



## Soaring to the moon

Chandrayaan-2 will help India test the technologies for deep-space missions

A decade after the first successful mission to the moon with Chandrayaan-1, the Indian Space Research Organisation successfully launched its sequel, Chandrayaan-2, to further explore the earth's natural satellite. Earlier this year, China landed a robotic spacecraft on the far side of the moon, in a first-ever attempt. Now India is attempting a similar feat – to land its rover Pragyan in the moon's South Polar region, attempted so far by none. The equatorial region has been the only one where rovers have landed and explored. The launch by itself is a huge achievement considering that it is the first operational flight of the indigenously developed Geosynchronous Satellite Launch Vehicle Mark-III (GSLV Mark-III) to send up satellites weighing up to four tonnes. The orbiter, the lander (Vikram) and the rover (Pragyan) together weigh 3.87 tonnes. Having reached the earth parking orbit, the orbit of the Chandrayaan-2 spacecraft will be raised in five steps or manoeuvres in the coming 23 days before it reaches the final orbit of 150 x 1,41,000 km. It is in this orbit that Chandrayaan-2 will attain the velocity to escape from the earth's gravitational pull and start the long journey towards the moon. A week later, on August 20, the spacecraft will come under the influence of the moon's gravitational pull, and in a series of steps the altitude of the orbit will be reduced in 13 days to reach the final circular orbit at a height of 100 km. The next crucial step will be the decoupling of the lander (Vikram) and the rover (Pragyan) from the orbiter, followed by the soft-landing of the lander-rover in the early hours of September 7. Despite the postponement of the launch from July 16 owing to a technical snag, the tweaked flight plan has ensured that the Pragyan robotic vehicle will have 14 earth days, or one moon day, to explore.

Unlike the crash-landing of the Moon Impact Probe on the Chandrayaan-1 mission in November 2008, this will be the first time that ISRO is attempting to soft-land a lander on the earth's natural satellite. A series of braking mechanisms will be needed to drastically reduce the velocity of the Vikram lander from nearly 6,000 km an hour, to ensure that the touchdown is soft. The presence of water on the moon was first indicated by the Moon Impact Probe and NASA's Moon Mineralogy Mapper on Chandrayaan-1 a decade ago. The imaging infrared spectrometer instrument on board the orbiter will enable ISRO to look for signatures indicating the presence of water. Though the Terrain Mapping Camera on board Chandrayaan-1 had mapped the moon three-dimensionally at 5-km resolution, Chandrayaan-2 too has such a camera to produce a 3-D map. But it will be for the first time that the vertical temperature gradient and thermal conductivity of the lunar surface, and lunar seismicity, will be studied. While ISRO gained much with the success of Chandrayaan-1 and Mangalyaan, the success of Chandrayaan-2 will go a long way in testing the technologies for deep-space missions.

## What's NEXT?

National Exit Test should overcome legal and political opposition and avoid the NEET way

In its second iteration, the National Medical Commission (NMC) Bill seems to have gained from its time in the bottle, like ageing wine. The new version has some sharp divergences from the original. Presented in Parliament in 2017, it proposed to replace the Medical Council Act, 1956, but it lapsed with the dissolution of the Lok Sabha. The NMC will have authority over medical education – approvals for colleges, admissions, tests and fee-fixation. The provisions of interest are in the core area of medical education. The Bill proposes to unify testing for exit from the MBBS course, and entry into postgraduate medical courses. A single National Exit Test (NEXT) will be conducted across the country replacing the final year MBBS exam, and the scores used to allot PG seats as well. It will allow medical graduates to start medical practice, seek admission to PG courses, and screen foreign medical graduates who want to practise in India. *Per se*, it offers a definite benefit for students who invest much time and energy in five years of training in classrooms, labs and the bedside, by reducing the number of tests they would have to take in case they aim to study further. There are detractors, many of them from Tamil Nadu – which is still politically opposing the National Eligibility-cum-Entrance Test (NEET) – who believe that NEXT will undermine the federal system, and ask whether a test at the MBBS level would suffice as an entry criterion for PG courses.

The Bill has also removed the exemption hitherto given to Central institutions, the AIIMS and JIPMER, from NEET for admission to MBBS and allied courses. In doing so, the government has moved in the right direction, as there was resentment and a charge of elitism at the exclusion of some institutions from an exam that aimed at standardising testing for entry into MBBS. The government also decided to scrap a proposal in the original Bill to conduct an additional licentiate exam that all medical graduates would have to take in order to practise, in the face of virulent opposition. It also removed, rightly, a proposal in the older Bill for a bridge course for AYUSH practitioners to make a lateral entry into allopathy. It is crucial now for the Centre to work amicably with States, and the Indian Medical Association, which is opposed to the Bill, taking them along to ease the process of implementation. At any cost, it must avoid the creation of inflexible roadblocks as happened with NEET in some States. The clearance of these hurdles, then, as recalled from experience, become fraught with legal and political battles, leaving behind much bitterness. NEXT will have to be a lot neater.

# The judicial presumption of non-citizenship

In further strengthening the Foreigners Tribunal, the judiciary has failed to fulfil its duty as the last protector of rights



GAUTAM BHATIA

On May 17, in a very short hearing, a three-judge Bench of the Supreme Court (the Chief Justice of India Ranjan Gogoi and Justices Deepak Gupta and Sanjiv Khanna) decided a batch of 15 petitions under the title *Abdul Kuddus v Union of India*. Innocuously framed as resolving a "perceived conflict" between two paragraphs of the Schedule to the Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003, the judgment – little reported in the media – nonetheless had significant consequences for the ongoing events in Assam surrounding the preparation of the National Register of Citizens ("the NRC").

### Two parallel processes

What was the issue in *Abdul Kuddus*? In short, it involved the status of an "opinion" rendered by a Foreigners Tribunal, as to the citizenship (or the lack thereof) of any individual. The issue arose because, in the State of Assam, there are two ongoing processes concerning the question of citizenship. The first includes proceedings before the Foreigners Tribunals, which have been established under an executive order of the Central government. The second is the NRC, a process overseen and driven by the Supreme Court. While nominally independent, both processes nonetheless bleed into each other, and have thus caused significant chaos and confusion for individuals

who have found themselves on the wrong side of one or both.

The petitioners in *Abdul Kuddus* argued that an opinion rendered by the Foreigners Tribunal had no greater sanctity than an executive order. Under the existing set of rules, this meant that an adverse finding against an individual would not automatically result in their name being struck off the NRC. Furthermore, the Tribunal's opinion could be subsequently reviewed, if fresh materials came to light. This was particularly important because, as had been observed repeatedly, citizenship proceedings were riddled with administrative (and other kinds of) errors, which often came to light much later, and often by chance. And finally, the petitioners argued that if the opinion of the Foreigners Tribunal was used to justify keeping an individual out of the NRC, then that decision could be challenged and would have to be decided independently of the decision arrived at by the Tribunal. In short, the petitioners' case was that the two processes – that of the Foreigners Tribunal and of the NRC – should be kept entirely independent of each other, and without according primacy to one over the other.

### Flawed tribunals

The Supreme Court rejected the petitioners' arguments, and held that the "opinion" of the Foreigners Tribunal was to be treated as a "quasi-judicial order", and was therefore final and binding on all parties including upon the preparation of the NRC. There are, however, serious problems with this holding, which will severely impact the rights of millions of individuals.

To start with, neither in their



DAVID TALUKDAR/INPHOTO VIA GETTY IMAGES

form nor in their functioning do Foreigners' Tribunals even remotely resemble what we normally understand as "courts". First, Foreigners Tribunals were established by a simple executive order. Second, qualifications to serve on the Tribunals have been progressively loosened and the vague requirement of "judicial experience" has now been expanded to include bureaucrats. And perhaps, most importantly, under the Order in question (as it was amended in 2012), Tribunals are given sweeping powers to refuse examination of witnesses if in their opinion it is for "vexatious" purposes, bound to accept evidence produced by the police, and, most glaringly, not required to provide reasons for their findings, "... as it is not a judgment; a concise statement of the facts and the conclusion will suffice" (although the Court, as an offhand remark, also added "reasons" to "facts" and "conclusions"). Subject to provisions of this manner, Tribunals are left free to "regulate [their] own procedure for disposal of cases."

Unsurprisingly, over the last few months, glaring flaws in the working of the Foreigners Tribunals have come to light. Questions in Parliament showed that as many as 64,000 people have been de-

clared non-citizens in ex-parte proceedings, i.e., without being heard.

Testimonies reveal these people are often not even served notices telling them that they have been summoned to appear. Alarming, an investigative media report featured testimony by a former Tribunal member who stated that his compatriots competed to be what was jokingly referred to as "the highest wicket-taker", i.e. the one who could declare the highest number of individuals "foreigners".

When adjudicating upon a person's citizenship – a determination that can have the drastic and severe result of rendering a human being stateless – only the highest standards of adjudication can ever be morally or ethically justifiable. But in further strengthening an institution – the Foreigners Tribunal – that by design and by practice manifestly exhibits the exact opposite of this principle, the Supreme Court failed to fulfil its duty as the last protector of human rights under the Constitution.

### Unwelcome departure

The Court attempted to justify this by observing that "fixing time limits and recording of an order rather than a judgment is to ensure that these cases are disposed of expeditiously and in a time bound manner". This, however, is the reasoning of a company CEO, not that of the highest Court of the land, adjudicating upon a matter that involves the rights of millions of people. When the stakes are so high, when the consequences entail rendering people stateless, then to allow such departures from the most basic principles of the rule of law is morally grotes-

que.

The Court's observations in the *Kuddus* case, and indeed, the manner in which it has conducted the NRC process over the last few months, can be traced back to two judgments delivered in the mid-2000s, known as *Sarbananda Sonowal I* and *II*. In those judgments, relying upon unvetted and unreviewed literature, without any detailed consideration of factual evidence, and in rhetoric more reminiscent of populist demagogues than constitutional courts, the Court declared immigration to be tantamount to "external aggression" upon the country; more specifically, it made the astonishing finding that constitutionally, the burden of proving citizenship would always lie upon the person who was accused of being a non-citizen. A parliamentary legislation that sought to place the burden upon the state was struck down as being unconstitutional.

What the rhetoric and the holdings of the *Sonowal* judgments have created is a climate in which the dominant principle is the presumption of non-citizenship. Apart from the absurdity of imposing such a rule in a country that already has a vast number of marginalised and disenfranchised people, it is this fundamental dehumanisation and devaluation of individuals that has enabled the manner in which the Foreigners Tribunals operate, the many tragedies that come to light every week in the context of the NRC, and judgments such as *Abdul Kuddus*. It is clear that if Article 21 of the Constitution, the right to life, is to mean anything at all, this entire jurisprudence must be reconsidered, root and branch.

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# A misleading presentation of a labour programme

The Economic Survey presents an unbalanced view of the technical interventions in MGNREGA



RAKSHITA SWAMY & RAJENDRAN NARAYANAN

A chapter in the recent Economic Survey on the "transformational" impact of Aadhaar on the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) merits scrutiny. It presents a skewed and unbalanced view of the programme's technical interventions instead of taking a comprehensive view of the implementation. The Survey draws heavily from the Indian School of Business's working paper titled "A Friend Indeed: Does The Use of Digital Identity Make Welfare Programs Truly Counter-Cyclical?"

A rebuttal of this working paper, published in November 2018, highlighted glaring flaws on three counts – factual, methodological and conceptual. Yet the paper has been uncritically accepted and widely cited in the Survey. This raises questions about the credibility of the Chief Economic Adviser's (an affiliate of the ISB) office. Here are six reasons why the Economic Survey's presentation of the MGNREGA is misleading.

Aadhaar has to be understood as merely being a pipeline for funds transfer in the MGNREGA. A lack of adequate financial allocation, pending liabilities and low wages have dogged the programme over the past eight years. About 20% of the Budget allocation in each of the last five years is of pending wage liabilities from

previous years. It was worst in 2016-17, when pending liabilities were 35% (₹13,220 crore) out of a total allocation of ₹38,500 crore. MGNREGA wages in many States are about 40% lower than the Ministry of Labour's national minimum wage. Instead of sufficiently funding MGNREGA, a legal right, in times of severe drought, there is disproportionate attention by the government towards creating a complex architecture based on technical solutions.

### Technological inputs

Second, the Economic Survey misrepresents the continuous technological interventions in the MGNREGA since its inception. Electronic funds transfer started as far back as in 2011 through the Electronic Fund Management System (eFMS), and became symbolic of the Direct Benefit Transfers (DBT). This served as the basis for the National Electronic Fund Management System (NeFMS), introduced, in 2016. The Survey uses the term "ALP" for Aadhaar-linked payments and conflates it with the DBT by repeatedly referring to the time before 2015 as "pre-DBT" to make its claims. The conflation of terms prevents one from making an honest assessment on the effect that different interventions have had.

Third, the Survey makes strong assertions that timely payment of wages have positively impacted worker participation. To support this, the Survey makes dubious causal claims on reduction in payment delays due to the introduction of Aadhaar. However, their understanding of payment delays is faulty.

Wage payments to MGNREGA workers happen in two stages. The



B. VELANKANNI/RAJ

first is the time taken by the blocks to generate the electronic Funds Transfer Orders (FTO) and send it digitally to the Central government. The second is the time taken by the Central government to process these FTOs and transfer wages to workers' accounts. While it is true that delays in the first stage have reduced, those in the second stage continue to be unacceptably high. Only about 30% of the payments are credited on time; the Central government takes more than 50 days (which is the second stage) to transfer wages to workers.

The Survey only considers the delays in the first stage. Aadhaar has no role in reducing the delays in the first stage but comes into play only in the second stage. Therefore the claim in the Survey that the "ALP has positively impacted the flow of payments under the scheme" is a manipulation of facts.

Fourth, the Survey attributes an increase in demand for and supply of work in drought-affected areas to Aadhaar ignoring other crucial factors. For instance, it ignores the Supreme Court's orders on drought (*Swaraj Bhuiyan vs. Union of India* (2015), which coincided with the duration of the working

paper's analysis. Taking cognisance of the Court's orders and continuing monitoring, the Ministry of Rural Development issued strict directives (between 2014 and 2017) to ensure allocation of works and on-time payment of wages.

These judicial-administrative directives, which came into effect after Aadhaar was introduced, played an important role in the increase in the MGNREGA work uptake in drought areas. Not accounting for the Court's orders as a contributing factor in their "causal" analysis makes their findings unreliable. In fact, in Rajasthan, under the new State government, the "work demand" campaign initiated in December 2018 has resulted in a 67% increase in employment generated and a record number of households having completed 100 days of work under the MGNREGA. There is a three-fold increase in employment generation in Karnataka in 2019 compared to 2018. This demonstrates how political and administrative priorities can have a strong positive impact on the programme.

Fifth, while the Survey rightfully acknowledges the nature of positive targeting of the MGNREGA – with women, Dalits and Adivasis benefiting the most – it wrongfully attributes it wholly to the introduction of Aadhaar. The argument denies the unambiguous impact of the universal access of the MGNREGA without having to meet any eligibility criteria. It is disappointing that in independent India, an official document on the state of the economy compares a constitutionally backed legal guarantee to the largesse of feudal kings. This should have been expected as the Survey misses the

point that the programme was introduced as a legal right and not as an act of charity. Indeed, to this end, the Minister for Rural Development recently made an odd comment: "I am not in favour of continuing with MGNREGA because it is for the poor and the government wants to eradicate poverty."

Sixth, the Survey's claims about the ALP identifying "ghost beneficiaries" is exaggerated as an RTI query showed that they accounted for only about 1.4% of total households in 2016-17.

### Violation of rights

The technology historian, Melvin Kranzberg, wrote, "Technology is neither good nor bad; nor is it neutral." It is telling that the Survey completely ignores numerous instances where technology has resulted in violation of workers' rights under the MGNREGA – some examples are not registering work demand, not paying unemployment allowance and compensation for payment delays among others.

In fact, another ISB study, not cited in the Economic Survey shows that 38% of the Aadhaar-based transactions in Jharkhand were diverted to a different account. Overlooking these fundamental issues, cherry-picking studies and using flawed analyses to justify technocracy is an example of ethical paralysis. While the Economic Survey harps about an ill-designed technological pipeline, the fact is that a landmark labour programme is being put on a ventilator.

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## LETTERS TO THE EDITOR

Letters emailed to letters@thehindu.co.in must carry the full postal address and the full name or the name with initials.

### Off to the moon

The quick resolution of the fault that affected the lift-off of the Chandrayaan-2 lunar mission leading to a successful launch yesterday is cause for celebration. The country looks forward to India becoming part of the "space elite". Our scientists at ISRO are the epitome of hard work, perseverance and team spirit. One hopes that the success stories of ISRO inspire Indian youth.

B. SURESH KUMAR, Coimbatore

India has begun a new space journey and the scientists at ISRO deserve praise for their focus, hard work and perseverance.

Launching satellites at affordable rates in comparison to other global space agencies is another masterstroke. ISRO has not only failed to amaze and has also broken the stereotype of public sector undertakings being inefficient. Perhaps other public sector undertakings can emulate the work culture of ISRO.

MEJARI MALLIKARJUNA, Nadigadda, Chittoor, Andhra Pradesh

### RTI amendments

The RTI Act is one of those rare pieces of legislation which empower citizens to look into the often ambiguous workings of the government and our elected representatives. Citizens have a right to know how the

administration is not only using our funds but also delivering on its promises. Amending this to protect either the bureaucracy or the political system is against the spirit of not only the RTI Act but also our democratic credentials (Editorial page, "The tremor of unwelcome amendments", July 22). The right to information is as important as the right to vote and altering this equation and making the RTI chief subservient to the government of the day is both anti-democratic and setting a wrong precedent. If any amendments are contemplated, the government should only further strengthen the laws and make them more 'user-

friendly'. At a time when India's rank in the global transparency index is low, we cannot enact laws that cover up scrutiny.

H.N. RAMAKRISHNA, Bengaluru

To say that the RTI Act has empowered citizens and brought transparency in government departments is not factual for the simple reason that replies to RTI queries are generally vague. Seldom does an applicant receive a pointed reply. The government should ensure that the Act should serve its true objective and is not shortchanged by government officials under the guise of technicalities. Another fact is that most of the information

in the public domain is through whistle-blowers who need to be protected.

DEEPAK SINGHAL, Noida

### What matters

The heart-warming story of a cancer survivor should inspire those with the disease (Open Page, "The tale of a gritty survivor's battles", July 21). Even members of the medical

### CORRECTIONS & CLARIFICATIONS:

In a front-page report headlined "Govt. to roll out big push for infrastructure" (July 22, 2019), the projected spending in the infrastructure segment for the next five years was erroneously given as ₹100 crore. It should have been ₹1.5 lakh crore.

It is the policy of The Hindu to correct significant errors as soon as possible. Please specify the edition (place of publication), date and page. The Readers' Editor's office can be contacted by Telephone: +91-44-28418297/28576300 (11 a.m. to 5 p.m., Monday to Friday); Fax: +91-44-28522963; E-mail: readerseditor@thehindu.co.in; Mail: Readers' Editor, The Hindu, Kasturji Buildings, 859 & 860 Anna Salai, Chennai 600 002, India. All communication must carry the full postal address and telephone number. No personal visits. The Terms of Reference for the Readers' Editor are on www.thehindu.com