



## Safe at school

Students should be able to return to campus without fear if protocols are strict

Almost every child got left behind for more than a year in India, as COVID-19 shuttered schools and forced pupils to study online at home, if they could. This long period of learning loss is a major setback in itself, affecting the physical and mental health of many students and depriving them of a year of vital skill development. It is understandable, therefore, that at least 14 States and Union Territories have tempered caution with calculated risk and opted to reopen campuses, mostly for secondary and higher secondary students. These governments are not alone in looking for the golden mean to manage the pandemic. In several countries, leaders are exploring ways to reduce the risk of coronavirus infection among pupils who are not yet eligible for vaccination, while getting them back on campus. At the end of the second wave, in July, Haryana and Nagaland went back to in-person teaching for higher classes, while Punjab, Uttarakhand, Himachal Pradesh, Puducherry and Lakshadweep are doing so this month. Andhra Pradesh, Karnataka, Tamil Nadu, Uttar Pradesh and Odisha are to follow. As schools reopen, there are positive indicators available from countries experimenting with back-to-school decisions, and red flags, in the wake of the Delta variant's wildfire spread.

One study of a million students and staff members who returned to school this year in the United States, where children must be 12 years old to get a vaccine, showed that in spite of the resultant exposure to 7,000 COVID-19-positive children and adults, only 363 other children and adults acquired the infection. This is attributed to a universal mask mandate. In India, with a school student population of over 250 million, resumption of in-person schooling is advocated by some public health professionals based on the understanding that younger children are less at risk, as they do not have well-developed ACE-2 receptors in the lungs that enable the virus to enter. This must, of course, be considered along with the impact of the Delta variant on children who do get infected, sometimes severely, even though their numbers may be small. In Ludhiana, 20 students in two schools tested positive eight days after reopening on August 2, underscoring the need for strict protocols, testing and quarantining. Maharashtra has followed the textbook in setting up committees headed by Collectors and civic officials to decide on reopening, with optional student attendance. Such a decentralised effort is welcome, as it enables closures only in areas with high incidence. It is important to note that after 18 months of the pandemic, there is consensus on ventilation and distancing norms as low-cost interventions with efficacy next only to vaccination. In the Indian context, this should favour outdoor classes under natural or built shade, wherever possible. It is disappointing that teachers and staff have not been universally vaccinated yet, a lacuna that must be urgently filled.

## Building consent

A consensus on the Postgraduate Medical Education Regulations 2021 is a must

The Indian Medical Association (IMA), the largest organisation of doctors in India, has demanded that the National Medical Commission (NMC) withdraw the draft Postgraduate Medical Education Regulations 2021. In its current form, it notes that there shall be common counselling for admission in all medical educational institutions to all Post-graduate 'Broad-Specialty' courses (Diploma/MD/MS) on the basis of the merit list of the National Exit Test. Currently, admissions to such programmes are based on the post-graduate NEET. Half the seats to the various courses are based on the all-India quota and the rest are admitted by the State governments, which comply with reservation norms. The IMA contends that the draft regulations leave States with no power or discretion to manage admissions to State medical colleges, which rely on State funds. If States did not have the freedom to decide on student intake, they would find it hard to provide quality medical services to the local population. The proposed regulations follow from the provisions of the National Medical Commission Act, 2019, that itself replaced the Medical Council Act of India and was a subject of extreme friction between medical professionals and the Centre. In both instances, the heart of the objection is States' discomfort with ceding powers to the Centre. The familiar argument of the States is that health care is a State subject. Through the decades, while the Centre plays the critical role of funding and conceiving targeted programmes to ameliorate disease and improve overall health-care standards, the matter of implementation has always been left to the States.

The Centre has an important role in setting standards and amplifying best practices so that minimum – but ever improving – standards of health care are delivered across all States. Much like cadres of the IAS are deputed to States based on centralised examinations, there is, in principle, no reason for such a system not to be effective, but the Centre needs to be extremely responsive to States' views on the same. The very real problem, laid bare during the pandemic, is the shortage and extremely uneven availability of quality health care. Through the years, attempts are being made to improve this by trying to bridge alternative systems of medicines with modern medicine, but these have always been marred by political and religious overtones, and a convergence seems unlikely in the near future. The import of the proposals should not be made hostage to a Centre-States power struggle. Efforts must be made to build more consensus involving stakeholders, such as the IMA, State medical councils and representatives of health-care groups.

# A healthy 'White Paper' beginning

Tamil Nadu's analysis of its financial situation is erudite and honest and could help steer the State back on track



PRAVEEN CHAKRAVARTY

The Finance Minister of Tamil Nadu, Palanivel Thiaga Rajan, on Monday, unveiled a 112-page 'White Paper' (<https://bit.ly/2Uen5oY>) on the fiscal situation of the State. It is perhaps a first in recent times that a State government in India has published an erudite and honest analysis of its economic and financial situation, which is laudable.

### The lowdown

But for citizens of the State, it was not good news. The report essentially said that the State is deep in debt, with falling revenues, rising expenditure and declining investment. The average family in the State pays roughly ₹1 lakh in all taxes every year to the State and the Union government and receives ₹1.6 lakh worth of subsidies and services (health care, transport, education, water, power, etc.) every year. The gap between revenues and expenditure is funded through loans and the State carries a consolidated debt of ₹2.6 lakh per family.

Tamil Nadu Chief Minister M.K. Stalin has an onerous responsibility to pull the State out of this dire financial situation that has been made even worse by the COVID-19 pandemic. As the White Paper surmises, the only solution is for the State government to raise more revenues and be more efficient in expenditure. But that is easier said than done.

Any State government raises revenues through tax and non-tax sources, with typically more than three-quarters coming from direct and indirect taxes. But after the introduction of the Goods and Services Tax (GST), elected State governments in India do not have the powers to raise income or sales tax revenues on their own and are beholden to the Union government. These constitute the bulk of tax revenues.

### Under State control

Taxes on property, fuel and alcohol are the only remaining domains that are under the direct control of the State government. But the Narendra Modi government has already burdened the average Tamilian with ₹32-₹33 of cess on petrol and diesel, which it collects for itself and does not share with the State government. It is thus virtually impossible for any State government to levy any more fuel taxes on people. So, realistically, the only immediate option available for Mr. Stalin to raise additional revenues is through property taxes, which is what the White Paper justifiably alludes to.

Property taxes are progressive and fair since they do not impact the poor as much as the rich. The White Paper argues that there is gross under-collection of property taxes by the urban local bodies due to non-revision of property tax rates, improper assessments and under-valuation. The 2016-17 Economic Survey of India authored by the then Chief Economic Advisor to the Modi government and a current member of Stalin's economic advisory council, Arvind Subramanian, had a detailed chapter on property taxes that



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used innovative techniques of satellite imaging of built-up areas of buildings in a city and estimated that in urban cities such as Chennai, there is a potential to collect four to seven times more in property taxes than is being collected today. The White Paper acknowledges such 'a large untapped potential of property tax collection' vociferously, that it repeats this phrase multiple times.

### Focus on local bodies

More encouragingly, the White Paper also highlights the importance of the devolution of powers to local bodies. The 'Kerala model' of efficient social welfare and disaster handling is much touted by policy economists. Much of it is owed to the robust local body governance infrastructure of Kerala. As the White Paper illustrates, it is no coincidence that Kerala has the highest allocation of expenditure for local body councils among all the States of India. Tamil Nadu ranks second and enabling local governments to garner additional resources through more property taxes will further strengthen local body administration in Tamil Nadu. Beyond improving property tax collections, there is not much else that the Tamil Nadu govern-

ment can do to raise revenues on its own in a GST regime, save for some disinvestments over the longer run.

COVID-19 has dented economic growth severely in Tamil Nadu and the rest of the country. Such crises typically call for an expansion of government spending to propel an economic recovery through what economists call a 'Keynesian multiplier' effect. Surprisingly, growth in Tamil Nadu's revenue expenditure has been declining over the last five years while capital expenditure has been reasonably steady.

### Issue of subsidies, GST spoke

The White paper raises concern over the large amount of subsidies incurred in power, water and transportation. While there may be some room for efficiency gains in subsidy expenditure through better targeting, it may perhaps be a bit risky to cut subsidies or expenditure drastically during a pandemic-induced economic crisis. COVID-19 has not only ravaged most economies across the world but also sharply exacerbated inequalities between the rich and the poor, within countries and across. Poor people have suffered far more than the well-to-do and it is the poor that benefit the most from subsidies.

If any, most economists argue for greater capital expenditure by the government to tide over the current precarious economic situation. Higher public investment in infrastructure has been the time-tested economic cure for such crises. Expenditure management will call for a deft balancing act by Mr. Palanivel Thiaga Rajan to improve expenditure efficiency without sacrificing the positive 'multiplier' impact of government

expenditure.

The real bugbear in India's fiscal federalism has been GST. It is now safe to conclude that GST has been a political, economic and administrative disaster, with none of the touted economic benefits coming to fruition and fracturing Union-State relations in the process. The White Paper is absolutely correct in questioning the future of GST and raising genuine concerns over its viability. The only case for GST to continue now seems to be similar to the Churchillian case for democracy – it is the worst except for all other forms'. Ironically, it was Mr. Stalin's father, M. Karunanidhi, as the Chief Minister of Tamil Nadu in 2009 who objected to the introduction of GST and warned of a 'daring leap of faith about its potential' in a letter to then Prime Minister, Dr. Manmohan Singh.

Since the time of Chief Minister Kamaraj in the 1960s, Tamil Nadu has been the torchbearer of inclusive economic development in the country, with its unique model of generous State welfare, copious private investment and efficient public services. The White Paper clearly articulates how the last few years have been an aberration, causing Tamil Nadu to veer off that track. Chief Minister Stalin and his government have an enormous and an arduous responsibility to steer the State back on track. They are off to a sincere start, and hopefully, Mr. Palanivel Thiaga Rajan will be able to release a 'Pink Paper' in 2025 to showcase Tamil Nadu in the 'pink of economic health'.

*Praveen Chakravarty is a political economist and Chairman of Data Analytics of the Congress party*

# The importance of the booster dose to plan ahead

The execution of such a vaccination campaign is what will help get India out of COVID-19's stranglehold



T. JACOB JOHN & M.S. SESHADRI

The COVID-19 vaccination is relatively new to the world, but the history of vaccination goes back a few centuries. The Expanded Programme on Immunisation was launched by the World Health Organization in 1974 and since then all countries of the world have gained considerable experience in rolling out several vaccines for children and pregnant women.

### The immune response

Broadly speaking, vaccines may be classified as replicating live infectious vaccines, and, non-replicating non-infectious vaccines. Currently used live virus vaccines inoculated by injection include measles, rubella, mumps and chickenpox vaccines. The inoculum dose contains a few thousands of live but attenuated viruses – they replicate in body tissues without producing overt disease. The final effective dose that stimulates the immune system may be billions or trillions of viruses and the stimulus sustained for days to weeks as the injected viruses continue to multiply within the human body. Therefore, immune responses to replicating live virus vaccines – both antibody and T-cell immunity – are robust and long-lasting.

The non-replicating injected

vaccines include nearly all others – the most common being diphtheria, pertussis (whooping cough), tetanus, hepatitis B, Haemophilus influenzae b, pneumococcal, human papilloma virus, inactivated poliovirus, inactivated hepatitis A vaccines. For them, the dose confronted by the immune system is what is injected. What is injected is a tiny amount of antigen, measured in micrograms, plus stabilisers and preservatives in some, and adjuvants in a few, all chemicals and salts in minute quantities.

### Why go in for a booster dose

In order to get robust and long-lasting immunity with non-replicating vaccines, we need to give multiple doses – the initial one, two or three doses given in quick succession, at intervals of one or two months, are "priming doses" – meant to prime the immune system to the antigens in the vaccine. The immune system responds well, but with relatively low levels of antibody and subdued T-cell immunity. Over time, in a few months to one year, the antibody levels wane in almost all vaccinated individuals. To reach and maintain high and protective levels of antibody, we need one or more injected "booster dose(s)".

Every non-replicating vaccine requires priming and boosting. Influenza vaccine boosters are recommended annually; tetanus vaccine once in five to 10 years. For others such as human papilloma and hepatitis A and B vaccines, one booster dose may suffice for decades of protection.

All current COVID-19 vaccines



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fall in the non-replicating category and for robust and long-lasting immunity, they require, quite predictably, priming doses to induce early immunity, and booster dose(s) to sustain, long-term, high antibody titres, overcoming waning immunity.

### The current schedules

The current COVID-19 vaccination schedules are only priming doses – the immunity induced by one dose (Johnson & Johnson vaccine), Pfizer vaccine (two doses three weeks apart), all others (two doses at four weeks or more inter-dose interval) are expected to wane, as experience with all previous non-replicating vaccines have taught us. The usual interval between priming and boosting is six months to one year, because protective levels of antibodies will be present for at least that duration, when the priming doses include two or three injections.

Limited experience with antibody titres after natural infection or after vaccination against COVID-19 informs us that the antibody titres decline such that a proportion does not have even detectable virus neutralising antibody levels after six months. There is further

evidence that those who are elderly, men particularly, and those with organ transplants, cancer treatment or co-morbidity, have weaker primary antibody responses than their younger/normal counterparts. This implies that they may remain vulnerable to severe disease and death; they are in urgent need for booster dose(s) to ensure and sustain protective immunity.

The initial expectation that the COVID-19 pandemic would be a short-lived one is proven wrong. It is now 20 months from the first case and numerous variants have emerged, and chains of transmission continue even in countries which have achieved wide vaccination coverage such as Israel and the United Kingdom. It seems inevitable the pandemic will evolve into a permanent 'pan-endemic' state and vaccination is here to stay for years to come, until we manage to eradicate the virus altogether using vaccines.

It is apparently this realisation, that immunity wanes and the pandemic is evolving into endemic long-term prevalence, that prompted Pfizer Company to seek approval for a booster dose in the United States, and Israel's Ministry of Health to start booster doses to all above 60 years of age.

### The strategy ahead

In India, we have an ethical dilemma – as long as there is inadequate vaccine supply, everyone deserves priming doses before even the highly vulnerable early vaccine recipients are offered booster doses. The solution is to accelerate vaccine procurement without count-

ing the cost.

For every country planning vaccine roll-out, the science of vaccination demands that all those getting priming doses should receive at least one booster dose – at a well-chosen interval. The science of immunology teaches us that a booster dose delivered at an interval of at least four, preferably six to 12, months after the last priming dose, will stimulate the production of 'long-lived' antibody secreting cells, as well as 'long lived (virtually life-long) memory cells'. Those who get a third dose one month after the second dose should count it as three-dose priming instead of a true booster which requires four months to one year of wait.

India will do well to plan a vaccination strategy for completing two priming doses in all adults and children, third dose to the special category described above, and one booster dose to everyone one year later. Meticulous planning and the execution of such a vaccination campaign is what will get the country out of the stranglehold of this virus and its variants that have emerged and any that might emerge with higher transmission efficiency than even the Delta.

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## LETTERS TO THE EDITOR

Letters emailed to [letters@thehindu.co.in](mailto:letters@thehindu.co.in) must carry the full postal address and the full name or the name with initials.

### The clock is ticking

In a democracy where money and muscle power are the *sine qua non* for winning elections, it remains to be seen what political parties will now do in the backdrop of the Supreme Court of India's directive and warning (Page 1, "Parties get 48 hours to publish candidates' criminal records", August 11). Suppose the criminal record of a contesting candidate is made public. Will voters be stumped and have little choice? What if all the fielded candidates are in the same league? For any political party to scout around for a candidate with an unblemished record is like searching for a needle in a haystack.

DEEPAK SINGHAL,  
Noida, Uttar Pradesh

One cannot help wondering whether merely providing information on criminality or corruption will still play any significant role in the electoral process in India. It is apparent, going by the antecedents of a majority of lawmakers, that it is almost a non issue, where caste, communal or emotional issues play the deciding factor in the ultimate success of candidates in most of the cases. Under such circumstances, such data would remain a cosmetic exercise. Candidates are seldom scared of these negative factors, as courts across India take decades to nail defaulters. Unless the judiciary fast-tracks criminal or corruption cases and brings them to a logical

conclusion, candidates and parties would continue to take shelter under the pretext that 'no one is guilty unless proved so'. Moreover, our rural population, which outnumbers urban elites in casting votes, is not that techno-savvy to research the credentials of candidates.

V. SUBRAMANIAN,  
Chennai

The Supreme Court's exasperation over the failure of political parties to weed out criminals from electoral politics is only natural. Winnability seems to be the clinching factor in the selection of contestants. It is time that parties stopped delivering sermons from the rooftops about democracy and morality in politics. The onus is on the key political parties not to touch

criminals trying to enter politics, and to lead by example. Now that the Court has set the stopwatch, can we hope that political parties will not try to find ways and means to circumvent this direction? When will it be possible for India to prevent 'lawbreakers' from becoming lawmakers? The electorate needs to play a proactive role in this matter.

C.G. KURIAKOSE,  
Mallippara, Kothamangalam, Kerala

### States and ranking

No State, whether it is Uttar Pradesh or Kerala, can score a perfect 10 on the governance scorecard (Editorial page, "The construct behind the 'Shining U.P.' card", August 11). There is no such thing as a 'number one State' in the absolute sense. Varied

metrics underpin the composite record of governance. For historical, cultural, and socio-political reasons, States perform differently under the metrics. Kerala scored high on human development but its economy is not self-sufficient to provide jobs to its people, forcing job-seekers to migrate to other States and countries.

Uttar Pradesh has a long way to go in ensuring social development. At the same time, the Yogi Adityanath government has succeeded in curbing the State's chronic lawlessness. Preserving communal peace and initiating job-oriented and massive infrastructural development are other achievements. Discrediting the election-oriented

'Shining U.P.' campaign is no reason why we should ignore the positives.

V.N. MUKUNDARAJAN,  
Thiruvananthapuram

Most of the claims about Uttar Pradesh fall under one of the following categories: myth, fiction, fabrication and propaganda. Readers can make their choice. The fact is that in the State there has been a suppression of COVID-19 death numbers, journalists have been harassed for doing their job, and that women are unsafe is not something to be proud of. Finally, the visuals of many bodies floating down the Ganga are an indelible mark.

MATTHEW ADUKANIL,  
Tirupattur, Tamil Nadu

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