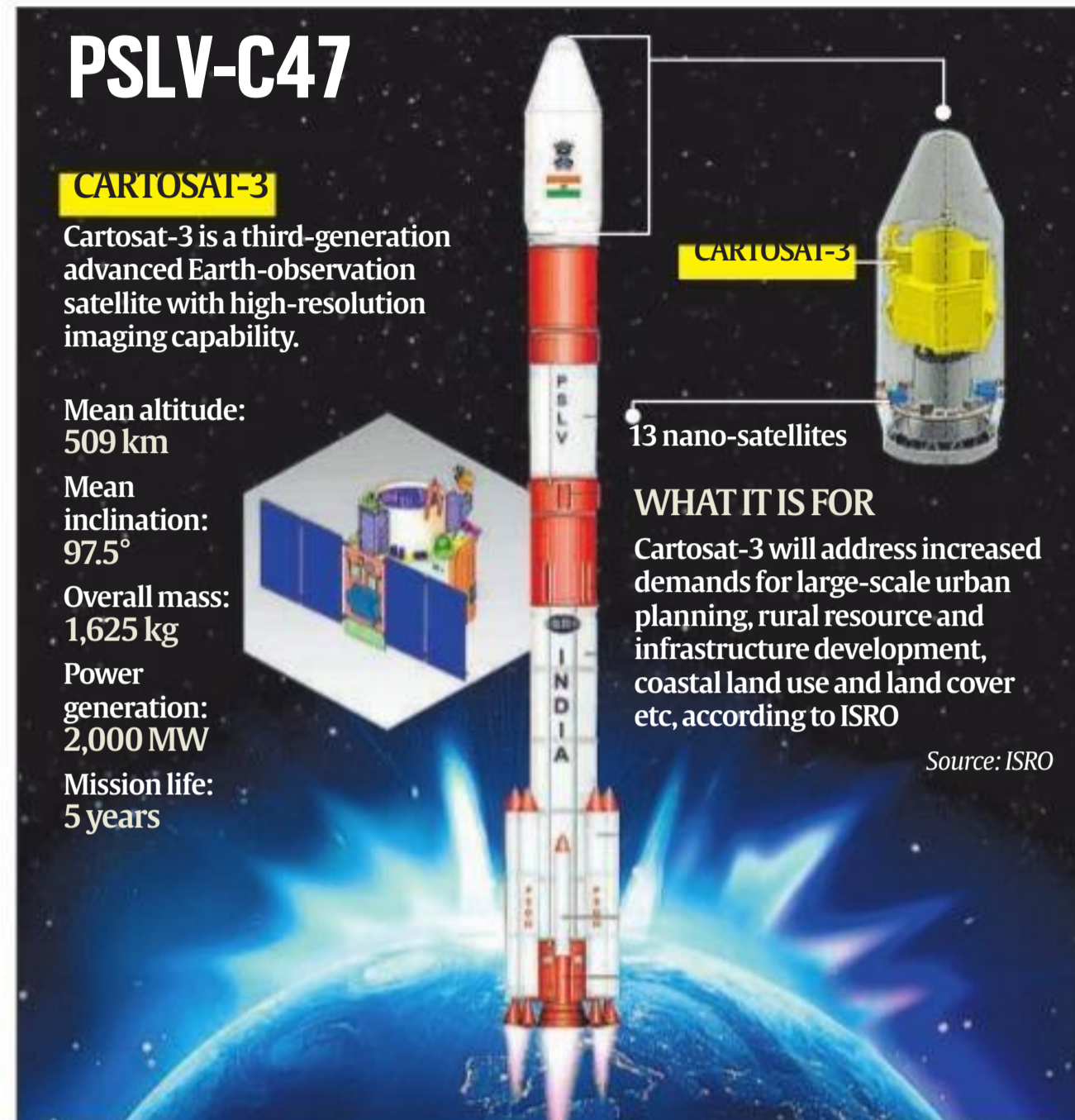
### The payload

The main purpose of the mission is to place the 1,625-kg Cartosat-3 satellite, the third generation of Earth-observation remote sensing satellites that ISRO has been launching and using since 1988. These satellites provide high-resolution imagery of the Earth that are used for applications like 3-D mapping, disaster management, agriculture and water management, recording of changes in land use, and urban and rural infrastructure planning, and even border surveillance.

The PSLV-C47 rocket is also carrying 13 commercial nano-satellites from the US. Twelve of them are Flock-4P satellites, also Earth-observation satellites, from the private company Planet, which has sent several such satellites on PSLV rockets earlier. In fact, it was an earlier version of these same Flock satellites that, in February 2017, had helped ISRO launch a world record 104 satellites at one go. Of the 104 satellites on board PSLV-C37, 88 were Flocks. Those Flocks were called doves, and the current bunch is known as super-doves.

### Earth observation

The main payload in Wednesday's launch would be the next-generation Cartosat satellite. The Cartosat satellites, used mainly for large-scale mapping of the Earth through high-resolution cameras, are part of the large range of earth observation satellites deployed by ISRO, starting with the Indian Remote Sensing series of satellites. The Earth-observation satellites also include the Resourcesat and RISAT series, the Oceansat series and



## PSLV-C47

**CARTOSAT-3**  
Cartosat-3 is a third-generation advanced Earth-observation satellite with high-resolution imaging capability.

- Mean altitude: 509 km
- Mean inclination: 97.5°
- Overall mass: 1,625 kg
- Power generation: 2,000 MW
- Mission life: 5 years

13 nano-satellites

### WHAT IT IS FOR

Cartosat-3 will address increased demands for large-scale urban planning, rural resource and infrastructure development, coastal land use and land cover etc, according to ISRO

Source: ISRO

many more. These satellites now focus on generating theme-based user-friendly data that are in great demand. The Resourcesat and RISAT series of satellites, for example, provide imageries and data that are needed for land and water resources applications. The Oceansat series and the SARAL satellite, meanwhile, produce data on the oceans, while satellites like INSAT 3D, INSAT-VRR or Megha Tropiques study the atmosphere.

Data from Earth-observation satellites are in great demand, both from government agencies, which need it for planning and infrastructure development, as well as private

companies looking to execute infrastructure and other projects.

### Cartosat, then and now

Cartosat-3 has been developed as an improvement over the Cartosat-1 and Cartosat-2 series satellites, though ISRO has not yet revealed the full specifications of this satellite. Cartosat-1, launched in May 2005, was the first Indian remote sensing satellite capable of taking three-dimensional images. With a resolution of 2.5 metres, which meant it could identify a car on the ground from space, Cartosat-1 helped in creating new digital

maps of over 150 towns and cities in the country at a scale of 1:10,000. Earlier maps were of a scale of 1:50,000 or even lower. Data from this satellite were also used to do an inundation vulnerability assessment of the Indian coastline in the event of a tsunami or a major cyclone, and even for estimating the status of irrigation potential created by the large number of projects under the Accelerated Irrigation Benefit Programme.

The first of the Cartosat-2 series was launched in 2007 and these have been substantially advanced versions of Cartosat-1. Seven of them are in orbit, each with the capability of taking images of resolution better than 1 metre. The last three Cartosat-2 series satellites are also placed in a lower orbit — 505 km from the Earth's surface compared to the 640 km earlier — thereby increasing their resolution further.

ISRO has not revealed the quality of the images it would be able to take. But it is likely to have the capability to take images with resolution better than 0.25 metres.

"There is great demand for reliable high-resolution data because these are needed for a very wide range of applications. It is needed by the government, private companies, and also academics who are studying earth, ocean or atmosphere systems. We need to know how the forest or vegetation cover is changing for example, or how urbanisation is spreading. Cartosat satellites come back to the same place after every few months, so that they are able to capture the change that is happening on the ground. And this is valuable for a number of user agencies. ISRO is therefore only catering to the increased demand by deploying more such satellites," said a retired space scientist.

### The rocket

Wednesday's mission will fly on a four-stage PSLV rocket that has been the most consistent of ISRO's launch vehicles. This would be the PSLV's 49th flight. All but two of them have been successful. Apart from Chandrayaan-2, which flew on a GSLV rocket, the other three launches this year have all used PSLV variants.

# Why a Pacific island is voting for independence

NEHA BANKA  
KOLKATA, NOVEMBER 22

NEARLY 30 years after a decade-long brutal civil war, the tiny (9,300 sq) km island of Bougainville in the Pacific is going to polls starting Saturday to vote on its independence from Papua New Guinea.

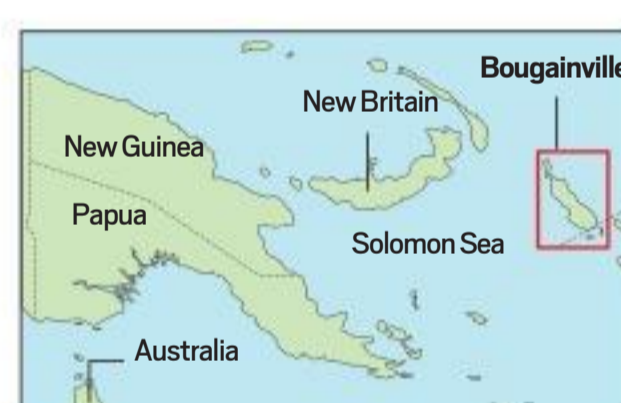
### What is the referendum about?

Between 1988 and 1998, armed groups in Bougainville were involved in conflict with the government of Papua New Guinea. The referendum is a result of one of the provisions of the Bougainville Peace Agreement, signed in 2001 and enacted through an amendment of the Papua New Guinea Constitution. Edward P Wolfers, Foundation Professor Emeritus of Politics, University of Wollongong, Australia, told *The Indian Express*.

Voters choose between 'greater autonomy' or independence for Bougainville. Before any final decision, the referendum would have to be passed by the Government and Parliament of Papua New Guinea, in consultation with the Autonomous Bougainville Government.

### How did the island get its current status?

Its indigenous population had inhabited it



for centuries. In 1885, it came under the protectorate of German New Guinea. In 1914, during World War I, Bougainville and other islands, including what is now Papua New Guinea, fell under the control of Australian forces. The League of Nations controlled the island until 1942 when, following a battle during World War II, Australia took over the island's administration. This arrangement lasted till 1975, ending with Papua New Guinea gaining independence. In the late 1970s, a decentralised system of provincial government was introduced in Bougainville. The Bougainville Peace Agreement in 2001 brought about autonomy.

### Why does it want independence?

"There has subsequently been dissatisfaction among Bougainvilleans over implementation of the agreed arrangements for

Bougainville autonomy, particularly in regard to the constitutionally guaranteed financial grants to which the Autonomous Bougainville Government (ABG) is legally entitled, but which the (Papua New Guinea) National Government has not provided in accordance with the ABG's calculations," Wolfers said.

The conflict is rooted in exploitation of resources, and unequal distribution of wealth. The Panguna mine, also known as the Bougainville Copper Mine, is the world's largest open cut copper mine. The copper contributed significantly to Papua New Guinea's economy and the mine created job opportunities for people from Papua New Guinea and Australia, leading to conflict with Bougainvillean locals who also reported discrimination and racism. The protests inflated into a civil war, resulting in the death of thousands and displacement. The mine was closed in May 1989. The war was brought to a halt due to the Peace Agreement.

### What is Papua New Guinea's stance?

"Though there have been previous leaders who expressed reservations, the current National Government is committed to holding the referendum. Prime Minister James Marape has said publicly that he believes that Papua New Guinea will be stronger if Bougainville remains part of Papua New

Guinea," said Wolfers. "While the current government can be expected to respect the process and the result of the vote, it seems unlikely that a separate independence will receive overwhelming public support elsewhere in Papua New Guinea and that the National Parliament will simply agree." What will possibly follow, Wolfers said, is discussions about ongoing areas of cooperation.

### What happens if Bougainville gains or does not gain an independence?

According to Wolfers, there can be "little doubt that an independent Bougainville will face serious challenges in financing, staffing and managing a full range of governmental functions, at least in the short to medium-term". If Bougainville becomes independent, the immediate steps would involve putting in place law and order, economic opportunities for villagers, and access to education.

According to Wolfers, the scope of the option of greater autonomy on the ballot-paper has still to be precisely defined, the details of which will need to be negotiated. The referendum is being closely watched by other provinces in Papua New Guinea, and also by various other countries.

Voting will take place over two weeks. The results are likely to be known in December.

# In Meghalaya living root bridges, study sees global potential. Can it work?

TORA AGARWALA  
GUWAHATI, NOVEMBER 22

THE *JING kieng jri* or living root bridges — aerial bridges built by weaving and manipulating the roots of the Indian rubber tree — have been serving as connectors for generations in Meghalaya. Spanning between 15 and 250 feet and built over centuries, the bridges, primarily a means to cross streams and rivers, have also become world-famous tourist attractions. Now, new research investigates these structures and proposes to integrate them in modern architecture around the world, and potentially help make cities more environment-friendly.

### What did the study look at, and find?

Researchers from Germany investigated 77 bridges over three expeditions in the Khasi and Jaintia Hills of Meghalaya during 2015, 2016 and 2017. Taking into account structural properties, history and maintenance, morphology and ecological significance, the study, published in the journal *Scientific Reports*, suggests that the bridges can be considered a reference point for future botanical architecture projects in urban contexts.

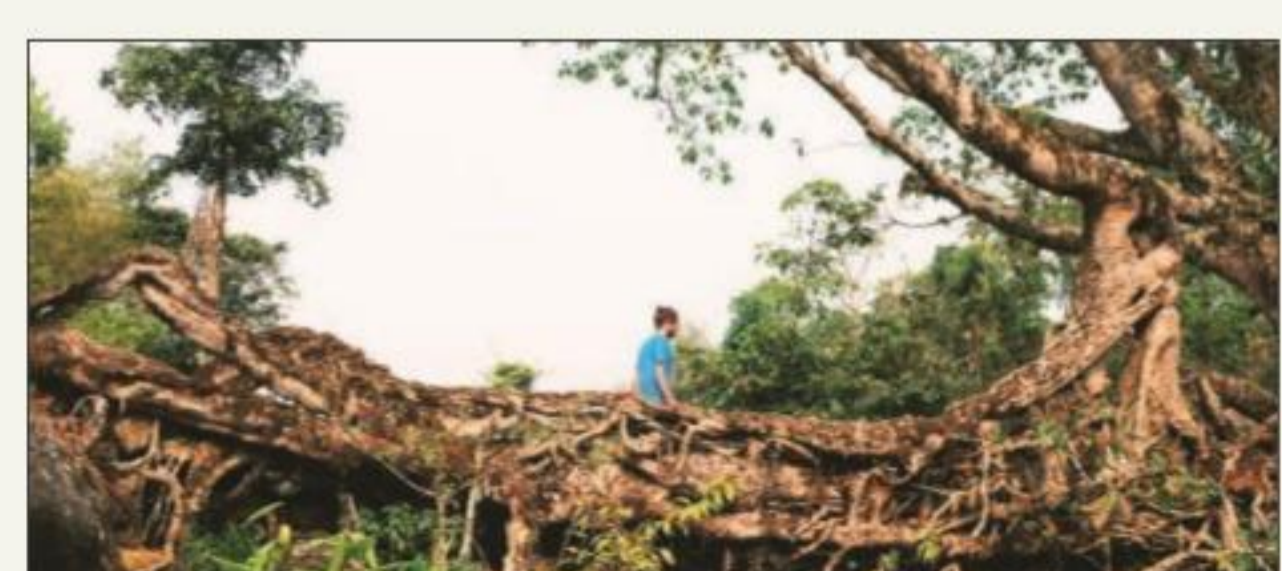
"The findings relating to the traditional

techniques of the Khasi people can promote the further development of modern architecture," said Professor Ferdinand Ludwig of the Technical University of Munich, one of the study authors and founder of a field of research called "Baubotanik" that promotes the use of plants as living building materials in structures.

While stressing they are "not planning to create new living bridges for contemporary cities" right away, the researchers believe this extraordinary building technique can help facilitate "better adaptation to the impacts of climate change". "We see a great potential to use these techniques to develop new forms of urban green in dense cities," said Ludwig. "By understanding the growth history, we can learn how long the bridge has taken to grow to its current state and from there design future growth or repairs, or growth of other bridges," said Wilfrid Middleton, one of the co-authors.

### What is extraordinary about these?

A root bridge uses traditional tribal knowledge to train roots of the Indian rubber tree, found in abundance in the area, to grow laterally across a stream bed, resulting in a living bridge of roots. "Let us redefine these bridges as ecosystems," said Bengaluru- and Shillong-based architect and



These bridges are built by manipulating living roots of rubber trees. F.Ludwig/TUM

researcher Sanjeev Shankar. In 2015, in one of the earliest studies on these structures, Shankar wrote, "The process begins with placing of young pliable aerial roots growing from *Ficus elastica* (India rubber) trees in hollowed out *Areca catechu* or native bamboo trunks. These provide essential nutrition and protection from the weather, and also perform as aerial root guidance systems. Over time, as the aerial roots increase in strength and thickness, the *Areca catechu* or native bamboo trunks are no longer required."

*Ficus elastica* is conducive to the growth of bridges because of its very nature. "There are three main properties: they are elastic, the roots easily combine and the plants grow in rough, rocky soils," said Patrick Rodgers, an American travel writer who has done many solo expeditions to these areas since 2011 and has also contributed his expertise to the new study.

What is crucial for a root bridge to survive is the development of an ecosystem around it. "Specifically the entire biology, the

entire ecosystem, and the relationship between the people and the plants, which have, over the centuries, kept it going," said Shankar, who is working with the Meghalaya government along with indigenous communities and other academics to formalise policies and regulations for conservation and responsible development of these ecosystems.

### Can this really be replicated elsewhere?

"Regarding the techniques and approaches of Living Root Bridges, we are in an early research phase. There are first concepts how to transfer the idea, but no concrete plans for projects yet," Ludwig said in an email.

Shankar said: "We should ask: where will a plant be happy? Will it be happy in a highly toxic environment of a polluted city, where thousands will walk on it, where cars, trucks and buses are on it, or is the plant a living entity which grows in a specific microclimate?" A pointer might lie in the deteriorating health of certain root bridges in Meghalaya. While there are hundreds of such bridges, the two most popular (Riwai Root Bridge and Umshiang Double Decker Bridge) have borne the brunt of recent tourism growth.

"Both these bridges have been adversely affected in the past ten years. This is because of the introduction of modern architecture

such as new concrete footpaths, building etc around the bridge that have impacted that bridge health. There are cracks in them," said Morningstar Khongthaw, 23, a villager who started The Living Root Foundation in 2018. "My ancestors made these bridges for a practical need: to cross streams and rivers. Now the bridges are too weak to accommodate people beyond a capacity," said Khongthaw.

### So, is there any potential?

"My personal opinion is that the basic idea — architectural structures made of *Ficus elastica* plants — is sound in urban environments. This is because of the robustness of the plant itself," Rodgers said, by email. He added, however, that factors like "civic planning, good governance, preventing people from damaging the bridge" also need to be taken into account. "Certainly, there is no technical impediment to there being living architecture in urban areas," he said.

Shankar feels the *Ficus benghalensis* (banyan tree) is a related species that can potentially be tried. "How we can apply it to future buildings and structures, and to what extent this integration is appropriate and viable, is a very important question and only a real test in the envisioned environment can prove its feasibility," he said.