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FRONTLINE

JANUARY 15, 2021

INDIA'S NATIONAL MAGAZINE

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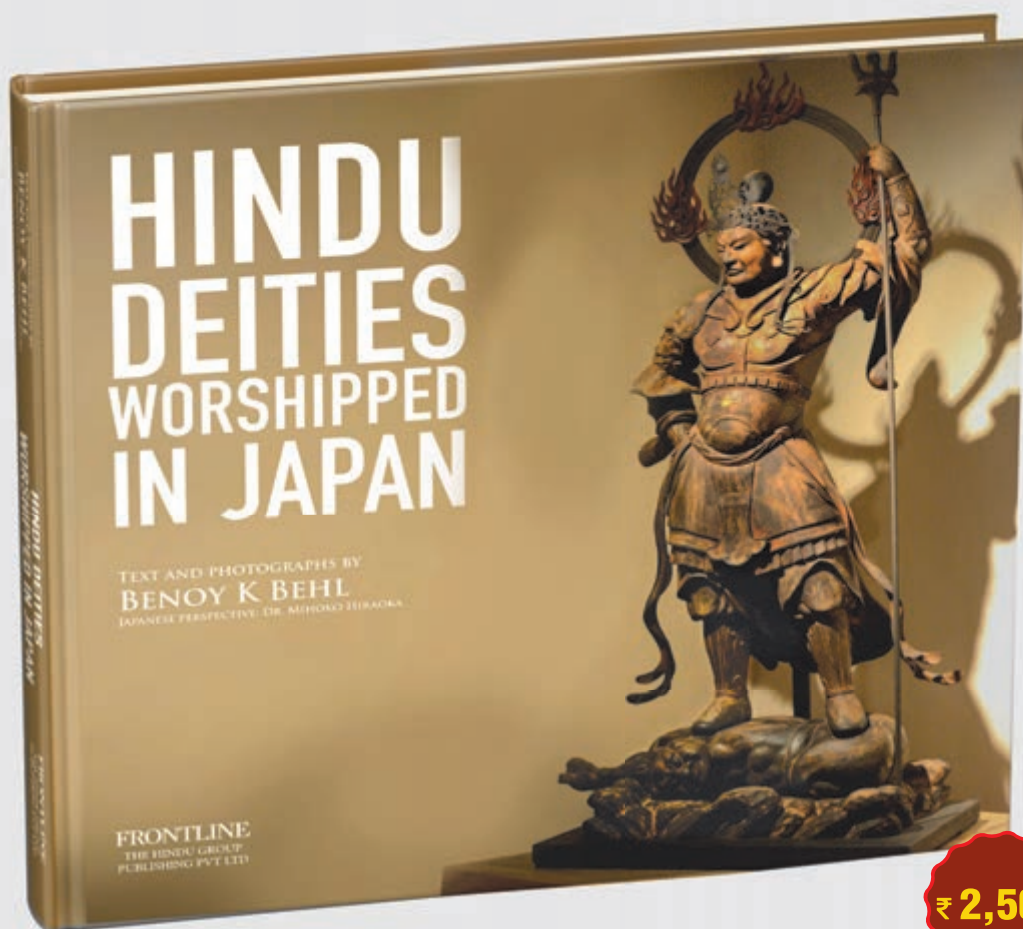
A challenge & an opportunity

Falling numbers of new infections and the availability of vaccines should not lull the country into complacency in the fight against COVID-19.

Free and universal vaccination and a robust disease surveillance system backed by active testing, contact tracing and isolation of the afflicted are essential to prevent a second wave

This coffee-table book opens a window to the practice of Buddhism in Japan, right from its arrival in that country 1,000 years ago to its growth through the worship of deities of Indian origin.

Benoy Behl's images illuminate the pages and present an invaluable account of Japan's links with Hinduism and with its Buddhist past



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FRONTLINE

VOLUME 38 NUMBER 01 JANUARY 01-15, 2021 ISSN 0970-1710 [HTTPS://FRONTLINE.THEHINDU.COM](https://frontline.thehindu.com)

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Outside Mumbai International Airport on December 22, municipal workers in PPE suits waiting to escort passengers who arrived from the U.K. to quarantine centres.

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Published by N. RAVI, Kasturi Buildings, 859 & 860, Anna Salai, Chennai-600 002 and Printed by T. Ravi at Kala Jyothi Process Private Limited, Survey No. 185, Kondapur, Ranga Reddy District-500 133, Telangana on behalf of THG PUBLISHING PVT LTD., Chennai-600 002.

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COVER STORY

CHALLENGE AND OPPORTUNITY

It would be premature to believe that the epidemic has burnt out and unpardonable to **leave the population unguarded** against a possible catastrophe. That is why the vaccine is so welcome, but there are many challenges in its administration. BY **T. SUNDARARAMAN**

AS THE YEAR COMES TO A CLOSE, THERE IS finally some good news on the COVID-19 front. The number of new cases has gone down quite dramatically, and a vaccine has become available. Both are highly awaited developments. But it is not yet time to celebrate.

At its peak, around September 11, 2020, India was recording over 97,000 new cases and 1,250 deaths a day. As of December 15, the figures dropped to 26,401 cases

and 380 deaths a day.¹ What could be the reason for this decline? Could it be effective public health control, or just poor measurement, or has herd immunity crossed the threshold levels? Or is this just the lull before the storm—a deferred epidemic, the worst of which is yet to come?

Poor measurement is no doubt a problem. One has to account for the fact that the five or six top performing

CELEBRATIONS in the Christmas week in Kolkata. As people get back to normal lives and social interactions increase, a second wave of the infection is a possibility that cannot be wished away.

States in terms of traditional health indicators like maternal and child survival, and whose social determinants of health are clearly better, have the highest number of reported cases per million or of deaths. The degree of under-reporting was estimated in one study as about 90 missed infections for every detected case. While the two States, Delhi and Kerala, with the highest rates per million of the population missed about 25 infections for every detected case, the proportion of missed cases in States with weaker public health systems such as Uttar Pradesh and Bihar could be 300: 1.² Thus Kerala reports 19,034 cases per million and Uttar Pradesh reports only 2,436 cases, while the all-India average is 7,355 cases per million. On the other hand, the trend in the number of cases reported is likely to be more reliable than the absolute numbers. And there can be little doubt about a declining trend in the past two months.

Better care and ability to handle the spread may have

improved the ability to flatten the curve. Access to testing has also increased, and further after the peak crisis months of July to October, beds for hospitalisation also became easier to access. It is likely that isolation of sick cases, whether in COVID-19 hospitals, or in care centres or at home, is now more robust than in the first few months of the pandemic. High levels of stigma could also paradoxically contribute to more sick people and contacts staying at home.

Another contributory factor for the decline in COVID cases is that in select population clusters the proportion of those who have been infected (otherwise known as herd immunity) has reached a level where epidemic spread no longer occurs. Spread at a lower rate does, however, continue. We still do not know the exact threshold level of herd immunity required for preventing epidemic spread. The most frequently cited figure is 60 per cent, but that assumes a level of infectivity which may change with changes in behaviours as well as the spread of mutant strains.

However, as is typical of all diseases with epidemic potential, there would be many clusters where the proportion of non-immune population is high, and outbreaks in such clusters would continue to occur. It is in such circumstances that most nations in the West are experiencing a huge second wave. In this second wave, the regions that did well in the first round are likely to do worse simply because the proportion of unimmunised persons is higher. We can see that to some extent in Kerala, which did very well in controlling the disease in the first few months but slipped into high levels of case incidence in later months.

The second wave is not inevitable, and a robust disease surveillance system backed with active testing, contact-tracing, and isolation or quarantine, can prevent this—as many nations in the Asia-Pacific region have shown. But premature celebration, and the resulting complacency that the epidemic is behind us, could leave us vulnerable to an intense second wave. And second waves, as we know from the 1918 flu pandemic, could be worse than the first.

This is the big reason why the coming of the vaccine is so welcome. It would be premature to believe that the epidemic has burnt out and unpardonable to leave the population unguarded against a possible catastrophe. While the proportion of those with severe or fatal forms of the disease may be low, the absolute numbers are high enough to make this disease one of the leading causes of adult mortality in India. There has been one crore cases and 1.5 lakh deaths owing to this disease in 2020. Though it is possible that sub-clinical infections, undetected by the usual antibody tests, have provided herd immunity or that virulence of the virus has decreased, it is also possible that we would face a second wave with increased virulence. And even if herd immunity thresholds are adequate to break an epidemic spread, disease incidence and mortality may be high enough to cause serious public health concern. Good public health planning cannot rest merely on wishful thinking and a hope that the epidemic

will slow down by itself. It is not only the mortality rates that are a cause of concern. The lockdowns in the wake of the epidemic spread have severely affected economic activities across the world, and the introduction of vaccination would go a long way in reviving the economy. Even in the industrialised world, which has fairly robust, universalised social security networks and universal health care, vaccines are urgently required to open up economies. Just as an RT-PCR test has become mandatory for most international travel, a proof of vaccination is certainly going to become a mandatory requirement for travel soon in all developed nations. In countries like India, as normal economic life resumes, the degree of social mixing will sharply go up and may result in new outbreaks and cycles of lockdowns and unemployment. This would affect large sections of the working population with no social security and the absence of a return to normalcy may itself curb demand in a major way.

It is, therefore, not surprising that almost every single political party in India has promised free and universal vaccination against COVID-19 as soon as vaccines are available. These promises are loudest just before elections. But in official pronouncements, there is much backtracking from earlier commitments to free and universal access to this vaccine. Clearly, there are many challenges that any programme of vaccine delivery would have to address. Important among these are determining the effectiveness and safety of the vaccine, organising procurement and delivery, building capacity for storage and distribution, and determining priorities for immediate distribution, while planning for ensuring access for all.

INTRODUCTION OF NEW VACCINES

The first challenge is the ability to innovate an effective vaccine that would be appropriate to the Indian context. Any vaccine that is introduced has to undergo clinical trials that demonstrate that it at least provides effective protection against severe disease and reduces mortality along with a high level of safety, since normal persons are being given the injection. The big change in December 2020 is that there are now five vaccines that are on the market or close to being so, and according to information circulated, the mid-term third phase of clinical trials have found these to be effective. These are the Pfizer vaccine, the Moderna vaccine, the Oxford-Astrazeneca, the Russian Gamaleya of Sputnik V, and the Chinese vaccine CoronaVac. Of these, only the Oxford vaccine’s clinical trial data are published in a peer-reviewed journal.

The data of the others have been made available to national regulatory bodies, and different nations have provided “Emergency Use Authorisation” (EUA) for one of more of these. EUA is more of an early and temporary licensing method and only implies that the vaccine is likely to qualify for full approval once all the data are in. The World Health Organisation (WHO) itself has not certified any.

One concern regarding the clinical trials is that the

end point used for measuring effectiveness is the reduction in symptomatic cases among those vaccinated as compared with the control population. While this is likely to be associated with reduced mortality, sample sizes are not as yet adequate to establish that. Post-introduction follow-up studies are needed to know for sure that it would be equally effective in the elderly and in persons with co-morbidities who are more vulnerable to fatality. The current sample sizes are too small even to establish safety adequately, and extensive post-introduction surveillance will be required.

Further, we do not know the duration of immunity these vaccines will provide, and though it could be life-long, it could also be as short as one year. We also do not know for certain that it will reduce asymptomatic infections and whether such individuals could continue to spread disease. Also, the vaccines till date need two doses spaced about a month apart to be effective.

All of this means that mass vaccination will need to be accompanied by extensive monitoring and surveillance. Thus, vaccination is not a one-off effort but has to be built into the structure of a comprehensive health systems approach with adequate outreach and surveillance. While digitisation of vaccination data could help to an extent, projection of such digitisation as a stand-alone or main solution and its use as a short cut to systems strengthening is insufficient and misleading.

VACCINE LOGISTICS

The next major challenge is addressing the requirements of vaccine logistics, and this includes procurement, storage, distribution and vaccine delivery.

In procurement, both costs and the ability to ramp up domestic production are important considerations. The Pfizer and Moderna vaccines are costlier at approximately \$20 and \$33 per dose and are not under production in India. Gamaleya is \$10 and there is only one company licensed to manufacture this. Oxford-AstraZeneca is relatively affordable at \$ 4, but this would still be costlier than any vaccine we currently use.³ There is an Indian version of this vaccine, called Covishield, which is ready for manufacture in India by the Serum Institute of India (SII) under voluntary licensing with Astrazeneca, and potentially its production can be scaled up. But, there are no binding agreements as yet with the Indian government, though the SII has agreements for advance purchases with many industrialised countries and the international COVAX Facility. Nor has the government announced any budget on what it is willing to spend for such vaccination or even a White Paper outlining its proposed strategy.

When it comes to storage and distribution, the Pfizer vaccine, which requires minus 70 degree Celsius storage facilities, becomes an unviable option in Indian circumstances. Moderna’s requirements are less (minus 15 to minus 25 degrees C), but still far in excess of Indian cold storage capacity. The Oxford-AZ vaccine and the Russian and Chinese vaccines, however, need only +2 to +8 degrees C temperature for storage. But, given the

Overview of soon-to-be-available COVID-19 vaccines

Platform	Manufacturer/Supplier	Route of administration	Doses	Cold chain requirement (°C)
Inactivated	Bharat Biotech (Whole virion) Sinovac	IM	2	2-8
Viral vector Adenovirus	Oxford/Astrazeneca/ SII Gamaleya Research Institute/ Dr Reddy’s Laboratory, India	IM	2	2-8
Protien Subunit (recombinant)	Novavax GSK/Sonafi Biological E, India	IM	2	2-8
mRNA	Moderna Pfizer	IM	2	-20 at 2-8 x 30 days -70 at 2-8 x 5 days
Live attenuated virus	Codagenix/SII	Inhalation	1,2	2-8
DNA	Zydus Cadilla, India	Intradermal		2-8

IM: Intramuscular; SII: Serum Institute of India.

Source: Editorial by Rajesh Bhatia, Online version India and COVID-19, Part-IV, Indian Journal of Medical Research

volumes, even this would be a challenge. Existing vaccine supply chain requirements largely cater to children below one year of age, and to expand from that to vaccinating the entire population is a huge leap. Uninterrupted, safe and reliable supplies at tens of thousands of delivery sites also require well-functioning logistics management systems, and except in three or four States, these too are under-developed.

ADDITIONAL CAPACITY VS RE-PURPOSING

Increasing capacities to vaccinate a major part of India’s population requires a substantial increase in storage infrastructure, equipment, vaccine transport vehicles, and, not least, a tremendous investment in human resources. This requires financial resources but it also needs the time to build the physical and organisational structures required.

Instead of investing in increasing infrastructure and human resources, the government would be tempted to simply re-purpose existing primary health-care capacity to take on this load. Such re-purposing displaces essential health services and can cause untold and unmeasured harm to people’s health. In an earlier phase, the government created bed capacity for managing severe cases of COVID 19 by converting busy public hospitals providing a wide range of tertiary health care into dedicated COVID hospitals. This in effect was a cessation of essential public hospitals services, and the displaced patients were pushed into the high-cost private sector (often not even that, for the private sector was itself shut down).

There is a similar danger in initiating COVID-19 vaccinations through the existing public sector, without the necessary increase of infrastructure and human resources. If even a part of existing staff and infrastructure are simply re-purposed, other chronic diseases like tuberculosis and HIV (human immunodeficiency virus) infections are likely to see a huge rise, and hard-won achievements in maternal and

child survival may face a setback. And other epidemic-prone diseases can flare up.

FOR A SECOND GENERATION OF VACCINES

In the coming year a number of new vaccines are likely to enter the market. Across the world, over a hundred vaccines are being developed and many of these could have advantages over currently available vaccines. India itself has an indigenously developed vaccine, Covaxin of Biotech, which has entered the third phase of trials. Fortunately, political pressures to prematurely certify this product have been checked, giving the researchers time to develop more evidence and credibility for the vaccine. Advantages that future vaccines could provide include a single dose requirement as compared with two doses currently; a longer duration of immunity; ability to store at room temperature; or easier ways to administer, such as drops. And the next generation of vaccines need to be even more affordable and be part of domestic manufacture, so that supplies are reliable and there is no drain on national revenue. The possibilities are immense.

All of this will require research institutions in India and all over the world to press ahead with their research. But current global innovation regimes can be an impediment to the discovery of new and more appropriate drugs and vaccines. They have so far failed to deliver on any curative medicine for COVID-19 and failed to share information on or transfer technology for better vaccine development. Vaccine developers are working in silos in competition with each other, when the need is for shared information and collaborative work. To address this bottleneck, in one of the most significant developments in global trade policy since the Doha declaration, India and South Africa have sponsored a joint resolution calling for the suspension of a wide variety of intellectual property rights to enable research, innovation and transfer of technology for new COVID-19 products and for scaling up manufacture of existing products. This resolution has found support from most



VIJAY SONEJI

A VOLUNTEER undergoing Covaxin clinical trial at Civil Hospital, Sola, one of the hospitals selected for vaccine trials, in Ahmedabad on November 27.

developing nations, but predictably been opposed by the same few developed nations who support and profit from big pharma. But this is an opportunity for developing nations to push ahead with or without the waiver, to develop more relevant approaches to innovation and manufacture of essential medical products.

PRIORITISATION

Even in the best-case scenario, it is difficult to imagine going to scale with extensive vaccination programmes in India before the middle of 2021 and reaching a substantial proportion of those in need before the end of 2022. Therefore, the question of who will get priority access to free vaccines becomes all-important. WHO has already released two guidance documents to define the principles and goals that national and global policies should prioritise.⁴

In India a committee has been constituted (National Expert Group on Vaccine Administration for COVID-19, or NEGVAC) and plans have been drawn up, though such plans are far from transparent or participatory. What we do know is that the plans prioritise all health workers who are estimated at about one crore, then all front-line workers defined as including the police, armed forces and civil defence, and municipal workers estimated at about two crores. After this, it is the elderly and those with co-morbidities, estimated at 27 crores, who would be the priority.⁵

There are other important categories that are not mentioned. Two of the five principles that WHO spells out are equity, which is understood as reaching out to those more vulnerable for socio-economic reasons, and reciprocity, which is defined as “those who bear significant additional risk and burden of COVID-19 response for the benefit of society”. By these criteria migrant workers who would be travelling across States and face high exposure owing to their working conditions, and who lack access to health care and social security should also be on the priority list. While those on international travel will be certain to access the vaccine as an entitlement, it remains to be seen whether working people and all sections that cannot practise social

distancing will have an entitlement to get free vaccines. Only a commitment to universal access to free vaccination would ensure this.

Faced with financial, logistic and managerial constraints, it would be tempting for the government to adopt a policy where vaccination of a small part of the population is paid for and the rest is left to the private sector. It would be relatively easy for the government to get away with such a minimal intervention policy. Without a major health communication effort there is likely to be a lack of expressed demand for the vaccine in large segments of the population characterised by low health awareness. Stigma is already one of the big barriers for access to care in most under-developed regions. In such communities, herd immunity would soon decrease the rate of spread of the disease, and excess mortality could go unnoticed. Government inaction on the vaccine front could also get re-enforced by more modern forms of vaccine hesitancy in sections of civil society.

Finally, while vaccines may become available, recognition has to dawn that vaccines are public goods only if vaccination is a public good. Further, that universal vaccination will be feasible and justifiable only if it goes along with the strengthening of health systems in a manner that recognises the entire public health system as a public good.

Universal vaccination is not only the act of giving two doses of vaccine to all eligible individuals. It includes building up extensive disease surveillance systems which in turn requires extensive outreach services as well as testing capacity, and the ability to identify, manage and compensate those who develop complications, and continue with both public health measures and hospital care for some time to come.

The rising tide of people’s movements should find in this crisis an opportunity to push the government to honour its political commitment to provide universal vaccination as part of ensuring the people’s right to health and health care. □

Dr T. Sundararaman is Global Coordinator, People’s Health Movement, and former Executive Director, National Health Systems Resource Centre, New Delhi.

ENDNOTES

1. <https://www.worldometers.info/coronavirus/country/india/>
2. <https://theprint.in/health/india-is-missing-about-90-infections-for-every-covid-case-latest-govt-analysis-shows/567898/>
3. <https://www.bbc.com/news/world-asia-china-55212787>
4. These are “Values Framework for the allocation and prioritization of COVID-19 vaccination,” and the “Roadmap for Prioritizing Population Groups for Vaccines against COVID-19”.
5. <https://www.livemint.com/news/india/who-will-be-on-priority-list-for-covid-vaccines-in-india-what-expert-panel-suggests-11607429290362.html>

Light at the end of the tunnel

Developing a vaccine during the COVID-19 pandemic is an extraordinary feat of science made possible by of **years of scientific work** and investment in understanding two closely related coronaviruses, SARS-CoV-1 and MERS-CoV. But there is still a long way to go before equitable access to vaccines is ensured and COVID-19 is completely defeated. BY **GAGANDEEP KANG**



OLI SCARFF/AFP

MEMBERS OF STAFF DELIVER INJECTIONS of the Pfizer-BioNTech vaccine to invited patients at a drive-in vaccination centre in Greater Manchester of North West England on December 17.



PETER SUMMERS/GETTY IMAGES

BRITISH PRIME MINISTER Boris Johnson leaving 10 Downing Street after it was announced that the United Kingdom government had approved the Pfizer/BioNTech COVID vaccine for use, on December 2.

With the approval of the first vaccines for COVID-19, we can now project a future where this terrible time is behind us and the pandemic is under control. Getting this far, this fast has not been easy. It has meant compressing a decade of vaccine development work into less than 12 months—an achievement that has only been possible because of science and the collaboration between academia, industry, policymakers and funding.

The first emergency use authorisation for Pfizer/BioNTech vaccine, based on data that went beyond the originally projected endpoints, was issued on December 2, just 218 days after the clinical trials started and 326 days after the novel coronavirus sequence was released. For both the Pfizer/BioNTech and the Moderna vaccines, it was a matter of days to design the constructs that resulted in the two mRNA vaccines that have shown 90-95 per cent efficacy in protecting against disease and are now approved under U.S. emergency use authorisations, and in the case of Pfizer, in many other countries around the world.

These achievements, however, did not come from a standing start. The rapid acceleration of development of vaccines was only possible because scientists had been working to prepare for future outbreaks despite policymakers and governments dismissing their forecasts of future pandemics. In the wake of Ebola, the World Health Organisation (WHO) began to publish the Global Research and Development Blueprint which identifies each year the top 10 threats to public health, and always includes Disease X, the unknown pathogen that will come from an unknown place at an unknown time. The

experience also led to many international consultations, which resulted in the establishment of the Coalition for Epidemic Preparedness Innovations (CEPI), a grouping of state and non-state actors who were committed to the development of early clinical stage vaccines for outbreaks, which would address the issues of 'market failure'.

'Market failure' refers to the idea that even though there is a need for certain types of vaccines, the companies that manufacture vaccines are not interested in making them because they do not see any commercial viability in such products. In other words, if a disease affects the poor who cannot afford to pay for a vaccine, who will make it for them? For an infectious disease outbreak, where the timing of the disease is unpredictable, the number of people needing to be vaccinated is unknown and if the disease occurs in a poorer part of the world, finding a company or group who will try to make a drug or preventive product like a vaccine is near impossible.

EXPERIENCE WITH EBOLA

This was certainly the case with Ebola, where a vaccine candidate had been developed at the National Microbiology Laboratory of the Public Health Agency of Canada a dozen years before the first West African urban outbreak, but there were no companies interested in clinical development. By the time the world got its act together to evaluate the vaccine, and turf wars between countries and agencies that all wanted to conduct vaccine research to control the outbreak were sorted out, Ebola cases were already trending down because of aggressive treatment and infection control measures. While developing vaccines that prevent disease are clearly a superior strategy in terms of lower human costs, we need to remember that with sufficient resources, spread of human-to-human infection can be controlled by separating the infected from the healthy, as we have seen with SARS-CoV2, even with the additional challenge of asymptomatic infections.

A COALITION AGAINST EPIDEMICS

CEPI arose from the idea that an essential part of preparedness for epidemics was to make and keep ready vaccines that could be used quickly in outbreak situations for diseases on the WHO Blueprint and also to try to develop new technologies for rapid response in case disease X emerged. CEPI, supported initially by the governments of Norway, Germany and Japan, and by the philanthropic organisations the Wellcome Trust and the Bill and Melinda Gates Foundation, had India's Department of Biotechnology as a founding partner, with Dr K. Vijayraghavan, then the Secretary of the Department of Biotechnology and now the Principal Scientific Adviser to the Government of India, chairing the interim Board. CEPI was formally established in Norway in 2017, and it raised about \$800 million from governments and philanthropies to target Lassa fever, MERS and Nipah in 2018. In 2019, CEPI expanded its portfolio to also sup-

port development of chikungunya and Rift Valley fever vaccines and rapid response platforms, which included mRNA and viral vector technologies. Therefore, in 2020, when SARS-CoV2 clearly emerged as a potential global threat, CEPI was able to fund the first three vaccine candidates in January, and these included support for Moderna and the University of Oxford.

Shortly thereafter, others, particularly multinational companies, with and without vaccine development experience, and governments followed with support for vaccine development at multiple scales, particularly in the United States and Europe. The story of vaccine development during this pandemic, while incomplete, is a remarkable record of great speed, great science and co-operation on a scale we have never seen before. But the world has only been able to make such rapid advances because of years of scientific work and investment in understanding two closely related coronaviruses—SARS-CoV-1 and MERS-CoV. The National Institutes of Health in the U.S. house the Dale and Betty Bumpers Vaccine Research Center, which was established under President Bill Clinton to make a vaccine for the human immunodeficiency virus (HIV). While HIV vaccine development efforts have so far not been successful, the learning gained from understanding HIV has resulted in vaccine candidates against Ebola, the original SARS, chikungunya and many other viruses. That Moderna and Pfizer were able to design highly effective vaccines within days of the viral sequences being released was due to the fact that researchers had invested years in understanding how to target the spike protein that studs the surface of all coronaviruses. Work with SARS has shown that stabilising the structure of the spike in the shape before it fuses with the host cell is more likely to preserve targets

for infection-blocking antibodies induced by a vaccine.

This exceptionally rapid progress on mRNA vaccines seen in 2020 reflects years of patient endeavour by scientists on new vaccine platforms. In all our approaches to vaccines from Edward Jenner onwards, the focus of vaccine development was to deliver the entire infectious agent, or part of it, in order to induce an immune response that was calibrated to protect without inducing disease or side-effects. With new technologies that focus instead on delivering the instructions for making a protein to host cells, scientists are trying to make vaccines that are safer, can be made much more quickly and can be adapted to a range of targets once the infectious agent is known. With viral vectors, RNA and DNA vaccines, the two essential components are the genetic cargo or the sequence that instructs our cells to make a protein, and the delivery vehicle, whether it is a virus that acts as a carrier or vector, a fatty nanoparticle that protects RNA from breaking down, or plasmid DNA that incorporates the sequence for a protein within itself. Once inside the cell, the genetic cargo essentially hacks into the same mechanisms used by SARS-CoV2 to replicate itself, but instead of producing the whole virus, a single protein in its three dimensions is produced. The immune system recognises the protein as foreign and musters all of its components to respond.

These revolutionary technologies have, for mRNA and viral vectors, been validated by phase 3 and give the world powerful new tools to radically accelerate the response to future disease threats. Even as we hear news of new variants, and the very real threats they pose, we have hope because we now have the tools that will enable us to respond effectively and rapidly.

These are landmark shifts in vaccine development. If



CONSTRUCTION WORK in full swing for a COVID vaccine storage unit at the Rajiv Gandhi Super Speciality Hospital in New Delhi, on December 20, 2020.

R.V. MOORTHY

a range of viral vectors can be validated, we will have options to choose from, depending on the rapidity and durability of the immune response to be induced, and whether it is to a single protein or multiple proteins. While the vector will remain the same, the genomic message they carry can be easily switched based on need. Viral-vectored vaccines can be easily and cheaply made, holding real promise for their use in low- and middle-income countries. The potential for much more distributed vaccine-manufacturing capabilities, at regional and country level, will promote future security of supply.

The mRNA approaches are even more of a paradigm shift. Unlike traditional vaccines which are dependent on biological manufacturing, which is often tricky and temperamental, mRNA vaccines are actually chemical compounds and the processes for chemical synthesis are well understood and easily replicated. While we still have to work through regulatory processes that have not yet dealt with platform technologies, there is at least hope of a future rapid response strategy.

A LONG HAUL, STILL

In the meantime, though, we still have a long way to go to defeat COVID-19. As an example, the U.S., which is the country most hit in terms of lives lost and the burden borne, is also the country with greatest access to vaccines because it invested \$10 billion in making and testing candidates. While vaccine development is usually a risky process, with up to 90 per cent of the candidates failing, the availability of the best science, testing technologies, manufacturing methods and clinical testing platforms meant that the U.S. was able to mitigate the risk of failure for vaccine companies and able to deliver on both speed and scale. Vaccines are now being rolled out in high-income countries, in small numbers at the moment but expanding rapidly. Although other prevention strategies of masking, distancing and re-aligning to prevent congregations may need to continue, high-income countries have a light at the end of the tunnel.

In less well-endowed parts of the world, CEPI, the Gavi Alliance, the WHO and other partners have come together for Access to COVID-19 Tools (ACT) Accelerator that is seeking to make available at least 2 billion doses of vaccines for countries that participate in the COVAX facility. The COVAX facility has over 190 countries participating and is the largest multilateral undertaking after the Paris Agreement on Climate Change. Vaccines provided through COVAX are calculated to be sufficient for the participating countries to vaccinate at least 20 per cent of their populations. This is much better than what the world was able to do for H1N1, the last pandemic, but it is also clear that for most countries access will be slower than for countries that have made bilateral deals with vaccine manufacturers or countries like India, Brazil and Indonesia that have their own vaccine-manufacturing capability.

We need to understand that in a connected world and with a virus capable of asymptomatic spread, no country is safe until everyone has a chance of protection. The

failure to promote access to vaccines around the world will ensure many more unnecessary deaths, further suffering and disruption of essential health services, and a slower global economic recovery.

It is estimated by the RAND Corporation that high-income countries would lose about \$119 billion a year if the poorest countries are denied COVID-19 vaccines. RAND also estimates that the high-income countries that paid for vaccines would get back about \$4.8. for every \$1 spent.

We are in a good place now, but our work is not done. We have proven products, but they are insufficient for the global need and have challenges of storage, supply and distribution. For example, it is unlikely that mRNA vaccines can be widely used in India because of their requirements for cold- and ultra-cold storage. We will need vaccines more suited for all parts of the world, with less cold chain requirements, single dose and with long-term protection. Further, while India's immunisation programme is the largest in the world, it has no experience of adult immunisation. The logistics support, training, documentation strategy and safety monitoring systems are being built by the government by repurposing or building on existing strategies, but how well they will do, will be known only when vaccines are rolled out.

Although the acute phase of the pandemic may end in a year or so, SARS-CoV2 is likely to be here to stay. It will continue to circulate and evolve. If long-term protection is feasible, then we may not need booster doses, but otherwise we will have to vaccinate and update vaccines regularly. We need to be investing now in research and development so that we can plan for the long-term management of SARS-CoV2. This is actually a huge opportunity for investments in health and in vaccines for India because we have many viruses in our own and the global landscape, such as influenza, dengue, chickenpox and chikungunya that are all vaccine-preventable but have been largely unaddressed so far.

Known and unknown viruses will continue to be a threat. The COVID-19 pandemic will be repeated, even if we do not know when. We were lucky that that SARS-CoV2 is not a virus that has as high a fatality rate as SARS-CoV1 or MERS. With collaboration and incredible efforts, the world has developed vaccines that hold the promise of rapid control, even though there is much to be done for their manufacture and delivery. India may not have been the first to develop vaccines, but what matters more is that we are likely to be very large suppliers to the world, with the vaccines that will become available in 2021.

Looking to the future, in the wake of COVID-19, many countries will make national or regional investments in pandemic preparedness, and India should not be left behind. With investment in research, scientific solidarity, industrial partnerships and an enabling environment, we can develop vaccines for ourselves and the world at scale and speed. □

Professor Gagandeep Kang is with Christian Medical College, Vellore.

Virus variants

A global **second wave of infection spread** with the new UK-variant is possible unless the usual precautions are strictly adhered to and other restrictions on movement are strictly enforced, particularly on international travel between the affected countries and others. BY **R. RAMACHANDRAN**

WITH THE IMMINENT ROLL-OUT OF VACCINES for protection against the novel coronavirus SARS-CoV-2 in large parts of the world, and a couple of them already deployed in a few countries for emergency use among select cohort groups, it seemed that the world would soon be on top of the COVID-19 pandemic. As in the separate article Professor Gagandeep Kang (page 9) has described, scientists and industry have worked together to use advanced science and technology to achieve

what would have seemed impossible only a few years ago of delivering efficacious vaccines in less than a year's time, a process known to take a decade or more.

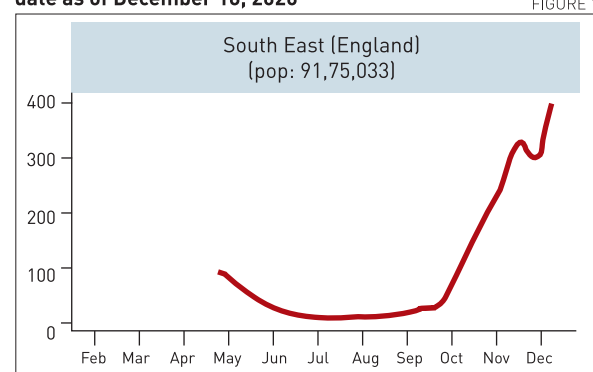
Because of the raging pandemic, the normal time frame for vaccine development was greatly squeezed. There has been a total paradigm shift from the traditional approach in clinical trials, approvals for public deployment and subsequent production. Investments towards R&D have poured in from multiple quarters, trial



REUTERS

AT A SPECIAL WARD in Arwyp Medical Centre in Kempton Park, South Africa, on December 25, 2020.

Fourteen-day COVID-19 case notification rates per 1,00,000 population in South East England, U.K., by reporting date as of December 16, 2020



Source: Threat Assessment Brief, December 20, 2020, European Centre for Disease Control (ECDC)

protocols have been shortened, approvals hastened and the industry too has taken a huge step of investing large sums to set up production infrastructure even before the trials were completed and regulatory approvals obtained. There was belief in the science behind these novel vaccines in the academia, the governments and the industry, and that hope had become a reality just a few weeks ago with the launch of a few vaccines.

But the light at the end of the tunnel which was bright until less than a month ago has dimmed slightly with the emergence of two new variants of the virus, in the United Kingdom and South Africa respectively, which have been found to be more highly transmissible than the original version from Wuhan (and other biologically and epidemiologically inconsequential genetic variants thereof) that the world has braved since December 2019.

SPIKE IN CASES IN U.K.

In the past couple of months, Britain had seen a rapid increase in COVID-19 cases (Fig. 1), particularly in South East England, with Kent being the most affected. Between the 41st week and 50th week, it increased from 100 cases per 100,000 population to 400 per 100,000 population, the reason for which was immediately unclear. Enhanced epidemiological investigations and genomic analysis were launched to find the basis for this unexplained sudden local spike in the number of cases.

Genome sequencing of virus isolates from these new cases found that over 50 per cent of the isolates had genomes belonging to a new single evolutionary grouping, technically called a phylogenetic cluster. This distinct variant has been named SARS-CoV-2 VUI 202012/01 (Variant Under Investigation, year 2020, variant 01) and is also sometimes referred to as 'lineage B.1.1.7'. In its COVID-19 monitoring and surveillance programme, the U.K. has put in place what is called "genomic epidemiology" in which epidemiological data is linked with sequencing data of isolates from a significant percentage of COVID-19 cases. Overall, the rate at which the U.K. has been analysing genomes of COVID-19 cases is around 5-10 per cent, which is quite high compared

with most other countries. When the variant was detected, the rate in the region around Kent was about 4 per cent.

To date, for a total of over two million cases, the U.K. has analysed 126,219 genomes (6.3 per cent). This is over 45 per cent of the total of about 275,000 genome sequences submitted to the global genome database called GISAID (Global Initiative on Sharing All Influenza Data). The fraction of the new VUI isolates in the weekly number analysed by the body called COVID-19 Genomics UK Consortium (COG-UK) steeply increased from the 40th week, and is currently over 12 per cent (Fig. 3).

The United States, on the other hand, has a total caseload of over 17 million and has analysed only 51,000 genomes (0.3 per cent). South Africa, which has also detected a new more infectious variant and has 912,500 total COVID-19 cases, has released 2,730 genome sequences (0.3 per cent). India has an abysmally low rate of genomic sequencing of virus isolates from patients. With a total number of cases at over 10.1 million, India has released sequences of only 6,370 genomes (0.06 per cent) so far.

The U.K. perhaps was able to pick up this variant given its very high rate of genome sequencing, which is linked to the epidemiological surveillance system in place. It is quite possible that significant variants (perhaps including this) have been circulating in other populations around the world but missed detection because the genome sequencing rate has not only been low in most countries but also not dovetailed to their COVID-19 epidemiological data gathering, especially when there are sudden local spikes in the number of cases, which have occurred in India, for example.

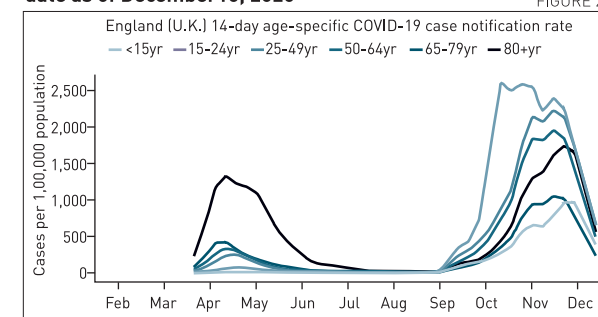
While surveillance and genomic analyses of the new cohort of recently infected patients in the U.K. (predominantly from South East England) have certainly demonstrated that this new variant is more transmissible, and hence more infectious, answers to other questions about the variant's biology, such as whether it causes more (or less) severe disease and whether it can evade human natural and/or vaccine-induced immune response, are uncertain. Extensive laboratory and clinical studies are required to unequivocally answer those questions, which undoubtedly will take time.

According to the COG-UK, which carried out the genomic analysis on the new cases of infection, this particular variant is growing in the U.K. about 70 per cent faster than the strain(s) that we have lived with until now. On the basis of this data, the New and Emerging Respiratory Virus Threats Advisory Group (Nervtag) of the U.K. has reportedly said that it is "moderately confident" that this new variant is substantially more transmissible. The fact that the variant was growing exponentially even during the lockdown period gave the Group that moderate confidence to declare that it demonstrated a substantial increase in its transmissibility compared with other variants (carrying mostly harmless genetic changes or mutations) that have appeared

during the pandemic. In addition, it also said that the variant had the potential to increase the parameter R-nought (R_0), which is a measure of the number of persons that each infected case passes on to, by 0.4 or more than the values observed before this new variant came to light. The higher (than 1) the R_0 is, the more widely the virus spreads. As of December 15, over 1,600 individuals had been infected with this variant in the U.K., the earliest case being traced to September 20.

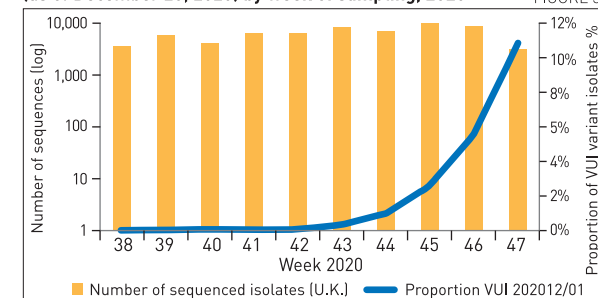
Until now there is no evidence of increased severity of the disease among those infected with this new U.K.-variant. According to a report of the European Centre for Disease Prevention and Control (ECDC), investigations into the properties of this new variant are ongoing and the U.K. has not so far reported adverse clinical observations, such as higher mortality or particularly affected groups. Cases with this variant were, however, seen predominantly in people younger than 60 years (Fig. 2), and it is these cases that are chiefly driving the increase of overall COVID-19 cases in the U.K. as well (Fig. 2). Modelling studies too have shown a strong correlation between the cases with the new variant and the overall increase in the caseload. In Wales, which too has seen a similar spike due to the new variant, the median age of the cases is 41 (range 11-71 years). But as the ECDC report points out, the current assessment that it does not seem to cause severe disease is also questionable because the

England (U.K.) 14-day age-specific COVID-19 case notification rate with cases per 1,00,000 population by reporting date as of December 16, 2020



Source: Threat Assessment Brief, December 20, 2020, European Centre for Disease Control (ECDC)

Total number of SARS-CoV-2 sequences from the U.K. and proportion of VUI 202012/01 variant sequences among all U.K. sequences in the GISAID EpiCoV database (as of December 20, 2020) by week of sampling, 2020



Source: Threat Assessment Brief, December 20, 2020, European Centre for Disease Control (ECDC)

affected age group is known to be less likely to develop severe disease. So, more clinical studies are necessary to firmly establish this.

INTERNATIONAL SPREAD

While these above cases were concentrated in Kent and in the wider South East England, including regions of London and East England, there are indications of a wider spread across the U.K. and also reports of a few cases in other countries. In Wales, as of December 14, 2020, 20 individuals had been identified with this virus variant. Denmark apparently has identified nine cases, the Netherlands one, and Australia one. There are also media reports of four cases in Belgium.

According to the ECDC report, three sequences from Denmark and one from Australia, from samples collected in November 2020, cluster with the U.K.-variant in the phylogenetic tree. This indicates that international spread has most likely occurred already, although the extent remains unknown, the report says. Besides, of course, there are cases arising from the South African variant. This variant has recently also been seen in a few cases in the U.K. But detailed information about whether its lineage is the same as the UK-variant (lineage 3.1.1.7) and the number of people infected with the SA-variant within South Africa and globally is, however, not immediately available. We will return to the SA-variant later.

Pertinently, as the ECDC report notes, "the [U.K.] variant has emerged at a time of the year when there has traditionally been increased family and social mixing". So, what seems imminent, given the continuing rapid increase of these variants among the newly infected in the U.K. and South Africa, is that the pandemic is unlikely to die away anytime soon. If it spreads 70 per cent faster than the current variant, it will, in all likelihood, become the dominant form of infection and disease. Even a global second wave of infection spread with this new variant is possible, unless the usual precautions are strictly adhered to and other restrictions on movement are strictly enforced, particularly on international travel between the affected countries and others. This is already happening with the announcement of travel bans between some European countries and the U.K.

Viruses frequently undergo mutations, which occur due to random errors in copying the viral DNA or RNA as they multiply in the host, and these errors accumulate over time. The SARS-CoV-2 undergoes about two mutations (which are generally of the single nucleotide substitution type in the genes coding for amino acids, which are the building blocks of proteins in any organism). But this cluster differs by 29 nucleotides from the original Wuhan strain, according to its preliminary genetic characterisation. This means that the accumulation rate of mutations in this variant has been higher than two substitutions per genome per month.

As mentioned earlier, most nucleotide substitutions are harmless and, therefore, not of concern as they do not change the amino acid that the gene codes for. But when a substitution results in the change of the coded amino

acid, the functionality of the corresponding protein may change, and if that is a critical antigenic region of the viral genome, it is concerning. For instance, the flu virus accumulates mutations at such a rate that a new vaccine is required every year. The amino acid substitutions that have no effect on the protein functionality are called “synonymous” mutations and those that do alter the protein function are called “non-synonymous” mutations.

Genetic analysis of the new variant from the U.K. has revealed an unusually large number of mutations in its genome, which include changes that could potentially impact patients’ response to pharmaceutical interventions to the disease. There are in all 23 mutations in this UK-variant, 17 of which are non-synonymous. Over half of these (nine) have been found to be across the Spike protein. S-protein is the stud-like protrusion in the outer envelope of the virus which the virus uses to gain entry into the host’s cells and use the host biochemical machinery to replicate and infect the host. This fraction (9/17) is much higher than what is expected from random mutations, according to the ECDC report. These nine mutations are, in fact, thought to define the variant because, while many of these mutations individually have been observed in other variants as well and have been found to change the functional behaviour of the virus, but not in this combination. So this rare combined effect of these mutations on the S-protein could have a significant health impact.

It would be recalled (“How a Virus Evolved in a Pandemic”, *Frontline*, May 22, 2020) that, during March-April 2020, we had already witnessed the emergence (from Europe) of a new lineage called A2a, with a dominant and defining ‘non-synonymous’ mutation called D614G (where the amino acid Aspartic acid (D) at site 614 in the Receptor Binding Domain (RBD) region of the S-protein was substituted by the amino acid Glycine (G)). The variant having Glycine (G614) was found to be more infectious than the original with Aspartic acid. However, it was also found that the body’s innate immune system was able to produce antibodies against this variant as well. That is, the variant did not evolve to evade the immune system. In fact, the 614G variant was found to be more vulnerable to the neutralising antibodies. In the current new variant, however, studies with other viruses suggest that some of them could be what are called “escape mutations”—those which evade the immune system—and hence the concern for the new variant’s possible significant impact on the pharmaceutical interventions to the disease and thus on the pandemic. The defining nine mutations of the UK-variant which are on the S-protein are: deletion (of gene) at position 69-70, deletion at position 144, N501Y, A570D, D614G, P681H, T716I, S982A and D1118H.

POTENTIAL BIOLOGICAL EFFECTS

Based on previous studies on other SARS-CoV-2 variants, three of these mutations are known to have potential biological effects, according to the preliminary

Challenges in vaccination against COVID-19	
Category	Challenge
Political	Prioritisation of vulnerable populations. Selection of vaccine based upon efficacy and cost. Timely procurement of vaccine and ethical distribution.
Programme management	Augmenting health system to reach out to target population. Making available sufficient and functional cold chain up to last mile.
Technical	Monitoring efficacy, persistence of protection and safety in community phase and launching Phase 4 safety surveillance.
Operational	Timely procurement and efficient distribution. Managing cold chain. Enhancing capacity for efficient response. Data management. Community engagement including response to adverse reactions.
Epidemiological	Monitoring progress of pandemic and adjusting vaccination plans.
Research	Response to availability of second generation of better vaccines.
Financial	Mobilisation of financial resources from within the country or through international development partners.

Source: Editorial by Rajesh Bhatia, Online version India and COVID-19, Part-IV, Indian Journal of Medical Research

genomic characterisation of the UK-variant by the COG-UK consortium:

1. Mutation N501Y, in which the amino acid asparagine (N) has been replaced by the amino acid tyrosine (Y). Like the mutation D614G, it is also located within the receptor-binding domain (RBD) of the S-protein and has been previously identified as increasing affinity to the ACE2 receptor on the host cells to which the virus binds and enters the cell. That is, this mutation could enable the virus to bind more tightly to the human cells. It is unknown whether tighter binding translates into any significant clinical or epidemiological differences. According to the U.S. Centres for Disease Control (CDC), this mutation has been associated with increased infectivity and virulence in a mouse model.
 2. The double gene deletion at position 69-70 of the S-protein has been seen many times before and is likely to lead to conformational (or shape) change in the spike protein, according to the CDC. Perhaps due to this shape change, it has also been described earlier to aid evasion of human immune response in terms of antibodies in some immunocompromised patients.
 3. Mutation P681H is immediately adjacent to the site of cleavage of the S-protein into its S1 and S2 sub-regions (a feature absent in other coronaviruses) by the human enzyme furin, which facilitates fusion of the virus with the human cell. So this mutation may have a locational advantage of interfering with the immune system’s bid to prevent virus binding and fusion.
- Says the COG-UK report: “Given the experimentally predicted and plausible... consequences of some of these

mutations, their unknown effect when present in combination and the high growth rate of [the variant] in the U.K., this novel lineage requires urgent laboratory characterisation and enhanced genomic surveillance worldwide.”

THE SOUTH AFRICA VARIANT

Is this new UK-variant related to the newly emergent variant in South Africa? The variant seems to have emerged in a major South African metropolitan area and was first detected in October. In its press statement of December 18, the South African Health Minister stated that a particular variant had increasingly dominated the findings of samples collected in the past two months. In addition, the statement said that there was evidence of a shift in the clinical epidemiological picture; in particular, a larger proportion of younger patients with no comorbidities were presenting with critical illness. The Minister also claimed that it was South Africa which alerted the U.K. authorities about the new variant which triggered the discovery of the U.K.-variant.

While the UK-variant seems to have only caused an increase in the number of cases among younger adults, there was no evidence of increase in severity of the disease in any age group. However, in the South African scenario severe illness was also being observed in young adults. “The evidence that has been collated,” he said, “strongly suggests that that the current second wave we are experiencing is being driven by this new variant.” The SA-variant too carries the same critical mutation N501Y, which, scientists believe, may be responsible for the increase in the virus’s greater infectiveness in both countries. Does this lead to severe disease in young adults? Only more studies on the variants can tell. The exact impact of its tighter binding to human ACE2 receptor is, however, not properly understood yet. However, according to Andrew Preston of the University of Bath, the mutation has been seen in other variants as well that have not been associated with increased transmission. “So, the picture is complex.”

Genetic analysis of the SA-variant has shown that it also has an unusually large number of mutations like the UK-variant. But the key mutation, N501Y, occurs in combination with other mutations that are not seen in the UK-variant. So, in all likelihood, it emerged completely independently of the U.K. strain and is not related to it. The SA-variant is characterised by N501Y, E484K and K417N mutations, two of them (N501Y and E484K) within the RBD, and the strain has been now called ‘501Y V2’.

VACCINES EFFECTIVE

Despite the above concerns in the behaviour of the two new variants from the U.K. and South Africa, scientists believe that there is no reason to think that the vaccines being rolled out or under development will be less effective. According to the Centres for Disease Control (CDC) of the U.S., the U.S. Food and Drug Administration (FDA) authorised vaccines are ‘polyclonal’; that is, they

produce antibodies targeting several parts of the spike protein. The virus would likely need to accumulate several mutations in the spike protein to evade immunity induced by vaccines or by natural infection, the CDC says.

However, in a recent study by Paul Axelson and others from the University of Pennsylvania Perelman School of Medicine, which was posted on the bioRxiv web preprint repository on December 13, 16 naturally occurring mutations on the S-protein, including the N501Y mutation, were investigated to determine whether these were able to prevent antibody binding and maintain the ability to bind to the ACE2 receptor and viral infectivity.

Significantly, the authors concluded that “SARS-CoV-2 with mutated forms of the spike protein may retain the ability to bind to ACE2 while evading recognition by antibodies.... It seems likely *that immune evasion will be possible* regardless of whether the spike protein was encountered in the form of infectious virus, or as the immunogen in a vaccine. Therefore, it also seems likely that reinfection with a variant strain of SARS-CoV-2 may occur among people who recover from COVID-19, and that *vaccines with the ability to generate antibodies against multiple variant forms of the spike protein will be necessary to protect against variant forms of SARS-CoV-2* that are already circulating in the human population” (emphasis added). Whether all vaccines already developed or under development are really of this nature is not known.

CHALLENGES

There are already several challenges that the rapid roll-out scenarios proposed for public use must confront (Table 1). The emergence of new uncertainties due to the somewhat unusual virus mutations seen during a pandemic adds another dimension. Among the various concerns about the impact of the new variants, the ability to evade vaccine-induced immunity would likely be the most concerning because once a large proportion of the population is vaccinated, there will be immune pressure that could favour and accelerate emergence of such variants by selecting for “escape mutants”. There is no evidence that this is occurring, and most experts believe escape mutants are unlikely to emerge because of the nature of the virus, says the CDC.

In the Indian context, the only viable vaccine currently is Oxford-AstraZeneca’s adenovirus vectored-vaccine, which is the most easily deliverable vaccine given its easily manageable cold chain logistics. Vaccination prospects in India are, therefore, currently dependent entirely on its British approval. Following that India is likely to approve for use here immediately. But the vaccine’s approval in the U.K., in the light of the emergence of this new variant and its rapid spread, may not come soon. The U.K. health authorities may want to see its efficacy against cases with the new variant(s) before. So, Indian roll-out plans should actually speed up trials and approvals for home-grown vaccines, but approvals must take into account all the new lessons being continually learnt from the virus variants’ infecting potential. □

A lesson in resilience

A month into the protests, farmers are **determined not to yield**. And they have alternative media, books, songs and a similar protest in history to keep them together.

BY **T.K. RAJALAKSHMI** AT SINGHU, GHAZIPUR AND SHAHJAHANPUR

THEY have been branded leftists and separatists and called all sorts of names. They have been mocked at, accused of being misled by political parties, stopped at various points on the road to prevent them from moving towards Delhi, harassed and ridiculed for being leaderless, and

termed reckless for taking on the government's might. Their unity has been questioned and attempts have been made to break it repeatedly, by the government and a section of the media. But the small and medium Indian farmers have shown a kind of resilience unprecedented in recent

history. "We are not going anywhere," says a farmer at the Singhu border, one of the main protest sites on National Highway One which links Delhi and Punjab, determined to stay put. At the other protest sites—Tikri and Palwal on the Delhi-Haryana border, Shahjahanpur on



AT THE SHAHJAHANPUR PROTEST SITE on the Haryana-Rajasthan border. The dipping temperatures have not diminished the farmers' resolve.

T.K. RAJALAKSHMI



T.K. RAJALAKSHMI

A MEDICAL CAMP run by the organisation Akal Aid at the Singhu protest site.

the Haryana-Rajasthan border, and Ghazipur and Chilla on the Uttar Pradesh-Delhi border—more and more farmers pour in to join the protesters in solidarity every day. Everywhere one heard the common refrain: repeal the three farm laws, withdraw the Electricity (Amendment) Bill, and give a legal framework for minimum support price (MSP) and procurement.

Even the dipping temperatures have not diminished their resolve. At Singhu, every day farmers' leaders jointly take stock of all the developments to decide the future course of action, including sending responses to the government. There is no confusion despite efforts by a section of the media to portray the farmers as obdurate and the government as generous, considerate and willing to listen to their demands. Some media have particularly focussed on farmers' "vehicles" and the *langars* or community kitchens with stocks of food in a bid to paint the protests as being done by big landed farmers to safeguard their own interests. They have also been showing "success stories" of farmers stating how they benefited by selling their produce outside the Agriculture Produce Market Committee (APMC) mandis.

But some of this propaganda seems to have backfired. For instance, Ravi Shankar Prasad, Union Minister of Electronics and Information Technology, tweeted about how under the Common Services Centre

Scheme (CSCS), an initiative of his Ministry to offer e-governance services in rural areas, cauliflower growers had received good prices. He specifically tweeted about a farmer having sold cauliflower for Rs.10 a kg using the digital platform when the local mandi offered just Re.1 a kg.

However, Naresh Kumar, the farmer from Alipur village in Uttar Pradesh's Shamli district about whom the Minister tweeted, said that the CSCS people had come to his village and procured five quintals of cauliflower at Rs.10 a kg, but he still had 500 quintals of the produce left. "They don't even pick up their phone when I call," he said in a video he shared with the media.

YOUTH PARTICIPATION

A striking feature of the protest is the participation of youths. From organising medical camps to working in community kitchens, helping distribute fruits, making an inventory of daily requirements and so on, they are everywhere. In order to counter the negative image given out by the media some of them even took the initiative of launching a newsletter called *Trolley Times*, a bi-weekly in Hindi and Gurmukhi priced at Rs.5, which details the challenges faced by farmers and documents the stories of protesters and features the media reportage of the protests from across the world. An IT platform, Kisan Ekta Morcha, they have launched has more than one lakh followers on

Facebook and an even larger number on Twitter and YouTube.

Book stalls at the Ghazipur, Singhu and Tikri protest sites are another aspect that gain attention. At Singhu, a trolley owner has displayed books, including John Reed's iconic *Ten Days that Shook the World*, a saga of the Russian Revolution as seen through the author's eyes. Said Sukhvinder Singh from Manuka village, Hanumangarh, Punjab, who is also a short filmmaker: "Farmers are not illiterate. There are some who have read all the big philosophers and can hold forth on the French Revolution." He complained that the Haryana Police were harassing farmers from Rajasthan who were moving from Tikri to the Shahjahanpur border.

A deep sense of hurt prevails among the protesters in the manner in which the government and the media have projected them. Said Ram Singh, the sarpanch of Jhabua village in Rewari district, Haryana: "When Sardars and Jats were fighting at Kargil, they lauded us. Today they call us separatists." At Singhu, youngsters held up posters which said, "We are not terrorists and druggies but farmers."

Musical expressions also bring them together. Songs of struggle and unity and those that celebrate the spirit of the youth posted on YouTube with titles such as "*Jawaani Zindabad*" and "*Ailaan*" (Declaration) by Kanwar Grewal or *Delhi ke Bhulekhe* (the false beliefs of Delhi) by Satta Vairowalia have become hugely popular. The videos are interspersed with advice to protesters to stay on course and to protest peacefully.

Said a young engineer at the protest site at the Ghazipur border: "Our parents are farmers and we see how hard they work. This is a matter of life and death for them." His friend Rajan Jawala, a farmer leader in his early twenties from Shamli district, shares the video showing a farmer from his village destroying his cauliflower crop as it would not sell for even Re.1. All what the farmers demand are guaranteed procurement at prices that cover the cost of pro-

duction and allow them to eke a livelihood free of debt and insecurity.

The level of organisation at the protest sites is telling; there are no signs of littering or garbage of any kind. There are few toilets but the neighbouring settlements which include the humblest of dhaba owners and roadside eateries have offered the protesters their modest facilities for accommodation and rest.

The gurudwaras of Delhi have been helping organise community kitchens and there is no shortage of food for anyone. A volunteer told *Frontline* that this kind of work was regular. During the pandemic-induced lockdown, when lakhs of people in the unorganised sectors were rendered jobless overnight, the gurudwaras had stepped in to feed them. He said this was part of *sewa* or welfare which they were obliged to do as part of their religious calling.

Policemen at Singhu and Ghazipur were also seen partaking in the *langars*. At Ghazipur, women from nearby colonies volunteered to help with chopping vegetables at the kitchen. Some of them, including a few elderly women, were from Trilokpuri, an area that was affected during the 1984 riots against Sikhs.

Some cynics pointed to things like SUVs owned by farmers, a stray counter or two offering foot massages, or protesters eating pizzas, to hint that it was the rich farmers who were leading the protest. To such comments, Ranbir Singh from Mansa district, Punjab, retorts that “no one would like to sit under the open skies in the freezing cold unless compelled to”. At one of the media briefings, a farmer quipped that the protesters were not eating pizzas but *pinnis* (a sweet made of wheat, sugar, ghee and dry fruit).

“Even so, what’s wrong if we ate pizzas? We work hard therefore we eat,” said Vikram Yadav, a farmer protesting at the Shahjahanpur border. “The flour in the pizzas are made with the wheat that we produce. They say we have expensive phones. It is with our hard-earned money that we buy them.”

The All India Kisan Sabha (AIKS) has mobilised farmers here

the most. There are smaller organisations such as the Gramin Kisan Mazdoor Samiti too. With the khaps (caste panchayats) of Haryana also backing the protests, the numbers at the Shahjahanpur border are expected to swell. Amra Ram, former president of the AIKS who has led many farmers’ struggles in Rajasthan, is hopeful of the outcome. “There is no shortage of food. People are helping out in large numbers. We are eating foodstuff that we would normally not get at home,” he told *Frontline*.

INDEFATIGABLE SPIRIT

The spirit of the farmers is indefatigable. Dharampal Seal, a septuagenarian, has seen many struggles in his life. Despite his age, he did not flinch one bit when a teargas shell came his way as the Haryana Police tied to push back the protesters at the Punjab-Haryana border. He used a flag stick to flick it aside. He said: “We have seen tougher times. The laws are not anything new. It is a culmination of the Dunkel negotiations that began in the 1990s to undermine our food self-sufficiency and food security by cutting down on agricultural subsidies. The then government of P. V. Narasimha Rao accepted those negotiations. Lakhs of farmers under the leadership of the AIKS and agricultural workers’ organisations protested in Delhi.”

He was referring to the Dunkel Agreement on tariffs and trade which was a predecessor to the World Trade Organisation. Ironically, the Bharatiya Janata Party, which was then in the opposition, joined hands with the Left and other parties to demand a Joint Parliamentary Committee to discuss the Dunkel proposals and its impact on agriculture.

The Bharatiya Kisan Union (Ugrahan), which has its presence all over Punjab, has mobilised the largest number of farmers and trolleys from that State. Its decision to celebrate Human Rights Day on December 10 by putting up posters of all those accused and put in jail under draconian Central laws drew unwanted attention and gave a handle to sections in the media and the gov-



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ernment to defame the protests. Dharampal Seal said that the farmers had the right to celebrate Human Rights Day in any way they wanted to and no one had any business to call them anti-national. He said: “We also believe that students and intellectuals who are being harassed and are behind bars should be released. But our first demand today is the repeal of the farm laws. We are aware that for the fight to win, farmers’ issues will have to take precedence.”

Debunking the myth that the protest was being led by landlords, Dharampal Seal said: “Small farmers are here in large numbers because the stakes are the highest for them. They know that they stand to lose their land if the farm laws are implemented. The percentage of big landed farmers is minuscule all over the country, including in this protest.”

He points to Sukhbir Badal, the leader of the Shiromani Akali Dal (SAD) which had walked out off the BJP-led National Democratic Alliance in opposition to the farm laws. “He’s a big landlord. Even he knows that he stands to lose if the big corporates get a foothold through the land laws. His wife, Harsimrat Kaur, was a Minister in the Central govern-

AT THE SHAHJAHANPUR SITE, a meeting in progress.

ment. She resigned. The SAD has opened a front against the BJP in Punjab,” Dharampal Seal said.

Some 40 per cent of the farmers in Punjab own between two and a half to five acres (one acre is 0.4 hectare) of land. Of the rest, more than half own only less than 20 acres; only a small percentage qualify to be labelled as big landlords. In the 12,700 villages of Punjab on an average only six to seven families own more than 20 acres.

Dharampal Seal said that agricultural workers had also joined in the protest. “If these private silos come up, the FCI [Food Corporation of India] will stop procuring. If the corporates come, they will have no use of our tractors or the *palledaar* who does loading and unloading work or spraying of pesticides. They will use helicopters to spray pesticides and mechanise all operations. This will affect the agricultural worker and all manual operations done by them,” he said. “There should be an MSP for all crops like bajra, soyabean, pulses and anyone procuring less than that should be prosecuted against,” he said.

The agriculture sector is still the

largest employer in India today. When industry collapsed during the lockdown, agricultural operations continued. When industrial growth plummeted hitting the GDP hard, agricultural growth remained on an even keel. “Yet we don’t get the value for our produce. Take the example of milk. Verka takes out powder, ghee, cream and buttermilk of three kinds from the milk we sell it. We get Rs.25 per litre but the byproducts of that very milk are sold to consumers at a good profit,” he said. Verka is the Punjab State Cooperative Milk Producers’ Federation.

1959 REDUX

Dharampal Seal recalled a similar protest in 1959 when the Congress’ Pratap Singh Kairon, the Chief Minister of unified Punjab, levied a “bet-terment tax” on farmers in lieu of irrigation and power facilities. The tax levied was to be used to finance the construction of the Bhakra Nangal project. The Congress-led government at the Centre too failed to assess the pulse of the people. There was widespread resentment among farmers.

The undivided Communist Party

took the lead in giving a voice to that brewing resentment. Harkishen Singh Surjeet, who later became the general secretary of the Communist Party of India (Marxist), led that agitation under the aegis of the Kisan Sabha. The all India president of the Kisan Sabha then was A.K. Gopalan, one of the founder members of the CPI(M). All political parties joined the protest. Dharampal Seal recalled that even Congress members joined the protest without the party banner. He said: “*Poorey kisano ka bhaanjan tha...saari bibiyaan bhi thi...Akali bhi saath aaye* (It was a movement led entirely by farmers including many women; the Akalis also joined us). Kairon, like the current BJP leadership, went on a propaganda drive, meeting farmers and convincing them of the benefits of the tax. But he did not succeed.

The protest was not without consequences. Three women were martyred, and seven or eight farmers died, while thousands of farmers courted arrest. But the farmers persisted and the Kairon government had to withdraw the tax. “There was no *Jathebandi* before that. The various units of the Bharatiya Kisan Union came up only in the 1980s. The AIKS was the oldest farmer organisation. It came up in 1936 in Lucknow. Many organisations believe that the AIKS’ presence is crucial to the famers’ protest,” said Dharampal Seal, adding: “I am close to 70 and this is the first time I have seen such a big protest involving all sections of society. The peaceful protest has not given a single chance for the police to act against us. The Singhu rally is almost 13 kilometres long. The youths are managing it all. They are not getting deflated at all. It is an encouraging sign. If, say, a hundred are heading back to their villages, two hundred more join in.”

With the sowing season for wheat over, more and more farmers are expected to join the protest. With each passing day and as temperatures dip, the throng of farmers at the protest sites only seems to be growing. If the strategy of the government is to tire them out, it does not seem to be working, at least for now. □

‘Farmers have no option but to protest’

Interview with **Hannan Mollah**, working group member, All India Kisan Sangharsh Coordination Committee. BY **T.K. RAJALAKSHMI**

THE All India Kisan Sangharsh Coordination Committee (AIKSCC) is the nodal organisation representing the farmers’ organisations. It was formed in 2017 in the aftermath of a police firing on farmers in Mand-saur, Madhya Pradesh. Since then the AIKSCC has grown in strength by consistently raising farmer and peasant issues. Hannan Mollah, general secretary of the All India Kisan Sabha, is a working group member of the AIKSCC. He is part of the 40-strong delegation of farmer leaders representing the protesters in talks with the government. He spoke to *Frontline* on why farmers have been persisting with the protests and on the stance of the government. Excerpts.

The objections to the farm laws are being portrayed as having come up abruptly.

Farmers took up these issues right from the beginning. This is the seventh month since they first raised it in June. First the ordinances came. There were protests, and copies [of the ordinances] were burnt. We hoped the government would listen. But it didn’t. We also want reform in agriculture, like the implementation of the Swaminathan Commission recommendations on MSP, loan waivers, and so on. Our idea of reform is different from that of the government, which is aimed at snatching away the rights of farmers. You know how it violated all parliamentary norms in the Rajya Sabha



HANNAN MOLLAH: “...the kisan movement has succeeded in defeating all the communal designs of the government.”

without giving the MPs voting rights and passed those Bills.

On September 14, the day the Bills were passed, we had a big protest. It was then that we decided that the resistance should be intensified and gave a “Resistance Day” call for September 25, which was a virtual bandh. As the government did not listen to us, the AIKSCC gave a call for a jail bhara programme on November 5. When repeated efforts using democratic means to draw the attention of the government failed, we decided that we needed to come out on the streets and protest. This is the background of the current protests.

The government has claimed that it does not know what are the

farmers’ demands.

That is a blatant lie. The government refused to listen to the voice of the farmers. A democratic government knows what the people want. We knew that trains were not running owing to the pandemic, and therefore it was decided that the *Dilli chalo* programme would be led by farmers in States in the vicinity of Delhi such as Punjab, Haryana, U.P., M.P. and Rajasthan. They would march to Delhi while in the other 17 States or so, regional programmes of protest would be held. You saw how borders were sealed in Haryana and farmers prevented from coming to Delhi. They were lathi-charged, water-cannoned and beaten. Even the national highway was dug up to prevent tractors from moving forward. Then, the government hit upon another conspiracy: to put us in an open ground on the outskirts of Delhi at Burari. They knew that they could keep farmers there for up to one year, and no one would get to know. It was a plan to jail us, and they could set the police on us if we decided to move out from there, like Jallianwala Bagh. We didn’t allow their conspiracy to succeed.

There are many things unique about this protest. First, it is the largest protest to be held since Independence. Second, there are 500 farmer organisations that are part of this joint struggle. Third, this movement has been totally peaceful. The government should have acknowledged it. It is an all-India move-

ment. When it started, Punjab was definitely in the forefront. It has been the history of the *kisan* movement in India that one State starts a movement and then it assumes an all-India character. The government aided by the media has been trying to project it as a Punjab movement in order to deny its all-India character. Some 25 crore people participated in the Bharat Bandh of December 8. Was it only Punjab and Haryana?

The government claims it is open to talks, and there have been a few rounds of discussions as well.

The discussions are a big farce. On September 30, five of us on behalf of the AIKSCC leadership met Defence Minister Rajnath Singh and Agriculture Minister Narendra Singh Tomar. We told them that farmers have been protesting for the last six months and requested them to bring a new law. We gave them a copy of the farmers’ Bills that we had formulated. The farmer, we said, was more than aware of the agriculture sector, its problems and the solutions. The two draft Bills were prepared on that basis. Twenty-one political parties supported the two private members’ Bills that were drafted from the perspective of the Indian farmer. We gave copies to the Speaker and the President of India. The Ministers said they would revert but they didn’t.

On the second occasion, on October 14, the government met only farmers from Punjab. This was the second ministerial meeting with farmers from Punjab. They too requested the government to repeal the farm laws and said that they were open to discussing everything, including stubble-burning issues.

On December 1, the government called a bigger delegation for talks: 31 organisations from Punjab and five national federations, including the AIKSCC and the Rashtriya Kisan Mahasangh. Gurnam Singh Chaduni from the BKU [Bharatiya Kisan Union] (Haryana) and a big combination of BKU (Rajewal) also attended it. We said there should be an agenda for discussion. How could there be a meeting without one, we

argued. We once again demanded the repeal of the Acts. The Minister went on to give a long lecture on why the Acts were good. On December 3, the talks continued, and he repeated the same things. That day at least they agreed that there were some weaknesses. They proposed four or five amendments. We said these cosmetic changes would not make an anti-farmer Act pro-farmer.

They repeated this in the next meeting as well on December 5. They insisted on the amendments. We said that a repeal was possible, especially when in one single hour 44 labour Acts were repealed to favour industry. Scores of farmers were unhappy. Surely, the laws could be repealed, we said. The next meeting was scheduled for December 9. A day before, they called for a meeting and a 13-member delegation met the Union Home Minister [Amit Shah].

The meeting was a big *tamasha*. The venue was not clear. For one hour, we waited at Amit Shah’s residence. The official who was sent to take us for the meeting did not know the venue. We had a tour of Delhi. Finally, a guest house near the Indian Agricultural Research Institute was decided on as the venue. For two and a half hours, we were on the road not knowing where to go. I have heard that the Home Minister is known for his organisational skills; couldn’t the venue of the meeting have been fixed efficiently?

That meeting began with the Agriculture Minister listing out a litany of praise for the Home Minister. But then the same amendments were reiterated. We were surprised. We felt that if a senior Minister was holding the meeting there should have been some progress in the talks. I must say the Home Minister was polite and said that a set of written proposals would be sent. We got them, in the form of a Powerpoint presentation, with the list of the same amendments we had rejected earlier. It was ridiculous. Is this how a government presents a proposal?

The government has been saying that the protest is politically motivated.

No political party was invited ever to the protest meetings. Neither are the political parties in the forefront of the agitation. It is a *kisan* movement. For seven months, farmers protested, not a single political party supported us. Yes, they have their opinions on the movement. Just like the BJP [Bharatiya Janata Party] has an opinion on the protests, the other political parties also have an opinion.

It was on October 27 that the AIKSCC invited other farmer organisations, and it was felt we should have a broad front. That was the origin of the Samyukta Kisan Morcha. Then, the government started saying the Left is behind the protest. Of all the 500 organisations, only seven or eight can be called somewhat Left. How can seven or eight organisations lead 500 organisations?

Then one *kisan* front, the BKU (Ugrahan), celebrated Human Rights Day and invited lawyers and others to their podium. The Punjab organisations requested them not to combine those events with farmers’ issues. They agreed. The BKU (Ugrahan) was not initially part of the 31 farmer fronts from Punjab. But the government and its friendly media latched onto this in order to project that this was proof that the protest was politically motivated. When this did not work, the government said they had met farmer organisations who supported the Acts. These were all paper organisations with no support behind them.

Despite the government’s propaganda, the protests have only intensified all over India. The government seems to be in a state of panic and, therefore, has been conducting counter campaigns in the form of holding *chaupals*, etc. In this protest, the *kisan* movement has succeeded in defeating all the communal designs of the government. There is only one identity of the protesters, that of being a *kisan*. Thirty-two farmers have died in the course of this agitation, but the government remains unconcerned. The poor farmers know they have no other option but to peacefully protest as long as they can. □

Duplicity of the farm laws

The controversial farm laws threaten livelihoods, jeopardise food security, are logically inconsistent and give the lie to the government's claims that it wants to protect the country's farmers. BY BISWAJIT DHAR

WHEN the government decided to open agricultural markets to agribusinesses and large traders as part of the economic package it came out with in May 2020, some commentators said that this was the “1991 moment” for agriculture, thus drawing a parallel with the market-oriented economic reforms the P.V. Narasimha Rao government introduced in the early 1990s. Two pieces of legislation were enacted in 2020: the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act (better known as the Contract Farming Act) and the Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act. And the existing Essential Commodities Act was amended to give effect to the policy shift the government announced.

However, a closer look at the three farm laws and the 1991 economic reforms tells us that the comparison is not apt. While the economic reforms began the process of deregulating the Indian economy by ending the so-called licence-control raj, or lifting of government controls over private enterprises, the two new farm laws are intended to facilitate the entry into Indian agriculture of agribusinesses and large traders who will now be able to exercise their influence over it, much in the same way that large grain traders do in



FARMERS sharing peanuts at the protest site at the Singhu border in New Delhi on December 24.

many countries around the world. In addition, the Essential Commodities (Amendment) Act will allow large traders to stockpile agricultural commodities, which they were earlier restrained from doing in order to curb speculative tendencies and keep food inflation in check.

The most dominant among the arguments advanced in support of the farm laws has been that it is a major step towards introducing a free market in agriculture. The tacit assumption is that the laws liberate the market from the stranglehold of the government and allow farmers to “freely” negotiate the best deals with large agribusinesses and traders. There are two counterpoints to this

argument. The first is that the government never had an overwhelming presence in agricultural markets, so a remedy of the kind that the government has proposed was not needed. This fact was alluded to in the 2006 report of the National Commission on Farmers (better known as the Swaminathan Commission), which pointed out that “the markets of agriculture commodities have been largely dominated by individual traders in the private sector” and that “private trade handles about 80% of the marketed surplus of agriculture commodities”. It also said that the “market for fruits, vegetables, meat, poultry products etc. is also dominated by the private sector”.

The second counterpoint is that a free market in agriculture is a myth that has frequently been sold both in the context of domestic and international trade. The reality is that agricultural markets are influenced by oligopsonies, or a small number of buyers, whose control has increased manifold with the increasing market-orientation of economies. Thus, in keeping with the times, the Indian government has introduced the three laws, which are nothing but an ensemble of instrumentalities for handing regulatory control over agriculture to agribusinesses and large traders. It is not difficult to understand that these laws have created



A MEDICAL TEAM checking the farmers who were on a hunger strike at the Delhi-Uttar Pradesh border near Ghazipur in New Delhi on December 25.

conditions that can best be described as “regulatory capture”, meaning that the government, whose role it is to regulate in the public interest, has been “captured” by the dominant market forces.

THE KEY OBJECTIVES

The objective of the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act is to make contract farming the model for Indian agriculture: The stated objective of the Contract Farming Act is to “provide for a national framework on farming agreements that *protects and empowers farmers to engage with agribusiness firms, processors, wholesalers, exporters or large retailers for farm services and sale of future farming produce at a mutually agreed remunerative price framework in a fair and transparent manner* and for matters connected therewith or incidental thereto” (emphasis added). There are, therefore, two operative parts to the objective: one, empowerment and protection of farmers to deal with large agribusinesses, and two, enabling farmers to negotiate remunerative

prices for their produce. The legislation does not provide for any means of effectively protecting and/or empowering farmers; all it does is state that the government may, at the most, issue “necessary guidelines along with model farming agreements”, thereby facilitating farmers to enter into written farming agreements. But even after the legislation came into force, the model farming agreements are yet to be notified.

The Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act complements the first Act through its stated objective: “to provide for the creation of an ecosystem where the farmers and traders enjoy the freedom of choice relating to sale and purchase of farmers’ produce which facilitates remunerative prices through competitive alternative trading channels; to promote efficient, transparent and barrier-free inter-State and intra-State trade and commerce of farmers’ produce outside the physical premises of markets or deemed markets notified under various State agricultural produce market legislations; to provide a facilitative framework for electronic trading and for matters connected

therewith or incidental thereto”. The main purpose of this Act is to allow traders to carry out inter-State movement of agricultural products, which had been under restrictions. Although granting farmers operational freedom is the stated purpose of both laws, their substantive provisions speak otherwise.

The government’s contention is that farmers will now be able to maximise their returns by negotiating with agribusinesses and traders. However, the question is, can farmers benefit, given their vastly unequal bargaining powers *vis-à-vis* large businesses? The economic condition of India’s farmers is well documented in the government’s submissions to the World Trade Organisation (WTO). According to the government, 99.43 per cent of the country’s farmers are “low income or resource poor”, a figure sourced from the Agricultural Census for 2015-16. The census informs us that this figure corresponds to the share of farmers who operate marginal, small and medium holdings, that is, agricultural holdings up to 10 hectares are “low income or resource poor”. Thus, in the government’s view, only 0.57 per cent of the farmers in the country are well-to-do. There cannot be a better indic-

‘We never asked for these laws’

Interview with **Major Singh Pun nawale**, general secretary, All India Kisan Sabha (Punjab). BY **T.K. RAJALAKSHMI**

MAJOR Singh Pun nawale, general secretary of the All India Kisan Sabha (Punjab), is a farmer himself and also part of the 32-member delegation from Punjab representing the Samyukta Kisan Morcha in the talks with the government. He said that the claims of the government were hollow and that the farm laws would leave the debt-ridden small and medium farmer at the mercy of the market. Excerpts from an interview he gave *Frontline*:

The government claims that the new farm laws have no connection with the minimum support price (MSP).

The farm laws are against farmers all over the country, not just Punjab and Haryana. The Centre has no business making such laws without consulting State governments and the stakeholders because agriculture is a State subject. In Punjab alone, the government earns Rs.4,000 crore from the mandis when farmers sell their grain. The tax is levied not on farmers but on wholesale traders. These taxes are used to build rural infrastructure. Every third village in Punjab has a mandi.

When there is a private mandi next to a *sarkari* [government] mandi, and it won't be taxable on the private trader, all that money would be foregone. It will be cheaper for the trader to buy outside the mandi. When the farmer begins to go to the private mandi, the *sarkari* mandi will become redundant. When *sarkari* mandis stop getting grain, they will shut down. The government will not be obliged to declare MSP.

Today the trader from Bihar buys paddy at a lower amount from the farmer and sells it in Punjab at a higher rate. This was a big scandal



T.K. RAJALAKSHMI

to buy, raising questions of quality.

Another example is that of the sugar mills. The sugar mill owners assure the farmers they will provide inputs like seeds, pesticides and even interest-free loans. But when there is overproduction, they don't buy. Around Rs.800 crore is due to farmers from sugar mills all over the country. In Punjab, the amount owed was Rs.500 crore; now it has come down to some Rs.200 crore. There is a sugar mill in Sangrur district owned by powerful politicians, some of whom were alliance partners of the Central government. We protested in front of the mill for 25 days but did not get our dues. They did not even respond to the Deputy Commissioner's calls.

The farm laws are related to the MSP. The MSP does not even cover our production costs. We risk losing even this once the farmer is compelled to enter into agreements under the new laws.

The government says that under the new farm laws, the farmer is free to sell anywhere. Is that your assessment as well?

The government says that India got freedom for the second time in 2020 with the farm laws. The government should know that 82 per cent of farmers all over the country and 35 per cent farmers in Punjab own less than five acres of land. The farmer has to borrow money even to transport his produce to a nearby village. Under the new farm laws, the small and marginal farmer will have no bargaining power whatsoever.

Loot will get a legal framework. The consumer also will be looted, legally. As farmers we want the consumer to get flour (wheat flour) at less than Rs.30 a kilogram. The farmer gets less than half that rate.

The government says it is open to talks. As someone who has been part of the farmers' delegation, what do you feel about the talks so far?

There have been five rounds of talks. When farmers pointed out that the clauses are against the federal system of the Constitution, they agreed. The Home Minister said that he was helpless. I don't know what he meant by that. Actually, if these laws are taken back, it is possible the government feels that the spotlight will turn to the other problematic provisions such as goods and services tax (GST), Article 370 and the Citizenship (Amendment) Act.

If these laws are implemented, farmers will be reduced to working as agricultural labour. There are many agriculture-related activities that give people employment. All that will be affected with these new farm laws. The talks so far have not made any headway as the government is not concerned about our future. Their intentions are very different from what they say.

The government says that there is nothing new in the laws. For instance, contract farming is not new.

A factory was put up at Channo village, situated on the route from Patiala to Singrur. Farmers entered into a contract with a chips and soup manufacturing company and were asked to sow two acres of potato and tomato each. Farmers did that. But the company rejected the produce on the grounds of quality. The same thing happened in the case of sugarcane farmers. The sugar mill owners said they would give us loans, free seed, pesticide and we could sow in as much land as we wanted. They paid us for one year. The same sugarcane seed sowed once can last for three to four years. So in the following year when the harvest was good, we had difficulty selling it.

The present contract will be even more dangerous. We won't be

able to sow anything other than what the contract specifies, and the contract would be such that the farmer will not be able to get out of it without mortgaging his land. The government has said categorically that the laws are for trade and commerce and not for farmers. So we said that the farmers are producers, not traders. The government doesn't invest in agriculture and the farmer doesn't have money. At least three reputed universities in Punjab—Punjabi University in Patiala, Panjab University in Chandigarh, and Shri Guru Nanakdev University at Amritsar—conducted studies and concluded that agriculture had become unviable for farmers as they were unable to get rid of their debts. In many places, farmers have been reduced to being farm labourers.

Modiji went to Jigraon village in Ludhiana in 2014. He was campaigning for elections as the Bharatiya Janata Party had an alliance with the Akalis. He said if he became Prime Minister, he would waive farmers' loans and implement the Swaminathan Commission recommendations on MSP. He never did that.

We asked for appropriate rates for our produce. We never asked for these laws. But we have been told to accept them. The Punjab farmer wants the government to help in crop diversification. We import pulses. That can be stopped if farmers were encouraged to grow pulses. Rate *ki* guarantee *ho aur khareed ki guarantee ho* [Guarantee us both the rate and the procurement for the produce]. We can grow anything, but support is required from the government.

We have suffered a lot after the Green Revolution. Our research institutes should be supported with funds so that they can research on seeds and soil conservation techniques. But the government does not want to invest. There is pressure to reduce subsidies under international agreements. The government

wants to import cheap grains and subsidise the rich nations rather than pay us.

How have government schemes like the Kisan Samman Nidhi helped farmers?

It is possible that some of it may have helped the really poor farmers, but what is the value of Rs.6,000 annually in the face of such inflation. For a farmer with five acres, who has a debt of Rs.20 lakh, the amount has no meaning. Ever since the Modi government was sworn in, suicides among farmers have risen. The number of children from farmer families in higher education has gone down.

The plan is to divert farm labour to industry. Industry needs hands. Diesel accounts for 35 per cent expenditure of total inputs. It costs Rs.80 a litre, which works out to be very expensive for the farmer. One sack of fertilizer which cost us Rs.400 is now close to Rs.800. There is no reduction in its cost. *Ek haath se paanch rupaye deti hai, doosre haath se bees rupaye leti hai* [With one hand they give us Rs.5 and with the other they take Rs.20].

The example of Bihar is cited to show that the farmers have gained by the abolition of the APMC mandis. But a lot of them still migrate to Punjab for work, do they not?

It is a fact that they come to Punjab every year. But during the lockdown, many of them went back, so we got labourers from places near Agra. We sent buses to get labour. All of those people had some land. They said that they would stay until June but they would have to go back to their villages to sow paddy. It is because they do not get the full rates for their produce that they have to work as farm labour as well. We received Rs.1,880 for one quintal of paddy; in Bihar, it sold for Rs.900. There was a time when the government needed farmers to feed the nation; today they don't.



MOORTHY R.V.

FOOD BEING PREPARED for farmers, near Ghazipur on December 25.

ator to describe the vastly disparate bargaining powers between India's farmers and agribusinesses. And when have negotiations between vastly unequal entities ever benefited the weaker party?

CONTRACT FARMING

Studies conducted on contract farming in India and other countries have shown that this form of farming is at best a mixed blessing. The studies have underlined several challenges associated with it. For instance, contracting agencies generally deal with relatively large producers and their contracts are often biased against small farmers. Also contract farming can perpetuate the problems farmers face instead of solving them. Finally, several studies have concluded that contract farming has been somewhat successful only in countries where the government and social organisations were active participants, with the former playing the role of enforcer of the rules of the game. These observations make it clear that in contract farming the relative bargaining power is skewed against farmers, which occurs, among other things, because of asymmetric information between the two parties.

Besides the inherent problems with contract farming, the piece of legislation enacted to promote it has several provisions that could potentially put farmers in an even worse bargaining position. For instance, agribusinesses have been allowed to impose a slew of conditions in their agreements with farmers, including those relating to compliance with

quality, grade and standards of the marketed products. The Contract Farming Act stipulates that the standards may be "formulated by any agency of the Central government or the State governments, or any agency authorised by such government for this purpose". This implies that besides the standards introduced by government agencies, which are adopted through transparent processes, the Contract Farming Act allows agribusinesses to introduce private standards, which are often imposed in a non-transparent manner and can be quite arbitrary, implying that they can be used to impose unfair conditions on farmers.

The Act further provides that "quality, grade and standards shall be monitored and certified during the process of cultivation or rearing [of animals], or at the time of delivery, by third party qualified assayers to ensure impartiality and fairness". This provision highlights the deeply intrusive nature of contract farming and the curbs it could impose on the freedom of farmers to carry out their activities, leave alone get "remunerative prices".

What is worse, the Contract Farming Act has provisions that introduce in the farming agreements a number of contentious conditions such as good farming practices and labour and social development standards. "Good farming practices" have not been defined in the Act, but if these are seen in conjunction with attempts to impose labour and social standards, farmers' interests could be seriously impacted. Labour and

social standards have frequently been discussed in the context of international trade rules and hark back to the core conventions of the International Labour Organisation relating to minimum wages and the use of child labour. India has consistently resisted the pressures of industrialised countries to incorporate these discriminatory standards in global trade rules as they are instruments that militate against the rights of developing countries in global markets.

It is ironical that such standards have been introduced in laws that can be used to undermine the interests of India's farmers. Two questions arise in this context. One, how can a government that speaks of helping farmers double their incomes introduce these grossly unfair instruments that can only increase the exploitation of farmers by agribusinesses? And two, when the government expresses its commitment to improving the ease of doing business, how can it increase transaction costs for farmers and make it difficult for them to do business?

The most controversial aspects of both law are some of the procedures they lay down for the settlement of disputes between farmers and large agribusinesses and traders. First, disputes between the parties are to be settled by a Conciliation Board, which will be appointed by a Sub-Divisional Magistrate (SDM). However, the jurisdiction of the concerned SDM has not been stipulated. This raises the possibility that the agribusiness/trader could approach an SDM in a jurisdiction at a considerable distance away from a farmer's fields, leaving him/her at a disadvantage while contesting a dispute.

Secondly, the decision of the Conciliation Board can be appealed before an Appellate Authority (Collector or Additional Collector nominated by the Collector), but no civil court has been given the jurisdiction to entertain any suit or proceedings in respect of any dispute. The plain meaning of this provision is that in respect of any dispute, civil courts cannot entertain complaints against the decision of the SDM or the Appellate Authority. In other words, the

decisions taken by government officials will be binding on the parties to a dispute and there is no scope for judicial review.

And, finally, the Contract Farming Act stipulates that legal proceedings cannot be initiated "against the Central Government, the State Government, the Registration Authority, the Sub-Divisional Authority, the Appellate Authority or *any other person for anything which is in good faith done or intended to be done under the provisions of this Act or any*

rule made thereunder" (emphasis added). A clarification needs to be sought from the government as to whom it intends to protect using the above-mentioned "good faith" provision, which almost reads like a *carte blanche*. Surely, not the farming communities?

It is fairly obvious that the farm laws will carry out re-regulation of agriculture through two simultaneous processes. First, agribusinesses/traders whose entry is being facilitated would not only control the

marketing channels but, more importantly, control the production processes as well. Secondly, the laws will diminish and eventually eliminate the government agencies that have been playing a critical role by offering farmers support prices for major products and thus cushioning farm incomes when commodity prices reduce, as they are wont to do immediately after the harvest. The absence of any mention of minimum support prices (MSPs) in the laws should, therefore, be interpreted as a

'We have only one demand: Repeal the farm laws'

Interview with **Satnam Singh Pannu**, president, Kisan Mazdoor Sangharsh Committee. BY **T.K. RAJALAKSHMI**

THE Kisan Mazdoor Sangharsh Committee (KMSC) is part of the Samyukta Kisan Morcha and one of the 40 farmer organisations taking part in the farmers' agitation. Although it claims to have a presence all over Punjab, its main support base is in Tarn Taran district from where thousands of farmers have arrived to participate in the protests against the farm Acts. Satnam Singh Pannu, president of the KMSC, spoke to *Frontline* soon after he addressed a public meeting at the Singhu border, one of the main protest sites of the present agitation. Excerpts:

It is almost a month since the protests at the Delhi borders began. What is your assessment of the present situation?

The government is trying its level best to discredit the movement. *Apne Bande Khade Karke* [by propping up their people], they are trying to project that farmers are in favour of the laws. They won't succeed. We are countering it and explaining to people what the farm laws are all about. The government has lots of resources, including the media, which it is us-



T.K. RAJALAKSHMI

ing for its own propaganda.

Is it a movement only of farmers in Punjab and Haryana as is being projected by the government?

No, it is an all-India movement. We have farmers from all neighbouring States. If the government resumes passenger train services, people will see how many more farmers will join in against the farm laws. There is no section of farmers that is not with us. *Yeh jaaney waaley log nahi hain* [they are not going to move from here]. Leadership *ne roka hua hai aur peaceful protest ka call diya hai*. Discipline maintain *kiya hua hai*

[The farmer leadership has stopped them from pushing ahead. It is a call for a peaceful protest and discipline has been maintained throughout].

The government has been inviting all of you for talks and says that farmers have not stated what their demands are.

That is not true. The government knows what our demands are. It is deliberate. They are trying to mislead the public. There is only one demand: repeal the farm laws. *Lambi chaudi baat nahi hai* [it is not a complicated question at all]. Minimum support price *ke alaava gujar basar nahi hai* [without MSP, it is impossible to survive]. Farmers have left their homes and work and are enduring the cold weather. They were compelled to launch a movement. It has not been out of choice.

How long do you think this protest can sustain itself?

We have rations that can last for up to a year. As of now, we are prepared to sit for two to six months. All the gurdwaras are helping us. Residents of Delhi are helping us as well. We expect more farmers to join in on December 26. Everyone has been given a roster. We are in lakhs. Our organisation is all over Punjab. There is support for this protest as everyone—the farmer and the agricultural worker—understands the negative effects of the farm laws.



PRAKASH SINGH/AFP

THE SUN SETS ON ANOTHER DAY of the protest: Farmers in front of their tents on a blocked highway in Ghazipur on December 24.

quiet withdrawal of the government from the public procurement system. Ironically, these steps are being taken by a government that won the popular mandate in 2014 after promising farmers a “minimum of 50% profits over the cost of production” and then claimed in its 2019 manifesto that by “increasing the Minimum Support Price of crops by 1.5 times the cost” it had ensured farmers a fair value for their yield.

LARGE FOODGRAIN STOCKS

Since its significant involvement in agricultural markets from the mid-1960s onwards, the government has facilitated India’s transformation from an import-dependent country to one that has large food-grain stocks. What also needs to be understood is that for decades, government agencies such as the Food Corporation of India were mandated to intervene in markets and prevent market failures from overrunning the largest private sector in the country, namely, agriculture. Had this not been the case, the production surges that the country saw following the adoption of Green Revolution technologies could not have been sustained as the uncertainties of the marketplace would have acted as serious disincentives that dissuaded farmers from remaining engaged in agriculture. The Swaminathan Commission commented in its second report that the “MSP system, which has contributed towards diversification and commercialisation of Indian agriculture and also in achieving the

present level of production, needs to be continued in near foreseeable future and its implementation should be improved”. The commission was alluding to the ineffective spread of the procurement system as it has remained mostly confined to the northern States. It noted further that the price behaviour of sensitive commodities not covered by MSP must be “closely monitored particularly during the glut season for need based support under the Market Intervention Scheme”.

Public procurement through the MSP system has had three advantages: one, providing farmers with incentives in the form of assured returns; two, dampening price volatilities of the major agricultural commodities in India, which is a common occurrence in global markets; and finally, helping build food-grain stocks to sustain the public distribution system (PDS). It is a no-brainer that if the government stops procuring foodgrains by offering MSP, the PDS will collapse.

The government can ill afford to withdraw the PDS as there is a high incidence of undernourishment among a sizeable section of Indians and dealing with it remains one of the government’s most formidable challenges. The Global Hunger Index for 2020 gave a grim reminder of this reality: India was ranked 94 out of the 107 countries for which the numbers were provided. Further, the United Nations Food and Agriculture Organisation’s *The State of Food Insecurity in the World* showed that

during 2017-19 the “prevalence of undernourishment in the total population” in India was 14 per cent, the second highest among South Asian countries. At the same time, it must also be remembered that India is home to the largest number of undernourished people in the world.

It is a dismal augury that while hunger and undernourishment remain major problems in the country, which have only worsened in the pandemic-induced economic crisis, the government is planning to transform India into an agricultural export hub. This is one of the oft-mentioned objectives of the new farm laws. A NITI Aayog member recently argued that given the emerging demand-supply scenario in the country, India will be required to sell 20-25 per cent of the incremental agri-food production in overseas markets in the coming years. However, this argument refuses to accept that given the scale of undernourishment among the country’s population, food stocks are a manifestation of inadequate implementation of the National Food Security Act (NFSA). In fact, over the past few years, budgetary allocation for the implementation of the NFSA has been falling in real terms. Thus, while its citizens go to bed hungry, the government is unable to find a market for its growing food stocks

Since it initiated economic liberalisation policies three decades ago, India has consistently submitted in the WTO that its agricultural policies are designed to ensure food security and protect farmers from the uncertainties of market forces. India could therefore justify its imposition of high import tariffs by saying they were needed to protect its agriculture from the heavily subsidised products that were traded in international markets. How consistent or compatible would the government’s stand of protecting Indian farmers be with its new-found aspiration of turning the country into an agricultural export hub? □

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Brothers in arms

Giving a boost to the agitation, the practice of friends and neighbours **standing in for the agitating farmers** by collectively carrying out farming activities in their fields catches up in Punjab. BY **VENKITESH RAMAKRISHNAN**



THE venues of the farmers' agitation around the National Capital Region (NCR) of Delhi have witnessed unique forms of solidarity and camaraderie among different segments of society since the last week of November 2020. Some of the constant features at the agitation points include doctors and nurses from Punjab, Haryana, Uttar Pradesh and other States providing regular medical care, caterers and housewives putting in place community kitchens, and artists and cultural activists staging performances to boost the morale of the farmers.

In the many villages in Punjab from where the farmers travelled to Delhi to join the protests against the new farm Acts, the scenes are more heart-warming. Farmers who stayed back to tend to the farms and fields have displayed a spirit of good neighbourliness and brotherhood. They are volunteering to sustain the farming activities of those who have gone to Delhi for the agitation. Lakhvir Singh, a young farmer of Badhni Kalan village in Moga district of Punjab, told *Frontline* in a videocall: "Our brothers have moved to Delhi for a long struggle. Even as they were preparing for the journey, collecting provisions and other essentials to last several months, we decided that their farming activity should not suffer in their absence. So, we are all collectively carrying out the farming

AT BADHNI KALAN village in Punjab's Moga district, farmers tend to the farming needs of those agitating in Delhi against the farm laws.

BY SPECIAL ARRANGEMENT



BY SPECIAL ARRANGEMENT

IQBAL SINGH and Deba Singh. Apart from cultivation, the two village elders of Badhni Kalan who did not join the agitation in Delhi also share the job of cattle rearing.



BY SPECIAL ARRANGEMENT

NIRMAL SINGH. He is taking care of the farming activities of two farmers participating in the Delhi agitation.



BY SPECIAL ARRANGEMENT

LAKHVIR SINGH of Badhni Kalan. He is managing the farming activities of three farmers.

activities in their plots exactly as they would have done if they were here.” Lakhvir himself is looking after the farming activities of three farmers who have gone to Delhi.

Various grains and vegetables are cultivated in over 6,900 acres (2,760 hectares) at Badhni Kalan. Village elders Iqbal Singh and Deba Singh said the arrangement of standing in for those who had gone to Delhi and fulfilling their farming roles had become a well-oiled system in the past month with regular checks and balances in place. Apart from cultivation, the farmers also share the job of cattle rearing. Iqbal Singh and another villager elder, Hariraj, play a major role in coordinating farming and other agriculture-related activities. Iqbal Singh said he was person-

ally looking after 70 cattle of farmers who had gone to Delhi. He said that they have initiated “a system of rotation of farmers whereby those who stayed for more than 10 days at the Delhi agitation point would return to the village and a fresh team of protesters would go from the village to Delhi in their place.” Apart from those who do the 10-day stint at the agitation points, small groups normally consisting of 50 to 100 people, including women, make short trips to the agitation points, which are approximately 400 kilometres from the village.

There are reports about initiatives similar to the ones in Badhni Kalan from all the districts of Punjab. Nirmal Singh, a farmer from Badhni Kalan, told *Frontline* that the farm-

ing activities taken up to support the agitating farmers were in themselves a form of struggle and a show of unity. He said: “Some local TV channels and newspapers have reported this briefly, but this is a movement, the message of which should be spread far and wide. The associate farmers are not affected even by extreme weather conditions like cold and fog in their enthusiasm to complete the tasks of the agitating farmers.” Nirmal Singh has taken over the responsibility of tending the farms of two farmers who are in Delhi. He said his friends and relatives in Amritsar, Jalandar and Ludhiana informed him that this initiative of standing in for the agitating farmers had caught on across the State.

Colonel (retired) Baljeet Singh



BY SPECIAL ARRANGEMENT

A GROUP OF farmers from Badhni Kalan ready to leave for the Delhi agitation venue to replace farmers from the village.

Dhariwal, a native of Badhni Kalan, told *Frontline* that it was just one of the many villages across Punjab where the new brotherhood in the agrarian community had taken root in the context of the agitation. “A sense of righteousness is the core on which this unity is built. That, coupled with the sense of betrayal and hurt caused by the Central government’s actions, has created a robust determination to fight. That is what we are witnessing in large parts of Punjab.” Dhariwal said previous interventions of farmers’ unions at the local level had contributed in a big way in building this unity.

PRODUCTS OF PAST STRUGGLES

Farmers such as Jagjit Singh, a prominent activist from Badhni Kalan in the Delhi farmers agitation and the coordination of farming activities initiated at Badhni Kalan are products of these past struggles. An anti-social ‘godman’ with political connections had forcibly occupied Jagjit Singh’s land but a sustained agitation by the farmers’ union at the local level forced him to return the land. Dhariwal said:

“What we are seeing now in the Delhi agitations and in the brotherhood in farming activities at the village level is the product of a long-standing and productive association between individual farmers and their unions. It is a relationship that has flourished on trust and conviction and not a product of ill-conceived and misleading propaganda as suggested by some vested interests.”

Colonel (retired) Subhash Chandra Deswal, now a progressive farmer based in Sikandrabad of Bulundshahr district in western Uttar Pradesh, told *Frontline* that the brotherhood in farming activities being seen across Punjab revived memories of the struggle for Independence among many elders in various parts of northern India. “During the freedom struggle too, this type of sharing was recorded in farming activities. The farming work of those who moved away from the villages to play active roles in the freedom struggle was taken up and completed by others in the village, fully internalising the spirit of the liberation movement. It would be difficult for any apparatus of the state to counter this kind of emotive

coming together of people.”

As things stand now, this agrarian brotherhood is essentially a Punjab-centric phenomenon. However, indications are that this will catch up in other parts of the country, too, especially Haryana and western Uttar Pradesh. Representatives of about 10 khaps (community organisations representing clans or groups of related clans, especially among north Indian farming communities such as Jats) of Haryana and western Uttar Pradesh came together for a sarv khap mahapanchayat at one of the Delhi agitation points in the third week of December. The Punjab brotherhood experience was reportedly discussed here. The mahapanchayat has decided to launch a jan jagran abhiyan (people’s awareness campaign) across thousands of villages about the repressive farm laws. khap leaders such as Sudhir Chaudhary are apparently of the view that the Punjab initiative must be replicated in other parts of the country, too. Clearly, the idea of brotherhood in farming activities is spreading and this is bound to enhance the cohesion and resolve among the agitating farmers. □

Trailblazing win

With its impressive governance record in Kerala, the Left Democratic Front registers a thumping victory in the local body elections, countering a barrage of allegations from the Congress and the BJP.

BY R. KRISHNAKUMAR

THERE is no denying what the results of the local body elections in Kerala indicate. The people have clearly rewarded the Left Democratic Front (LDF) coalition led by the Communist Party of India (Marxist) for the positive impact it has had on everyday lives in spite of the unprecedented challenges the State had to face during its tenure, including two devastating floods and the economic crisis that followed, the spread of the Nipah virus and then the COVID-19 pandemic.

What makes the LDF victory very sweet is that it came about despite the negative focus placed on its government's functioning and the targeting of its popular policy initiatives with a haze of allegations of corruption and nepotism by the opposition parties and a section of the media.

That the LDF could use its governance and development record to override whatever benefit the Congress and the Bharatiya Janata Party (BJP) hoped to achieve with their allegations and the ongoing investigations by different Central investigative agencies makes its electoral gains all the more remarkable.

LDF SWEEP

The LDF won 11 out of the 14 district panchayats as against seven it won in the 2015 elections. It won five of the six city corporations in the State. It also emerged victorious in 40 of the 86 municipalities, 108 of the 152 block panchayats and 514 of the 941 grama panchayats. Thus, it reversed

the recent trend of no ruling front emerging triumphant in the grass-root elections to the local bodies of the State, which are held every five years, usually a few months before the Assembly elections.

Preliminary estimates showed that the LDF got 41.55 per cent of the total votes polled, while the Congress-led United Democratic Front (UDF) got 37.14 per cent and the Bharatiya Janata Party-led National Democratic Alliance (NDA) got 14.52 per cent. The LDF registered good performances in the southern districts of Thiruvananthapuram,

Kollam, Pathanamthitta, Kottayam, Idukki, and Alappuzha, the central district of Thrissur and the northern districts of Palakkad, Kozhikode, Kannur and Kasaragod.

In spite of the intense anti-government campaigns it had launched, almost always following those of the BJP, the UDF found its hopes dashed in almost all districts, except Wayanad and Malappuram, and Ernakulam, to an extent. Of the two corporations it had won in 2015, the UDF could register a clear victory only in Kannur. The LDF won the corporations of Thiruvananthapuram, Kollam and Kozhikode hands down, and won the largest share of seats in Kochi (a former UDF stronghold). It is also set to run Thrissur corporation with the support of independents, including UDF rebels.

UDF STUNNED

The results of the elections to the district panchayat, which are normally taken as a sign of the political mood in the State, have gone completely against the UDF.

The most fruitful gains for the LDF were in central Kerala, especially in the traditional UDF stronghold districts of Kottayam, Pathanamthitta and Idukki. Congress leaders, who were claiming that the exit of the Kerala Congress faction led by Jose K. Mani (son of veteran Kerala Congress leader K.M. Mani) from the UDF would not affect the coalition's prospects in the region, were taken by surprise when the results showed otherwise.

Central Kerala has all along been a UDF stronghold, but the exit of the Jose K. Mani faction saw the LDF utilising the opportunity to the hilt by welcoming the party into its fold unusually quickly. As a result, the UDF suffered serious setbacks even in areas that were personal fiefdoms of top Congress leaders, including Opposition Leader Ramesh Chennithala and former Chief Minister Oommen Chandy.

What the elections revealed was

AN LDF celebration in Kochi on December 16.

the extent to which the Congress, with a terribly weakened party structure, has become dependent on the limited but critical strengths of its smaller regional allies such as the Kerala Congress and the Muslim League, in order for it to have at least a fighting chance against the LDF. Significantly, the LDF has now become an expanded coalition of 10 partners, the latest entrants being the Kerala Congress faction led by Jose K. Mani and the Loktantrik Janata Dal (LJD), both Congress allies until recently. With the split in the Kerala Congress and the exit of the Jose K. Mani faction from the UDF, only the Congress remained a worthwhile UDF force in central Kerala, but it was found wanting in the elections.

At least for now, the Jose K. Mani faction has won the upper hand in its bitter feud with the Kerala Congress faction led by veteran leader P.J. Joseph, on whom the Congress leaders placed full faith, instead of trying to keep both factions within the UDF fold. In retrospect it was a serious error of judgement, with Joseph's faction and the UDF suffering defeats even in Joseph's strongholds in Idukki district, especially in Thodupuzha municipality, his home turf. Moreover, for the first time in its 68-year-history, Pala municipality, a stronghold of K.M. Mani until his death a few years ago, was won by the LDF with the help of the Jose K. Mani faction. In the Assembly byelection held in Pala after K.M. Mani's death, the LDF had won the seat against the UDF candidate fielded by the Jose K. Mani faction. Clearly, the Congress had committed an egregious blunder in letting go of the Jose K. Mani faction.

The BJP-led NDA alliance, which came up with its best ever political campaign against the LDF government, increased its tally by about 400 plus seats. However, while it won 15.53 per cent of the votes in the Lok Sabha election a year earlier, it got only 14.52 per cent of the votes this time.

Its key objective of winning the Thiruvananthapuram corporation, where it came second in the 2015



H. VIBHU



PTI

CHIEF MINISTER Pinarayi Vijayan at a meeting in solidarity with the protest in New Delhi against the farm laws, in Thiruvananthapuram on December 23.

elections, came to naught once again. The BJP could only come second with 34 seats, as against 35 it won previously. However, the LDF increased its tally from 40 to 51, winning a majority on its own in the corporation council, largely benefiting from the utter rout of the UDF, which managed to win only 10 of the 100 seats.

NDA PERFORMANCE

Elsewhere in the State, the BJP, which had all along been struggling to break the dominance of the two prominent coalitions, and even managed some decent electoral gains at the local level in the 2015 elections, could win a majority only in two municipalities this time: Palakkad, which it retained, and Pandalam, a major centre of the Sabarimala agitation, where it posted a surprising victory. The party also registered a comparatively better performance in the grama panchayats, winning 23 of the 941 grass-root panchayats, as against 14 it won in 2015.



H. VIBHU

RAMESH CHENNITHALA, Leader of the Opposition.

However, despite the commotion it created against the LDF government, and the obvious glitter in its election campaign, the BJP and its six-party NDA coalition ended up with very little of the spoils to match the pre-election posturing, even though in many local bodies it displayed signs of improved gains. The party contested more seats than in 2015. In most of these seats, it had the satisfaction of seeing an erosion in Congress votes benefiting its candidates, even though the eventual victory went to the LDF.

The only region where the UDF could salvage some of its prestige was north Kerala. But there, too, the Congress-led front rode on the back of its strongest ally, the Muslim League, and on a controversial 'secret' understanding with the Welfare Party, the political wing of the Jamat-i-Islami. This secret alliance turned out to be a double-edged sword for the opposition Front, winning crucial votes for some UDF candidates while antagonising a large section of voters in other areas, leading to an open fight

within the Congress and driving a large chunk of Christian settler votes and secular votes in general to the LDF camp. At many places, the BJP also tried to make use of this pact at the local level to its advantage.

WEAKENING CONGRESS

The Congress' poor performance in the three-tier panchayats is a worrying sign of the party's weakening base in Kerala, when it is about to face the Assembly election in April. Just before the local body elections, in an interview to the *Deshabhimani* newspaper, Chief Minister Pinarayi Vijayan had drawn attention to a significant change in Kerala politics in recent years.

He said: "What is special in Kerala politics in recent times is that you cannot differentiate between the Congress and the BJP. If you examine their positions and approaches, in a lot many issues, you will feel 'isn't the Congress truly the BJP and isn't the BJP, the Congress'. The people know what will eventually be the consequence if somebody tries to gain benefit using the BJP as a prop. Perhaps only those who have continuously suffered losses by venturing out with the idea that they can make some gains by thinking and acting like the BJP alone may be unaware of this."

In general, the results of the 2020 local body elections once again became a celebration of the secular spirit of Kerala and a confirmation that the State does not favour alliances of mainstream parties with communal forces. The secret pact that the UDF struck with the Welfare Party reiterates the fact that it only proved beneficial to the BJP, and gained more credibility for the LDF's claim that it is the real secular force in State politics, not the Congress.

Indeed, the BJP, which had remained on the margins of electoral politics in the State, has managed to win an equivalent presence along with the two major fronts in the past few election campaigns. It has extended the nature and scope of its almost single-handed challenge from a few pockets in some districts to al-



S.K. MOHAN

K. SUDHAKARAN, MP, and UDF workers celebrating their victory in Kannur on December 16.

most all districts and corners of the State, and reaped rewards by making deft use of the weaknesses of existing coalitions, kindling controversies and raising hazy allegations.

This time it chose to hunt with the UDF and reaped incremental rewards at many places. But Kerala's response has been the unambiguous mandate it gave once again in favour of the LDF, among other reasons for the challenge the ruling coalition continues to offer against the BJP's communal agenda and the credible pro-people alternative policies it poses against those of the BJP-led Central government, which have often proved to be detrimental to the State's interest.

Both the UDF and the BJP tried hard to pin the election-eve political discourse in Kerala on the alleged "findings" of the Central investigative agencies in the gold smuggling controversy and the related allegations raised by them, away from the State government's governance record. But all through the elec-

tion campaign, the Chief Minister stuck to his position that anybody who had experienced life in Kerala at this critical juncture would not abandon his government.

LDF GOVERNANCE

Indeed, among the tangible achievements of his government were the way it handled the floods in two consecutive years and kept the COVID-19 pandemic at bay for several months, and, despite an acute financial crisis, ensured free supply of provisions to all ration card holders, distributed welfare pensions and opened free community kitchens to all those who needed it. Elsewhere, it distributed houses to 2.5 lakh homeless people under the Life Mission and brought about visible changes in the State's health and education sectors. In spite of the smokescreen of allegations, the majority of voters seem to have been convinced that no government in the recent past could have done more for them in such a short time, especially amid the challenges faced by the State. In retrospect, it seems the



THE HINDU ARCHIVES

JOSE K. MANI, leader of a breakaway Kerala Congress faction.

only thing Ramesh Chennithala got right before the elections was to identify the Chief Minister's daily press conferences as a threat to the electoral prospects of the Congress and the UDF.

From July this year, about the time when a television channel conducted a premature survey and announced that the ruling LDF was all set to return to power next year, the Congress and the BJP began their onslaught of yet-to-be proved allegations against the LDF government. The Chief Minister's hugely popular daily press conferences, conducted mainly to update the people about the State's COVID-19 status, also slowly became venues where he responded to opposition allegations against his government by repeatedly stressing the administration's achievements. On its own steam, it became the best public relations election exercise for the LDF, even as the Opposition Leader began meeting the press every other day to raise allegations one after the other.

As the elections approached, at one point Pinarayi Vijayan even described the Opposition as the "instigators of baseless allegations and specialists, thereafter, in withdrawing them". He added that "their biggest contribution has solely been the ruination of the historic social and welfare measures progressing in the State".

Going by the votes won by each front in the panchayats, municipalities and corporations, the LDF leads in 101 of the 140 Assembly constituencies in the State, the UDF in 38, and the NDA (BJP) in one. (In the 2016 Assembly elections, the LDF got 91 seats, the UDF 47, the NDA one, and Others one.)

Pinarayi Vijayan said the result of the local body elections "is the answer given by those who love Kerala against those who try to destroy the State and its achievements".

He added: "The State has given an appropriate response to middlemen and those who raise false allegations. The UDF is becoming irrelevant in Kerala. The BJP's claims have once again been demolished." □

A game plan gone awry

The outcome of the first-ever District Development Council elections has put paid to the BJP's plan to raise an alternative mainstream leadership in J&K and presented the pleasantly surprised Gupkar Alliance a signpost to build on its success. BY ANANDO BHAKTO

WHEN polling booths across the Kashmir Valley saw a healthy outpouring of voters on November 28 for the first phase of the District Development Council (DDC) elections, there was a general impression that the Bharatiya Janata Party's (BJP) plan of incubating an alternative mainstream leadership sans the Abdullahs and the Muftis, whom it missed no opportunity to berate as anti-national and corrupt, would be abortive.

The election outcome upheld

that point of view. The Abdullah- and Mufti-led People's Alliance for Gupkar Declaration (PAGD) emerged as the largest formation with 110 wards when the votes were counted on December 22. Altaf Bukhari's Apni Party, widely seen as a BJP proxy, secured just 12 wards, with its veteran leaders such as Dilawar Mir and Javaid Beigh tasting defeat.

The most striking feature of the PAGD's victory was its surprise ascent in the Jammu region, where it

was ahead in Ramban, Kishtwar, Poonch and Rajouri districts. There are 280 wards in total, 14 in each of the 20 districts of Jammu and Kashmir. For a party or an alliance to capture a district council, it has to secure a majority in its 14 wards. The BJP wrested only six of 20 districts—Jammu, Kathua, Udhampur, Samba, Doda and Reasi (all in Jammu region). The PAGD, on the other hand, won 13. Srinagar is up for grabs and its fate will be determined by the independents.



MEHBOOBA MUFTI, PDP leader and former Chief Minister at a press conference in Srinagar on December 23.



OMAR ABDULLAH, N.C. leader, addressing party workers after the DDC results, in Srinagar on December 23.

Yet, the election outcome should not be misconstrued as a positive vote for the two influential political families in Kashmir, who have long attracted cynicism from the disgruntled and alienated masses. Until the Abdullahs and Muftis fell out with the Narendra Modi dispensation and were detained on August 5, 2019, the day when Jammu and Kashmir's special status was ended, they were widely seen as a vehicle of Indian rule in the erstwhile State. In the words of Omar Abdullah, "there were enough Kashmiris that were happy to see us detained". That perception remains.

VOTER MINDSET

The people voted for them because they knew that the BJP was out to capture all of Kashmir's institutions through its proxies. They also voted because the elections were made to look like a referendum on the Centre's August 5 decision and it was imperative for them to make their disapproval known. In that context, the favourable outcome of these elections for the National Conference (N.C.) and the Peoples Democratic Party (PDP) has not erased the magnitude of the challenge they would encounter in rebuilding the wreck of mainstream politics.

In the public domain, the PAGD's constituents were euphoric. They described the results as a measure of how much the political battle lines have been redrawn. "The ruling BJP should read the writing on the wall and undo the decisions taken on August 5, 2019," said Farooq Abdullah, who heads the coalition.

In private, they were circumspect and aware of the hard combat that awaits them. The elections were hardly an exercise to bolster the process of democratisation, and the BJP will use every tool available in its armoury to divide the PAGD's ranks. The past months have witnessed renewed investigations into the Roshni scheme and repeated summoning of Farooq Abdullah as the agencies actively pursued the Jammu and Kashmir Cricket Association scam, among other elements of "vendetta politics".



COUNTING OF VOTES in progress at a centre in Jammu on December 22.

An interaction with close aides of Mehbooba Mufti gave one the sense that there was widespread apprehension in the party that the former Chief Minister could be implicated in a terror case. It is pertinent to mention that the Youth PDP's president Waheed Para was recently arrested by the National Investigation Agency (NIA) in a terror case involving Davinder Singh. This correspondent learnt that some officials in the Ministry of Home Affairs "had not taken Mehbooba Mufti's utterances lightly and were watching her moves". Since her release on October 13, the former Chief Minister has attacked New Delhi's office holders in her characteristic truculent spirit, calling them "dacoits" on more than one occasion.

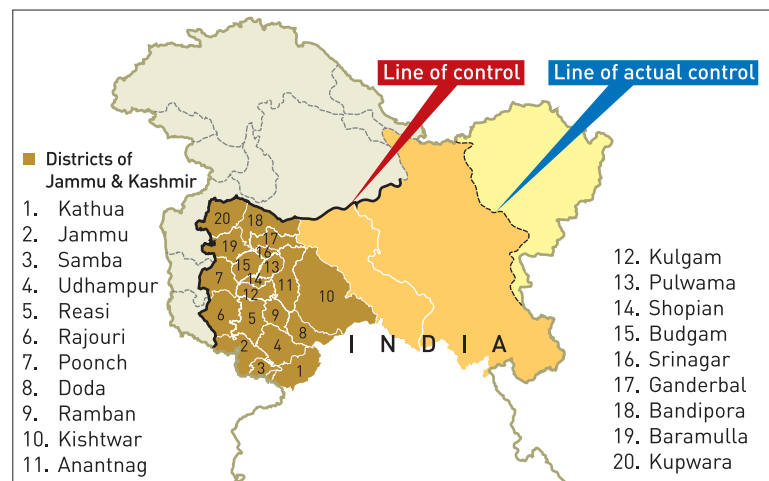
UPSETTING REVELATIONS

However, the election outcome has made several upsetting revelations for the BJP. One, its sharp and constant assailing of the Gupkar signatories will only give them political succour and improve their ratings among a populace otherwise hostile or indifferent to them. Two, Kashmiris will spurn any defectors from within the N.C. and the PDP, no matter the resources, capital and political facilitations made available to them. Three, the kind of negativity the BJP pioneered in Jammu, trying

to scare voters against the "Muslim other", has outlived its utility.

When one keeps the above scenarios in mind, it is not difficult to imagine that the BJP will likely recalibrate its approach vis-a-vis Jammu and Kashmir, with overtures to the N.C. as its natural outcome. Ever since Farooq and his son Omar Abdullah were released in February, they have battled perception of "a deal with New Delhi". This correspondent is given to understand that the Centre, at that point of time, had hinted at restoring Statehood, provided the Abdullah duo "showed good conduct". In political terms, it meant eschewing any anti-Delhi politics. Their initial quiescent behaviour pointed in that direction. But when New Delhi offered trifling domicile guarantees to the Union Territory, the lines of communication blurred.

Now, with the Apni Party experiment failing to take off, there is optimism within the N.C. that New Delhi will avoid further conflict and engage with them pragmatically. But will the N.C. be willing to break away from the PAGD? As *Frontline* had reported earlier, that formation was architected by Farooq Abdullah essentially by his realisation that "an independently acting, bellicose Mehbooba Mufti could be detrimental to the N.C.'s interests", as a member



of Omar Abdullah's inner circle told this correspondent at the time.

PRE-EMPTING MEHBOOBA

The Abdullahs knew that whenever the PDP leader was released, she would articulate the need for a large-scale street mobilisation against the August 5 action of the government, and were keen to pre-empt any such move. While public display of resentment would improve her standing with the people, the Abdullahs' plan of incremental resistance would be seen as "abandoning the cause". The PAGD was the Abdullahs' safety valve to preclude their bete noire's drift towards radical politics.

When one inspects the ongoing contrasting politicking of the N.C. and the PDP, one senses that the political fracas may reassert itself at the slightest provocation.

Mehbooba Mufti has been hitting the streets. She has been seen at different locations, often expressing solidarity with the nomads rendered homeless by the Manoj Sinha administration. She holds freewheeling pressers and is clearly aiming to rebuild her party. A confidant of the former Chief Minister admitted as much: "Her most urgent task is to revive the party's image and support base. She knows she has no shot at the government for the next five years. Importantly, she doesn't want to become the Chief Minister in such chaotic times."

The Abdullahs' circumstances are different. Before August 5, 2019,

the N.C. looked certain to sweep the next Assembly election in the erstwhile State. In the general election, it comfortably won all three Lok Sabha seats in the Kashmir Valley, with new entrant Justice (retd) Hasnain Masoodi dealing Mehbooba Mufti a blow in her stronghold, Anantnag in south Kashmir. In the past 15 months, while the BJP has been successful in engineering a vertical split in the PDP, the N.C. has managed to keep its flock together.

A private conversation with N.C. leaders revealed that the party was looking to counter New Delhi incrementally, without engaging in provocations. Winning a majority in the Assembly, bringing in resolutions to empower it, and waiting until a less hostile Central government replaces the current dispensation are critical components of their calculus. According to informed sources, in one of the N.C.'s internal meetings Farooq Abdullah issued a clear warning to dissenters to either abide by the party line or quit.

The N.C. admits privately that no party in Kashmir can hope to form a government unless it repairs ties with New Delhi and decides to work together on areas of agreement. A guessing game has begun within the N.C.'s ranks, with several senior leaders speculating: "Is Omar Abdullah talking [to New Delhi]?"

If voices from within the N.C. are to be believed, Omar Abdullah may be talking to New Delhi through a Sikh leader of the party who is his

conduit to the Centre. A senior N.C. leader told *Frontline*: "Omar has not been articulating much in the PAGD meetings." The senior leader views Omar's aloofness as an indicator that he might be engaged in parallel talks elsewhere.

However, Salman Sagar, the party's influential young leader, asserted that the coalition would not fragment. "This alliance was formed to restore whatever had been taken away from Jammu and Kashmir unilaterally rather than to capture power; it was formed when we weren't even aware that any elections would be held."

Siddiq Wahid, an ace scholar and political commentator, said the PAGD's credibility would be tested in the days following its victory. "It is imperative for the Gupkar allies to resist the temptation of seeking individual glory. One can sense that whereas the N.C. is acting as a moderate force, the PDP is rooting for aggressive politics. The two need to get rid of any emerging tension."

A close aide of Mehbooba Mufti warned: "Whoever exits [PAGD] will do so at his own peril, as his public standing would be dented." While that is true, there are other grave considerations facing the N.C. Within the N.C., there is a rising fear that if they do not minimise fissures with New Delhi, the Modi government could bifurcate Jammu and Kashmir yet again, giving Statehood to a separate Jammu province and keeping Kashmir under its direct control. If that happens, Kashmir would be doomed for a long time. The Congress' flip-flops on issues pertaining to Jammu and Kashmir has made it obvious that if it returns to power, it would opt for realpolitik rather than show magnanimity to the Muslim-majority Valley.

The senior leaders of the N.C. are unanimous that their strategy of incremental resistance is the only pragmatic and implementable option. But several questions remain: What price will the BJP exact for setting the terms of rapprochement? Will it include abandoning the struggle for restoration of special status? Can the BJP be trusted? □

Bandwagon effect

The Trinamool Congress suffers a huge setback as heavyweight leader Suwendu Adhikari and several others join the BJP, but workers of the saffron party are jittery over the massive influx from the Trinamool.

BY SUHRID SANKAR CHATTOPADHYAY

IN the biggest clutch of defections on a single day that the ruling Trinamool Congress in West Bengal has witnessed in recent months, former State Minister Suwendu Adhikari joined the Bharatiya Janata Party (BJP) at a rally in Pashchim Medinipur on December 19, along with a host of leaders and lawmakers. Union Home Minister Amit Shah was in attendance. The move

ended months of political speculation about where Suwendu Adhikari, one of the tallest mass leaders that the Trinamool had, was headed. His former party may face further defections of workers and leaders ahead of the Assembly election due in 2021.

Suwendu Adhikari's joining the BJP is being seen as the single biggest political development before the election, which is just a few

months away. Even though the BJP's rise in the State has been swift over the last couple of years, its organisational strength at the grassroots was weaker than the Trinamool's. Suwendu Adhikari, who is known for his organisational skills and mass appeal, is expected to give the saffron party an edge over the Trinamool, which now appears to be struggling to keep its house intact. Nine mem-



SUWENDU ADHIKARI (in blue jacket) links hands with Union Home Minister Amit Shah at the rally on December 19 where he formally joined the Bharatiya Janata Party. Also seen are BJP State president Dilip Ghosh and Mukul Roy, who made the shift from the Trinamool Congress to the BJP some time back.

bers of the Legislative Assembly joined the BJP along with Suwendu Adhikari on December 19—six from the Trinamool and one each from the Communist Party of India (Marxist), the Communist Party of India and the Congress. (Suwendu Adhikari himself recently resigned his seat in the Assembly). Five influential minority leaders, and several other leaders at the block and district levels also joined the BJP with them.

Suwendu Adhikari's speech at the rally made it clear what he would be bringing to his new party: "I have just started. Give me 24 hours, and you will see the difference in every booth and in every neighbourhood.... I want to assure you that I have not joined the BJP to throw my weight around. I will not be ordering you about. I will do whatever the party wants me to do. If it wants me to paint graffiti, I will; if it wants me to plant flags, I will do it." Once counted among the biggest opponents of the BJP, he touched Amit Shah's feet and hailed him as his elder brother. Training his guns on his former leader, Mamata Banerjee, and her nephew and heir apparent to the party leadership, Abhishek Banerjee, he said, "What I do, I do with integrity. When I was with the Trinamool, I worked for the Trinamool, and today I say, throw out the extortionist nephew!"

The Trinamool leadership struck back. It called Suwendu Adhikari a "traitor" and a "coward" and alleged that he had joined the BJP to save his own skin. Suwendu Adhikari was, after all, one of the Trinamool leaders who were caught taking cash on camera in a sting operation carried out by the news portal Narada News, which the BJP first made public just before the 2016 Assembly election. Of the 11 top Trinamool leaders shown accepting wads of notes from a representative of a fictitious company, Impex Infrastructure (set up for the sting operation), three are now in the BJP—Suwendu Adhikari, former Kolkata Mayor Sovan Chatterjee, and Mukul Roy, once considered Mamata Banerjee's closest aide. Mukul Roy was seen not taking the money but giving instructions

about whom it should be handed over to. The Central Bureau of Investigation (CBI) is investigating the case; the charge sheets are yet to be filed.

A PRIZE CATCH

According to BJP sources, the saffron party had its eyes on Suwendu Adhikari for quite some time. Suwendu Adhikari had found his political feet in the violent anti-land acquisition movement in Nandigram in 2007-2008. He played a leading role in the movement, which was triggered off when 14 villagers were killed in police firing on March 14, 2007. The Nandigram movement was instrumental in propelling Mamata Banerjee to power in 2011.

The Adhikaris are the most powerful political family in and around Purba Medinipur district. Suwendu Adhikari's father, Sisir Adhikari, is a veteran Lok Sabha MP; his brother Dibyendu Adhikari is a Trinamool MLA; another brother, Soumendu, is the Chairman of a municipal corporation. Suwendu Adhikari's own political influence is spread across several districts. Until recently he was in charge of the party organisation (observer) in as many as five districts—Purba Medinipur, Pashchim Medinipur, Jhargram, Murshidabad and Malda. He was the architect of many electoral victories for the Trinamool at the local and rural level.

He was also one of the most powerful Ministers in Mamata Banerjee's Cabinet, heading three departments—Transport, Irrigation, and Water Resources Investigation and Development. He was the go-to man for the party before elections. The BJP had calculated that Suwendu Adhikari's crossing over to its fold would not only translate into gains from an organisational perspective but also precipitate a rush from the Trinamool camp and thereby further weaken the ruling party.

Suwendu Adhikari quit the party on November 27 amid talks of a growing rift between him and the Trinamool. From that point, his joining the BJP was inevitable, though



ASHOK BHAIJIK/PTI

both he and the BJP were tightlipped about it. His imminent departure opened up the floodgates of discontent within the Trinamool. One leader after another began to speak out against the top leadership and hint at leaving the party themselves. On December 16, Suwendu Adhikari resigned as a Trinamool legislator, and the following day he quit the party.

The mass defections may help the BJP to build up momentum before the election and at the same time

CHIEF MINISTER Mamata Banerjee dancing with a tribal woman during the inauguration of "Bangla Sangeet Mela" in Kolkata on December 23. The Trinamool Congress is putting up a show of nonchalance amid the rush of defections from the party.

demoralise and weaken an already beleaguered Trinamool, but they are not without consequences. Resentment among the foot soldiers of the party, who have been at the receiving

end of violence allegedly perpetrated by Trinamool workers, is now brimming over in protests and demonstrations against new inductees such as Shyamaprasad Mukherjee of Bankura district, a former Minister from the Trinamool, and Jitendra Tiwari, MLA and former Mayor of Asansol Municipal Corporation. On December 21, senior BJP leader Saumitra Khan's wife, Sujata Mandal Khan, defected to the Trinamool in protest against people like Suwendu Adhikari joining the party. "People who have shed blood for the party are being ignored and undeserving people coming from the Trinamool are being given prominence," she said. Saumitra Khan accused the Trinamool of "stealing" his wife.

Jitendra Tiwari was forced to retract his announcement of quitting Trinamool in the face of protests from BJP workers and leaders. He had given a stirring speech when he resigned from the party and his post as Mayor indicating that he would return as a member of the BJP. Later he was forced to admit that leaving the Trinamool was a "bad decision". The Trinamool was only too relieved to be able to retain an important leader in the face of large-scale defections.

However, retaining disgruntled people whom the BJP will not have is also problematic. A senior Trinamool source said: "The problem we are facing now is not so much with those who have left for the BJP, but with those who have been rejected by the BJP. Their presence is disturbing a lot of people within the party, and yet at this point we cannot afford to lose any more members." That the Trinamool cannot afford to expel such leaders shows the pressure the party is under.

TWO-PRONGED ATTACK

While the State BJP has been systematically breaking the Trinamool's party organisation, the BJP-led government at the Centre has been putting pressure on the State administration by ordering the transfer of three senior Indian Police Service officers who were in charge of

the security of BJP president J.P. Nadda during his trip to Diamond Harbour on December 10. Nadda's convoy was attacked, allegedly by Trinamool workers. The BJP had alleged that the security provided for Nadda by the State government was not adequate. The BJP and Governor Jagdeep Dhankhar have long accused the State administration and police of being partisan in their dealings with the opposition.

The transfer order has led to a fresh stand-off between the Centre and the State. Mamata Banerjee has accused the Centre of interfering in the State's affairs and browbeating the administration. She tweeted: "GoI's order of central deputation for the 3 serving IPS officers of West Bengal despite the State's objection is a colourable exercise of power and blatant misuse of emergency provision of IPS Cadre Rule 1954... We wouldn't allow this brazen attempt by the Centre to control the State machinery by proxy! West Bengal is not going to cow-down in front of expansionist & undemocratic forces."

Maintaining that it was functioning within the ambit of the Constitution, the Centre went ahead with the transfer of Inspector General (South Bengal) Rajeev Mishra, DIG (Presidency Range) Praveen Kumar Tripathi, and Diamond Harbour S.P. Bholanath Pandey. Amit Shah countered Mamata Banerjee's allegations saying: "The letter which the Centre has written is completely constitutional and as per law. The letter is written under the ambit of federal structure and she should refer to the rules and speak to the Centre."

Chief Ministers of opposition-ruled Delhi, Punjab, Chhattisgarh and Rajasthan supported Mamata Banerjee, as did Dravida Munnetra Kazhagam leader M.K. Stalin. "Centre is brazenly interfering with State Govt functioning by transferring police officers. My gratitude to @bhupeshbaghel @ArvindKejriwal @capt_amarinder @ashokgehlots1 & @mkstalin for showing solidarity to people of Bengal & reaffirming their commitment to federalism. Thank you!" she tweeted. □

For a flawless law

The Maharashtra government **defers the Shakti Bill**, a proposed law on crimes against women and children, after women's rights lawyers and activists protest against its contentious provisions. BY **ANUPAMA KATAKAM**

SENSITIVE to crimes against women, the Uddhav Thackeray government tabled the Maharashtra Shakti Criminal Law (Maharashtra Amendment) Act, 2020, and the Special Court and Machinery for Implementation of Maharashtra Shakti Criminal Law, 2020, on December 14, the first day of the curtailed two-day winter session of the Assembly. But the proposed Bills invited loud protests from women's rights activists and opposition political parties. Describing the draft Bills as regressive, superficial and deeply flawed, rights activists said the Shakti Bill should be passed only after consultation with experts.

Taking cognisance of the demand for a detailed discussion on the draft Bill proposing crucial changes to the existing laws on violence against women and children, the government deferred approval for the Bill. It referred it to a 21-member joint select committee of both Houses of the legislature. Government sources said more than half of the committee would consist of women members. The committee has time until March 1, 2021, to submit its recommendations.

Veena Gowda, a senior women's rights lawyer, welcomed the government's decision and hoped a more holistic law would be created.

The twin Bills propose to reduce crimes against women and children by imposing stringent punishment. Women's rights lawyers and activists in Mumbai told *Frontline* that severe punishments such as death and life imprisonment were certainly not de-

terrents. A strongly worded letter signed by 30 women's organisations, which was given to the Chief Minister on December 11, reads: "Some provisions are not only anti-women but negate the very offence of rape. The effect of this Bill will completely deny women any hope of justice." This was one of the documents the Chief Minister acknowledged when he deferred the Shakti Bill.

QUANTUM OF PUNISHMENT

The Bill seeks to increase the quantum of punishment for all crimes against women which include harassment on social media. The contentious provision, however, is the death sentence for rape, acid attacks, and sexual offences against children. The Bill suggests adding a third explanation in Section 375 of the Indian Penal Code (IPC) regarding "presumption of consent". It means in case two adults are involved, the accused can appeal for "consent or implied consent". For crimes termed "heinous" the punishment will be imprisonment for not less than 10 years, even up to life imprisonment. Additionally, the Bill aims to set up select police teams and 36 special courts in the State, with a special prosecutor. There will be an online women and children offenders' registry with convicts' details and a link to the national registry of sex

CHIEF MINISTER Uddhav Thackeray (right) and Deputy Chief Minister Ajit Pawar at a press conference in Mumbai on the eve of the Maharashtra Assembly session on December 13.

offenders. Those convicted of acid attacks would have to pay Rs.10 lakh to the victim for surgery. Threats and intimidation of women on social media will be considered an offence entailing a maximum punishment of two years and a fine of Rs.1 lakh. Another provision is to punish those filing false rape cases to extort, threaten or defame the accused.

The draft Bill seeks to make these amendments within vital sections of the IPC, the Code of Criminal Procedure (CrPC) and the Protection of Children from Sexual Offences (POSCO) Act. While the stricter punishment is suggested under the IPC, the proposed amendments to the CrPC seek to bring down the investigation period from two months to 15 days, the trial period from two months to 30 days, and the appeal period from the six months to 45 days.

Across the board, rights activists say the death penalty for rape will be detrimental to the victim. On the amendment on "presumption of consent", women's rights activists said

the provision "feeds into the patriarchal construction of consent and conduct of women".

The letter to the Chief Minister stated: "It is the certainty of investigation, trial and punishment that works as a deterrent rather than the severity of punishment.... The possibility of the accused person being awarded the death sentence multiplies the conflict and the trauma faced by the victims and is most likely to prevent the reporting of such crimes." The letter is also emphatic about the danger of the victim being killed after the rape in order to wipe out evidence.

Flavia Agnes, a senior lawyer who runs the women's rights organisation Majlis, said: "Quite simply most times the victim is raped by a relative or a known person. First, not many women will file a complaint knowing a family member could be executed. Second, the victim is in danger because the rapist will kill her/him so that there is no witness or evidence." Flavia Agnes, who has been in the forefront of creating a rehabilitation programme along with the state for rape victims, said it would have been wiser to improve the infrastructure in the courts for cases that deal with crimes against women.

As for punishing people reporting false cases, the activists said in their letter that the provision "perpetuates the patriarchal notions of viewing women with suspicion, as unworthy of being believed and likely to incriminate men in false cases for unscrupulous purposes". Another absurdity is that the time frame suggested by the Bill is 15 days

for investigation and the trial a month later. "A hurried investigation and trial would more often than not lead to miscarriage of justice," the letter stated.

Several criminal laws had provisions for punishments for many of the crimes covered by the Shakti Bill, the lawyers said. For instance, the proposed inclusion of Section 354E (harassment of women by any mode of communication) in the IPC is targeted at punishing those intimidating women through the electronic media and social media platforms. This crime is already punishable under Sections 354A to 354D of the IPC and Sections 66E, 67 and 67A of the Information Technology Act, 2000. Similarly, the POSCO Act delivers death to serious offenders. Following the Nirbhaya rape case, the law was amended to include capital punishment for a repeat offender or in a case that resulted in the victim going into a coma.

Veena Gowda said: "This is a short cut. Lawmakers are missing the point. It is not severity of punishment that will act as a deterrent. There must be consistency and certainty. If I know there will be a thorough investigation and I know it works, that is a deterrent. Focus on making that system work, rather than adding layers.... There is so much they can do. For example, better forensic labs, counselling and sympathetic medical examinations could be a beginning. Strengthen, improve the attitude of the courts on this issue and sensitise the existing framework of the laws pertaining to crimes against women."

WITNESS PROTECTION AND SENSITISATION

Susan Abraham, a Mumbai-based human rights lawyer, said: "This is a dead letter law. If you talk about justice for women, you need to have protection for women. Start proper witness protection programmes and complete protection during trials. You have to get to the root of the problem. We are not looking at the actual problem of dealing with violence against women. Furthermore, first tutor society on protecting wo-

men, then make laws."

Susan Abraham, who has experience with the State government on rights cases, said: "The Bill will have no meaning at the ground level. It is a knee-jerk populist measure. If it is to get votes, then it is not the right thing to do." She pointed out that new laws would not be required if the current infrastructure was improved. For instance, safeguards such as women's cells in police stations have wound up and "protection officers", as stipulated by the Domestic Violence Act, are non-existent.

In spite of the constant political wrangling that has stalled development in the State, there is a consensus among all parties on protection for women against crime. A government source said the Shiv Sena was fulfilling a promise made in the run-up to the Assembly election in 2019. Rights activists question the hurry in introducing the Bill, as they feel a poorly thought-out Bill could result in irreparable damage.

As per the National Crime Records Bureau data, Maharashtra topped the country in the "heinous category—gang rape with murder" with 47 cases in 2019, and is one of the top five States in crimes against women. This could be the reason for the hurry in tabling the Bill. Lawyers believe that the Hathras rape incident in Uttar Pradesh must have got Maharashtra worried as it has a reputation for atrocities against Dalit women.

In 2011, the State government, along with a team of lawyers under the banner of *Rahat*, started a compensation and hand-holding programme for victims of rape. Once the crime was registered, the government paid Rs.2 lakh to help the survivor cope with difficulties. The programme has run into a bureaucratic mess. Flavia Agnes said the victim now had to appear before a legal aid committee without a support person. If the case did not go in her favour, the victim would have to return the money. "Further their attitude is callous and dismissive. This needs to be addressed," she said.

The Shakti Act is modelled on Andhra Pradesh's Disha Act. □



EMMANUEL YOGINI

Evidence of innocence

The **acquittal of Tablighi Jamaat** members from abroad nails the widespread lie that they were wilfully spreading COVID-19 and raises questions about the motives behind the demonisation of Muslims.

BY **ZIYA US SALAM**

BARELY a week after a Delhi sessions court acquitted 36 foreigners facing trial for allegedly flouting COVID-19 guidelines while participating in a Tablighi Jamaat congregation in March, Markaz, the headquarters of the Muslim organisation in New Delhi, lies forlorn—no celebrations, no chest thumping, not even a special prayer. Normally a beehive of activity with thousands of worshippers on any given day, the Markaz has remained closed since the media outrage over a congregation in March that was accused of spreading COVID cases across the country.

Even the acquittal of the men said to have attended the congregation has failed to lift the spirits of the organisation. The Jamaat is now seeking dismissal of the Arvind Kejriwal government for filing a first information report (FIR) in the case and creating “disturbance in the name of religion”.

The reaction is explained by the Jamaat’s spokesman, Shahid Ali, who considers the court verdict only an incomplete victory. “We consider it a partial victory. Just acquittal is not enough; stringent punishment for the guilty is necessary.”

He added: “The inspector of the police station is being made a scapegoat. Who registered the FIR? We

FOREIGN nationals belonging to the Tablighi Jamaat released from the Birsa Munda jail after getting bail from the Jharkhand High Court, in Ranchi on July 21.

have to ask at whose behest it was it filed. I am talking of Arvind Kejriwal, the Chief Minister of Delhi, at whose behest the complaint was filed. Please do not look for small entities. Like the Tablighi Jamaatis, the local policemen are being made a scapegoat. We request the President to dismiss the Kejriwal government for creating disturbance in the name of religion. Remember, the Delhi government in its daily bulletin on COVID victims used to make a special mention of the Markaz.”

The practice of mentioning the Markaz in connection with the coronavirus infection continued until April 11, when Delhi Minorities Commission intervened, objecting to the classification of victims based on religion or a religious body. How-

ever, much damage had already been done, with newspapers reporting separately about the number of COVID positive cases emerging from the Markaz. Earlier, the sessions court came down heavily on the Delhi Police—which reports to the Home Ministry—including Mukesh Walia, the Station House Officer (SHO) of Nizamuddin police station, and also talked of the motives behind the arrest of the Jamaatis.

The accused, who hailed from the United States, the United Kingdom, Kazakhstan, Indonesia, France, Tanzania, Sudan, Thailand and Sri Lanka, had pleaded that none of them was present at the Markaz “during the relevant period” and that they had been picked up from different places so as to “maliciously pro-

secute them upon directions from Ministry of Home Affairs”. The court acknowledged the probability of this plea. While passing the order, Chief Metropolitan Magistrate Arun Kumar Garg slammed the Nizamuddin SHO, the complainant in the case, and the investigating officer for lapses in identification of the accused.

It said: “It is beyond comprehension of the court, as to how IO (Inspector Satish Kumar) could have identified 952 foreign nationals out of 2,343 persons who, as per SHO, were found flouting the guidelines, without any Test Identification Parade (TIP), but on the basis of list provided by MHA (Ministry of Home Affairs).” The court effectively questioned the quality of the investigation into the case.

The court laid bare the police’s claim of a thorough investigation into the congregation held between March 13 and 15 and afterwards when the COVID restrictions came into force from midnight of March 24-25. It also called into question the “creditworthiness” of the personnel concerned.

Mukesh Walia had deposed before the court regarding identification of the accused following his visits to the Jamaat premises between March 12 and April 1. The Tablighi register produced by the police as proof of the foreigners’ arrival

and stay failed to convince the court. The court noted that the contents of the register produced by the prosecution did not prove that the accused arrived at the Markaz on the dates mentioned against their names, or that they stayed at the Markaz until the end of March.

According to the court, the prosecution failed to prove the documents, as per law, to establish the presence of the accused persons at the spot. Also, as the accused did not have any symptoms of COVID-19 during their alleged period of stay in Nizamuddin, “they cannot be said to have indulged in commission of any negligent act likely to spread infection”. The accused had been charged with offences under Sections 188 and 269 of the Indian Penal Code (IPC) and Section 3 of the Epidemic Diseases Act, besides the relevant provisions of the Disaster Management Act, 2005.

The latest ruling comes on the heels of similar bail and/or acquittal of Tablighi Jamaat members by courts in Chennai, Bengaluru, and the Aurangabad Bench of the Bombay High Court. Read together, they nail the lie of Tablighi Jamaatis acting as spreaders of COVID-19 or that the body had wilfully flouted visa regulations or the aforementioned Acts.

FAKE VIDEOS

The acquittals also bury the ghosts of fake videos circulated on social media allegedly showing Tablighi Jamaatis spitting at health officials and policemen, or disrobing before female nurses in quarantine facilities, or asking for special facilities in quarantine.

The AltNews fact-checking portal had then proved such videos to be either completely false or totally unrelated to the Tablighi Jamaat. However, the videos led to a spree of anti-Muslim actions, including a couple of Bharatiya Janata Party (BJP) legislators in Uttar Pradesh trying to chase away Muslim vendors from their colonies, or asking people not to buy goods from Muslim shopkeepers.

The Jamaat had then maintained

silence, preferring to pursue the case in different courts across the country. Incidentally, the Jamaat is the largest Muslim organisation in the world. It is an apolitical body that stays away from emerging day-to-day issues and prefers to concentrate on self-rejuvenation through prayer sessions and other rituals. It works exclusively among the Muslim community, staying away from any attempts at conversion. It has never taken a stand on even highly emotive issues such as instant triple talaq or Babri Masjid, preferring to confine itself to ritual retreats and mosques.

Shahid Ali said: “We have every hope that now the Markaz will also reopen and normal activities will resume.” Importantly, the Jamaat will not seek compensation for those acquitted by the court. “The Jamaat believes in, and works for, afterlife. The resorting to legal proceedings is the privilege of the sufferer. The individuals concerned may do so, but not the Tablighi Jamaat as an entity. The Jamaat believes not in worldly affairs. I do not think they will ask for compensation.”

Incidentally, the 36 members were the last of the foreign accused to face trial in the case. According to court records, 952 foreigners were initially accused by the Delhi Police of breaking COVID violations. Over 900 of them had pleaded guilty as part of a plea bargain as they did not want to stay back in India to face trial. However, 44 foreigners decided to face trial to clear their names of any wrongdoing as far as COVID regulations or visa rules were concerned.

The trials commenced on August 10 following directions from the Supreme Court. Eight of the accused were discharged by the sessions court in August as it found no “prima facie evidence” against them.

The judgment will hopefully close the most controversial chapter in the life of the Muslim organisation that is nearly a century old, one that led to widespread suspicion of its policy of seclusion from worldly affairs and false accusations of being the principal COVID-19 spreader in the country. □



Pension pain

The Department of Military Affairs' new proposals to increase the retirement age of officers and lower the stipulated pension of officers opting for premature retirement to contain the booming pension bill has been widely criticised. BY RAVI SHARMA

THE fastest growing component of India's defence budget is the defence pension bill and not expenses on the procurement of military hardware. The Indian Army, with 1.3 million soldiers, is the world's second largest armed forces and the only major fighting force in the world that keeps recruiting personnel instead of downsizing its strength.

According to the report of the Parliamentary Standing Committee on Defence (2019-20), the Government of India provides pension to approximately 32,35,730 retired defence personnel, of whom 26,33,947, or 81 per cent, are military pensioners, or their dependants, 6,01,783, or 19 per cent, are defence civilian pensioners or their dependants, and around 46,869 pensioners, or 1.4 per cent, are not classified in either category. To this burden, around 55,000 pensioners are added every year.

While the bulk of civilian pensioners are from the Ordnance Factory Board (OFB) and the Defence Research and Development Organisation (DRDO), military organisations such as the Military Engineer Services (MES), the Army Ordnance Corps (AOC), the Army Service Corps (ASC), the naval dockyards, the Base Repair Depots (BRD), equipment depots and army base workshops also contribute to the overall number of civilian pensioners. Besides these, as of 2020, about 73,700 personnel have superannuated from various defence establish-



GEN. BIPIN RAWAT, Chief of Defence Staff.

ments such as the Defence Accounts Department (DAD), the Borders Roads Organisation (BRO), the Jammu and Kashmir Light Infantry (JKLI) and the Coast Guard. Their pensionary benefits come from the Ministry of Finance's civil defence pension budget. In short, the total number of defence pensioners is 33,09,430, accounting for more than half of all Central government pensioners (65,36,469).

Although the initial increase in India's defence pension bill was because of changes in the colour service of a vast majority of personnel below officer rank (PBOR) resulting in almost every retiree becoming eligible for a pension, implementation of the Sixth Central Pay Commission (CPC) in 2008 more than doubled the pension budget in a period of two years. The defence pension bill went up further with the Seventh Central Pay Commission recommendations

in 2015 and the government decided in November 2015 to implement OROP (One Rank, One Pension) irrespective of the date of retirement. This resulted in a quantum increase of 46 per cent in pension expenditure in just a year.

The defence pension bill has more than doubled from Rs.55,000 crore in 2015 to Rs.1,33,825 crore in 2020-21 and is expected to go up by Rs.8,000 to 10,000 crore every year if the government implements its promise of revising defence pensions every five years. While the need to contain the steady rise in the defence pension bill cannot be emphasised enough, any methodology or means that is short-sighted, unimplementable, or affects the armed forces as a career option should be eschewed. A recent proposal of the Department of Military Affairs (DMA) to lower the stipulated pension of officers opting for premature retirement (PMR) appears to fall in this category. The DMA, which was established on January 1, 2020, functions under the aegis of the Ministry of Defence (MoD) and is headed by the Chief of Defence Staff (CDS) General Bipin Rawat. Gen. Rawat proposed a simultaneous increase in the retirement age for colonels (and equivalent ranks in the Indian Navy and the Indian Air Force) from 54 to 57 years, brigadiers from 56 to 58 and major generals from 58 to 59.

It is also proposed to increase the retirement age of the PBOR, the bulk of whom serve for a minimum of 15

years and are released depending on the rank and cadre vacancies in their stream and are compulsorily retired when they reach 35 years of age. The general opinion is that the PBOR of noncombat and specialised arms and services will be the biggest gainers of retirement age enhancement as these soldiers will now be able to serve until the age of 60. The Army will be able to better utilise this trained pool of personnel, who otherwise retired in their prime. The PBOR of combat arms will not gain as the Army needs younger and fitter men up front. Also, there will be no benefit for them on the pension front as they already come under the OROP scheme.

'UNTENABLE, ILL-CONCEIVED'

While the proposal to increase the age of superannuation had some supporters, the proposal to slash the pension of officers who retire was greeted with derision, with both serving and retired officers calling it ludicrous, unimplementable and legally untenable, since it would mean changing/altering mid-stream the terms and conditions of service in the armed forces. Pensionary benefits, which are worked out "at 50 per cent of emolument or average of emoluments drawn during the last 10 months period preceding the date of retirement, whichever is beneficial", actually attract many youths to join military service. A colonel retiring either prematurely (after completing 20 years of service) or on attaining superannuation will receive a monthly pension of around Rs.1 lakh for life.

Said a serving Brigadier: "The proposal to reduce the pension of an officer who retires prematurely will amount to change of service conditions retrospectively, and, therefore, will not be legally tenable. Such proposals will have to be implemented prospectively. The CDS is wrong in saying that only 'technically qualified personnel in the armed forces are unhappy' with such proposals. The New Pension Scheme [NPS] should be the norm in the defence services as it is for the rest of the country."

. Lieutenant General N.B. Singh

Strength of Armed Forces Uniform Personnel, April 2019

Service	Category	No.	% of total
Army	Officers	42,913	3.0
	Personnel below officer rank (PBOR)	11,85,146	82.4
	Total	12,28,059	85.4
Navy	Officers	10,979	0.8
	Sailors	58,073	4.0
	Total	69,052	4.8
Air Force	Officers	12,159	0.8
	Airmen	1,29,447	9.0
	Total	1,41,606	9.8
Total officers		66,051	4.6
Total others		13,72,666	95.4
Total (officers and others)		14,38,717	100.0

Note: These numbers do not include officers deployed in the Army Medical Corps (AMC), Army Dental Corps (ADC) and Military Nursing Service (MNS), personnel serving in the Defence Security Corps (DSC), non-combatants enrolled of the Indian Air Force, and new military recruits undergoing training. These elements together account for over 1,60,000 personnel.

Source: Compiled from "Demands for Grants (2019-20)", SCOD (2019-20), 17th Lok Sabha, 2nd Report, Lok Sabha Secretariat, December 2019.

(Retd), former Director General of the Indian Army's Corps of Electronics and Mechanical Engineers, said: "The CDS' move on pensions is ill-conceived and against the law of the land. The Supreme Court has in several judgments reiterated that pension is not a bounty but a right for services rendered. You cannot have different service conditions for a homogenous group of people in government service. The move has not found support in the Defence Ministry. The age extension recommended for officers and men is a welcome step, though there is the fear that it will create an ageing army."

A commodore posted at the naval headquarters described the twin proposals as "rubbish". The officer, who recently moved out of a key human resource appointment, told *Frontline*: "Officers who haven't made it to the next rank will naturally love it. Disenchanted and demotivated, they will sit back as guests of the government. This move will also put unnecessary pressure on commanding officers. It also flies in the face of making the armed forces a leaner and meaner machine. Being superseded is synonymous with the pyramidal structure of the armed

forces, but the age extension will result in officers staying longer even without promotions, just to claim pension benefits. At least now the armed forces can say no to undeserving personnel getting re-employed. Automatic age extension will result in the armed forces becoming like any other government organisation."

PREMATURE RETIREMENT

Under the DMA's proposal, officers seeking PMR after 20 to 25 years of service will receive only 50 per cent of the stipulated pension; those retiring after 26 to 30 years of service will get 60 per cent of pension; those retiring after 31 to 35 years of service will get 75 per cent of the entitled pension, and only those officers retiring after completing 35 years of full coloured service will receive the full pension. This move is clearly aimed at checkmating and penalising officers, especially the technically qualified specialists and super-specialists, who leave the service to seek a lucrative second career in the corporate world. The DMA proposal states: "The loss of such high-skilled manpower results in a void in the service skill matrix and is counterproductive." However, many defence observers feel that the proposals go against the culture and ethos of the armed forces.

Both the proposals fly in the face of the armed forces' human resource policy, including its steep and narrow pyramidal promotion structure. Out of a course of around 100 commissioned officers, all officers become Lt Col. after completion of 13 years of service, but hardly 30 make it as a selection grade colonel. The number varies marginally from service to service, corps to corps, depending on factors such as number of vacancies. Out of the 30 colonels, less than a third make it to the rank of brigadier, with hardly two or three brigadiers then becoming a two-star major general or three-star lieutenant general. Many officers opine that they should be given an option to leave the forces after 5/10/12/15 years of service, "as and when it becomes super clear as to what the fu-

Growing burden

THE Union Budget 2020-21 highlighted the rising cost of the defence pension bill. While the defence outlay of Rs.4,71,378 crore is 9.37 per cent higher than the budget estimates of 2019-20, the allocation for defence pensions, at Rs.1,33,825 crore, showed a 19.4 per cent increase from the previous year's allocation of Rs.1,12,080 crore. The defence budget is split into three major heads—revenue (moneys used in maintaining the weapons inventory, pay and allowances, infrastructure, and recurring expenses), capital outlay (money to modernise/ procure new weapon systems) and defence pensions. The allocation for procurement of military hardware at Rs.1,13,734 crore is lower than the expenses on pensionary benefits. The outlay for maintenance of the weapons inventory, pay and allowances, infrastructure, and recurring expenses is Rs.2,09,319 crore.

The periodic increase in salary, pensions and other benefits, coupled with the ever-increasing pool of manpower has meant that 59 per cent of the Ministry's expenses goes towards servicing the pay and allowances of its 1.43 million uniformed personnel, 3,98,433 defence civilians, and 3.24 million defence pensioners. The personnel below officer rank (PBOR), constitute the biggest pensioner segment, accounting for 77 per cent of pensioners and 49 per cent of the total number of people funded through the MoD's budget. The allocation to meet the pensionary liability of retired defence pensioners amounts to 4.4 per cent of the Central government expenditure and 0.6 per cent of India's gross domestic product.

Ravi Sharma

ture holds for them". Lt Gen. N.B. Singh voiced a broad swell of opinion when he said that the DMA was not considering organisational realities by advocating these proposals. He said: "Many of the officers who fail to make it to rank of colonel are around 35 to 37 years old, and with no prospects of future promotions. These officers cannot be expected to continue serving for another 18 to 20 years with no incentive. Premature retirement was intended to give these boys an easy way out.

The fact that, combat medics, pilots, combat engineers, signallers and other specialists are doing well after taking PMR, is not palatable to the CDS, as one can make out from his statements. The CDS must realise that nobody likes to change one's profession midstream when family commitments are at maximum."

KARGIL PANEL RECOMMENDATIONS

Why does the DMA want an ageing armed forces when the clarion call post Kargil conflict has been for an Army with a younger profile? The Kargil Review Committee (KRC) set up in 1999 under the chairmanship of K. Subrahmanyam had stated: "The Army must be young and fit at all times. Therefore, instead of the present practice of having 17 years of colour service (as has been the policy since 1976), it would be advisable to reduce the colour service to a period of seven to ten years and, thereafter, release these officers and men for service in the country's paramilitary formations.

After an appropriate period of service here, older cadres might be further streamed into the regular police forces or absorbed in a National Service Corps (or a National Conservation Corps), as provided for under Article 51A(d) in the Constitution, to spearhead a range of land and water conservation and physical and social infrastructure development on the model of some eco-development battalions that have been raised with a fair measure of success. This would reduce the age profile of the Army and the paramilitary forces and re-

duce pension costs and other entitlements such as married quarters and educational facilities."

The KRC had suggested that the manpower requirement of the Army could be met through the paramilitary forces which would "undertake recruitment on the basis of certain common national military standards and then send those selected for training and absorption in the Army for a period of colour service before reverting (them back) to their parent para-military formations". The committee's suggestion of an indirect mode of recruitment and lateral entry were unconventional, but were aimed at reducing colour service, improving the age profile, and, most crucially, reducing pension costs.

A Group of Ministers (GoM) set up in 2000 examined the KRC recommendations of a lower age profile and lateral entry. It noted that "there are problems relating to aspects of retirement age and command profiles in the armed forces" and argued for a reduced number of years of colour service. Implementation of the GoM's recommendations would have reduced the years of colour service, resulting in the retirement of many personnel without a pension, like it was before 1976, and ensured a check on the pension bill.

In 2001, the government set up a committee headed by A.V. Singh to look into the GoM's observations on the need to improve the age, command profile and promotional avenues and lower the pension burden in the armed forces. One of its key recommendations was time-scale promotions for officers up to the rank of lieutenant colonel/equivalent rank and, the creation of nearly 2,650 senior-level posts at the level of colonel and above ranks.

The committee sought to neutralise the financial impact of the move by earmarking 50 per cent of the officer cadre for Short Service Commission (SSC) officers, thereby saving on pensions. But following successive interventions of the Supreme Court all SSC officers, male and female, have now been given permanent commission. □

The disappearance of Roddam Narasimha

Roddam Narasimha (1933-2020), a great **scientist and scholar**, will be remembered in India for his contributions to the development of computing, aerospace technology as the initiator of the LCA programme, the space programme as the longest-serving member of the Space Commission, and in drafting the country's nuclear doctrine.

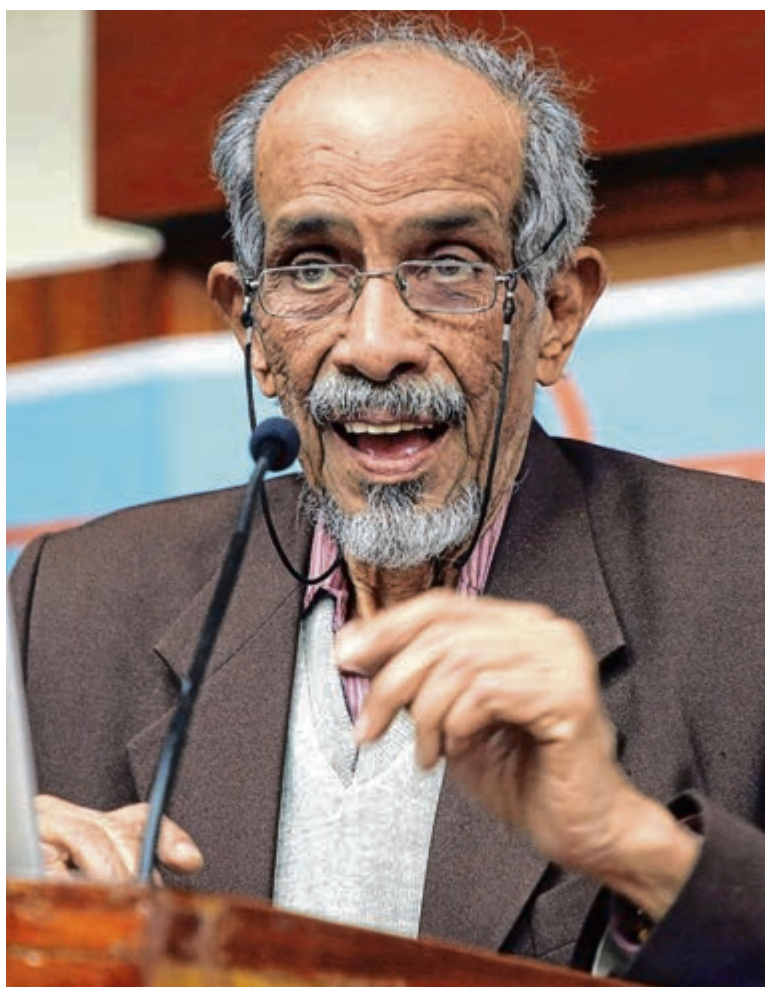
BY **U.N. SINHA** AND **SRINIVAS BHOGLE**

IT is hard to accept that Professor Roddam Narasimha has gone away. We have known him, admired him, and venerated him for almost half a century.

Year 2020 had been rough; there was the lockdown, and then there were illnesses and hospitalisations. Our regular Saturday morning chats at Professor Narasimha's place practically stopped. But one Saturday, this November, after confirming that he was at home, we decided to make an impromptu call. Narasimha was pleased to see us; although decidedly frail, the eyes still had the familiar warm glint. And, when it was time to leave, he walked with us to the door to say goodbye.

Narasimha was not just a legendary scientist and an intellectual colossus; he was also incredibly caring and affectionate. As a researcher, leader or thinker, Narasimha's top three traits were optimism, curiosity and courage. All his life Narasimha was the intrepid adventurer in science and technology; and, when required, he could also be the most committed crusader.

Consider, for instance, parallel computing. It was the year 1985, Narasimha had just taken over as the Director of National Aerospace Lab-



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PROF. RODDAM NARASIMHA receiving the Padma Vibhushan from President Pranab Mukherjee in New Delhi on April 20, 2013; (right) Addressing a session on Science, Technology and Innovation Policy-2013 at the IISc in Bengaluru in March 2013.



oratories (NAL), and scientists in NAL's Fluid Mechanics Division were livid at the poor number-crunching power of NAL's Univac computer. They met Narasimha to ask for more computing power. Narasimha bounced the problem straight back: "If you are unhappy with Univac, why don't you build your own fast *parallel* computer? They've built one at Caltech in the U.S. and I am sure we could put together one within a year ourselves."

The big surprise was that NAL actually built India's first parallel computer, Flosolver, within a year. Flosolver was faster than the existing Univac by at least a factor of three. Funding for Flosolver could have been tricky, but a 10-minute conversation was enough for Narasimha to convince Dr S. Varadarajan, the Director-General of the Council of Scientific and Industrial Research (CSIR), to sanction the Rs.20 lakh needed for the project.

The story does not end here. In 1986, at a meeting of the Science Advisory Council to the Prime Minister (SAC-PM), Rajiv Gandhi asked every member to give a 10-minute brief on what their pet project might be. Narasimha chose to talk about parallel computing. "The Prime Minister was so taken up by the idea that 10 minutes became nearly 90 minutes!", Narasimha later told us. And

as word filtered out of the Prime Minister's interest in parallel computing, every national establishment quickly announced their parallel projects; indeed, the creation of C-DACT, now C-DAC, was almost certainly the outcome of that meeting.

FATHER OF THE LCA IDEA

Narasimha was shy to talk of his role in the development of India's light combat aircraft (LCA, now Tejas), but there is no doubt that he set the ball rolling. In the late 1970s, Narasimha took time off as a professor at Indian Institute of Science (IISc) to spend a few years with aircraft design teams at Hindustan Aeronautics Limited (HAL). Based on these interactions, Narasimha argued that it was both feasible and desirable to build the LCA in large numbers. Narasimha's arguments achieved a rare resonance: the Indian Air Force (IAF) changed its perception, and Dr Raja Ramanna, the then Scientific Adviser to the Defence Minister, was sufficiently enthused to ask Narasimha to lead a team of experts from the IAF, the HAL and the Defence Research and Development Organisation (DRDO) to visit Germany, France, Sweden and England to obtain more insights and data. The team returned with a unanimous verdict endorsing the LCA concept. For the first time, all

the principal actors in Indian aeronautics appeared to be on the same page.

Later, a high-level committee, headed by Dr S.R. Valluri, which included a bigger contingent of aeronautical players, and of course Narasimha, gave the formal 'can-go-ahead' verdict after a detailed feasibility exercise. It then took Defence Minister R. Venkataraman just two minutes to clear the LCA programme.

"I WANT YOU HERE!"

In 1984, NAL was looking for a new director to succeed S.R. Valluri. Narasimha was the best man to succeed Valluri, but he failed to show up for the interview. "I didn't want it; I liked being a teacher and a researcher more," he later told us. But when the Chairman, Prof. Satish Dhawan, found Narasimha missing he sent his own car to fetch Narasimha with a brief message: "I want you here!" Narasimha could not say no to Dhawan, who was both his teacher and mentor. He joined as NAL's third Director in July 1984, just as he turned 51. He would continue at the helm until he retired in July 1993.

This was the first big leadership opportunity for Narasimha. There were formidable challenges: money was in short supply, foreign ex-

change was meagre, computing power was dismal, the crippling self-reliance slogan still ruled, and the worrying disconnect between academia, R&D, industry and users of aerospace technologies persisted.

Narasimha's prescription was a heady mix of 'hard' and 'soft' skills. The hard skills included innovative R&D, winning technology connections, and intelligent mathematical modelling. The soft skills included stronger networking, charismatic leadership, unbridled optimism, and his intense personal charm (it was always a great pleasure to interact with Narasimha).

Narasimha also brought in his other traits: of being a visionary (his crystal ball saw things that most others failed to see), of being a science and technology fanatic ("what would I have done in a world without science?", he once mused), of indomitable courage and confidence ("if there's a way to do something, we'll find that way," he used to say), and of being an inveterate dreamer (he was the first to dream of building India's own fighter aircraft).

THE BIGGER CANVAS

As NAL Director, Narasimha made an impressive start; often a great painter simply needs a bigger canvas to show off his ability and repertoire. He entered NAL as the LCA development programme was acquiring greater steam. An early challenge in aircraft development is wind tunnel testing—where you place a scaled-down aircraft model in a narrow and enclosed tunnel, unleash a controlled blast of air from one end, and see how the model 'behaves'.

When the question arose about where the LCA models would be tested, Narasimha naturally assumed that the wind tunnel testing would happen at NAL; after all, NAL's wind tunnels were built in the late 1960s in preparation for such a challenge. He was horrified when a top decision-making committee in Delhi asked him to agree to the proposal to do the wind tunnel testing abroad, because this was a 'time-bound' development programme. Narasimha later told us: "I was NAL's Director, and I was be-



WITH SATISH DHAWAN (left), his teacher and mentor, and K.R. Narayanan, the then Minister for Science and Technology, in Bengaluru.

ing asked to agree that NAL couldn't do this! Nothing could be more preposterous. So, right there, I gave an undertaking that we would complete all the wind tunnel testing ... and on schedule."

Eventually, NAL met every commitment; this involved a fundamental change in mindset, and the very style of administration. The wind tunnels worked for two shifts instead of one, and eventually round the clock. Narasimha won because he kindled everyone's hidden fires, pioneered outsourcing, and, most of all, because everyone wanted Narasimha to win. He had that kind of allure and luminescence.

THE SATISH DHAWAN INFLUENCE

While Narasimha's remarkable success as a researcher and academician was probably ordained, Satish Dhawan intervened at the key inflexion points to make sure that Narasimha successfully made the transition from good to great. After completing his "Masters" at IISc in the mid-1950s, Narasimha was not sure if he should look for a job or do research. That's when Dhawan suggested: "Why don't you stay here for two years and do some research, and we can have some fun?" And, after two years of fun, when Dhawan realised that he had nothing more to

teach Narasimha, he told him: "Now you better go to Caltech."

Narasimha spent some of the best years of his life at Caltech. He recounted so many Caltech stories. Talking of the American reaction to the Sputnik satellite in 1957, he said: "Everyone thought the Soviets were lying, and crowded on terraces to check out. To their great dismay, the bright little speck was indeed seen in the sky at exactly the appointed time." This Soviet success completely changed the U.S. perspective, and the R&D focus shifted almost overnight from aeronautics to space.

This also affected Narasimha's Caltech research plans. He had hoped to continue his work on turbulence, but research priorities shifted to outer space, where Navier-Stokes equations did not apply, and Narasimha therefore ended up working on rarefied gas dynamics and the Boltzmann equation.

But Narasimha was 24, at the prime of his powers, and everything seemed rather easy. His first paper, on rarefied gas dynamics, did not take too long to appear in print. A year later, Narasimha found himself at an international meeting in Berkeley, where someone was talking about his paper and declaring that it was all wrong. "You can imagine my surprise, but my PhD adviser, Prof. Hans W. Liepmann, was supportive.

We got chatting with other Caltech mathematicians, and I was reassured that my calculations were correct. It ended well; the speaker in Berkeley came down to Caltech, acknowledged his small error and withdrew the paper.” Narasimha’s confidence soared, and he started earning new respect in the U.S.; “I even earned a few lucrative consultancies while I was still a PhD student,” he recalled.

Narasimha was such an engaging *raconteur* with so many interesting stories to tell. That periodic clearing of the throat, and the engaging smile that frequently broke into a somewhat ironic laugh; we are going to miss all those moments.

BACK IN INDIA

Narasimha returned to India in 1962 to begin his Indian adventure starting as an assistant professor at IISc. Almost as soon as he returned, Dr Vikram Sarabhai invited him to Thumba to witness a rocket launch. That visit led to Narasimha doing some useful Monte Carlo calculations for ISRO.

At IISc, Narasimha quickly realised that he had to change track; serious computation was then not possible in India. Instead of grumbling about it, he cheerfully embraced theoretical mathematics, and proceeded to work on the “fascinating but neglected problem” of relinearisation of turbulent flows, in collaboration with Prof. K.R. Sreenivasan “who was one of our brightest students”. Many consider this to be among Narasimha’s best works.

MULTIFACETED

How could we describe Roddam Narasimha? “Great scientist and scholar”, “charismatic leader”, “mighty patriot”, “Sherlock Holmes of Indian S&T”, “eminent essayist”? He was arguably all that, and much more.

As a young engineering student, Narasimha remembers reading as many Holmes stories as he could; his friend wanted the book back in 48 hours. In the late 1970s, he got to play Sherlock Holmes while assisting the Satish Dhawan one-man committee. The pilots were refusing to fly



WITH THE AUTHORS U.N. Sinha (seated) and Srinivas Bhogle at a private function in Bengaluru, a 2016 picture.

the HS-748 (Avro) aircraft because they said its climb would be dangerously sluggish if one of the two engines failed. Narasimha enjoyed the adventure; a highlight of which was the IAF test pilot, Wg Cdr P. Ashoka, taking off with one of the Avro engines shut: “Just let my wife know if you see the plane crashing behind the bushes,” he requested before getting airborne. These test flights enabled Narasimha to compile valuable flying data, use it to develop the theory of stochastic corrective processes, and eventually conclude that there was no significant airworthiness issue of concern with the Avro.

As he aged, Narasimha became more Mycroft than Sherlock. He once told us: “I have been the chairman of so many investigation teams in aerospace, that I’m not sure I can now recall all of them.” But even he remembers the cloudy morning, sometime in July 1988, when a grim Prof. U.R. Rao, then Chairman, Indian Space Research Organisation (ISRO), walked in to meet him at the NAL Director’s Office. There had been two successive failures of the Augmented Satellite Launch Vehicles ASLV-D1 and ASLV-D2, and U.R. Rao asked Narasimha to head the investigative team. After studies spanning almost a year, Narasimha’s team determined that the failure was due to the brief instability after the

first rocket burnt out and before the second rocket fired. “That was a good investigation,” Narasimha recalled. “Since both failures were very similar, we knew that it had to be a design issue.” Soon, thereafter, Narasimha was invited to be a member of the Space Commission; he went on to become the Commission’s longest serving member (1989-2012).

As for being an essayist, we recall Narasimha lending us a book about good English writing. It was a slender book, but Narasimha’s ‘learning notes’ in the margins were as profuse as the number of words in the actual book. Good writing, and good scientific communication, was something that Narasimha deeply cared for. As President of the Indian Academy of Sciences (1992-94), he recommended the publication of a journal of science education. The first issue of *Resonance* appeared on January 1, 1996, and, 25 years later, the journal is still marching ahead strongly.

Narasimha’s knowledge of Sanskrit, acquired as a schoolboy (“although my father never considered this knowledge good enough”) coupled with his amazing felicity in the English language, persuaded him to read (and eventually write a book titled *Verses for the Brave*) about the *Yoga Vasistha*, believed to span an 18-day dialogue between Rama and the sage Vasistha. “What attracted me the most,” he told us, “was how

BY SPECIAL ARRANGEMENT

strongly the verses rejected fate. I was struck by the articulation of such a different philosophy. It was also so forcefully expressed... there was such verve, force, humour, lyricism and logic in the verses that reading them actually became a minor obsession with me."

HOPE AND DESPAIR IN CIVIL AVIATION

Narasimha always talked of the limitless options offered by civil aviation in India: "Civil aviation can be a net creator of wealth; not a consumer of wealth." During the 1980s and early 1990s, he showed projections to explain how India's air traffic would soar (at a time when Bangalore had just a dozen daily departures). He used to say: "If Brazil and Indonesia can do it, so can we!"

A lot of this enthusiasm got translated into the programme to design and develop the SARAS light transport aircraft. At the 2003 Bangalore air show, Narasimha's mood was buoyant. "Can it be boom-time for Indian aerospace?," he asked. And, with his eyes dancing, he said: "Although I'm posing this as a question, I strongly believe that the answer is yes."

When SARAS had a successful first flight on May 29, 2004, Narasimha could not stop smiling: "This is the day I was waiting for a long, long time!"

In some ways this was also the last hurrah. At a talk he delivered at NAL on his 73rd birthday in 2006, the optimism had diminished. "*Aeronautica is globalizing: Can India afford to keep out?*", Narasimha asked as he ruminated over an "apparent paradox": "When the basic fundamentals of Indian Aeronautica remain extremely strong, why isn't that boom coming? We don't seem to know how to exploit our potential and talent," he went on, and wondered if the endgame would be a Western group "exploiting our talent the way we can't ourselves".

In 2010, there was another glimmer of hope with the creation of the National Civil Aircraft Development (NCAD) programme. "This is an extraordinary step in Indian aeronau-

tics. We couldn't have asked for more!" Narasimha, now 77, and the 'wise old man' on NCAD exclaimed, during another lecture at NAL. "It's going to be an extraordinary challenge.... NAL must learn how to make and ride this approaching wave." He then proceeded to list the many formidable challenges ahead; it was a most remarkable enunciation.

Looking back, one is saddened. Narasimha still had the immense intelligence needed to wage a battle; he knew exactly how the war could be won. He still had abundant will, but was ruefully realising that there might be no way.

INSIGHT AND ERUDITION

Everyone who met Narasimha came away gushing how learned he was, and how charming. His handshake was warm and firm, and his handwriting was exquisite, and almost a work of art.

Conversations with him were immensely fulfilling. He was an excellent listener; he endeavoured to listen to every word you said, and if he did not catch the word, he would interrupt you and ask you to repeat. If he did not agree with you, he would start with an embarrassed "well ...", and then proceed to articulate his contrary point of view. He read voraciously, and was a prolific writer.

Narasimha was always influential, perhaps never more than during his years as Director, National Institute of Advanced Studies (NIAS; 1997-2004). His views were sought by individuals in the highest positions of power. He was often consulted on matters of national security. Following India's nuclear tests, there were many questions asked abroad about India's true intention. In response, the Indian government prepared its Nuclear Doctrine document; it was drafted almost entirely by Narasimha.

Narasimha invoked the alluring idea of 'computational positivism' to respond to Needham's poser: How did modern science come to birth in Pisa, instead of Peking or Patna? While the European method was based on hypotheses, generalisa-

tions, deductions and abstraction, Narasimha suggested that the Indian way was based on observation, examination and ingenious specific solutions or inferences; often called *yukti*. What was 'proof' for the Greeks was '*yukti*' to the Indians, but, somewhere along the way, proof completely overwhelmed and submerged *yukti*.

THE MONSOON AND THE CLOUDS

If Dhawan's big love was birds, for Narasimha it was clouds. As a child, Narasimha admired clouds for their mystique and variety. As a scientist, he realised that India's well-being was inextricably linked to the monsoon, and the rain that these winds deliver across the country. An accurate rainfall prediction was therefore essential, and among the many actors that play roles in the enormous monsoon drama, the cloud was the prima donna. The best monsoon prediction model would be the one with the best cloud model within.

Understanding cloud behaviour therefore became Narasimha's enduring passion; what troubled him was that we saw clouds every day with our eyes, but yet failed to understand the fundamentals of the phenomenon. So, Narasimha lovingly set up a cloud lab to create cloud-like flows. He was sure that these flows had important and fascinating stories to tell. It did not bother him that he was now 87, and officially old. The *karmayogi* never wavered from his *karma* till the very end. □

(This tribute draws heavily from G.S. Bhat and K.R. Sreenivasan's remarkable 2014 note in *Current Science*, the two wonderful interviews in *Bhavana* issues of April 2017 and April 2018, and the very exhaustive unpublished transcripts, archived by Dr Gopal M. Kamath, of our conversations with Narasimha in 2013 and 2014.) *U.N. Sinha and Srinivas Bhogle, former scientists of the National Aerospace Laboratories, Bengaluru, are Honorary Scientists at the Council of Scientific and Industrial Research-Fourth Paradigm Institute, Bengaluru.*

Scientist & mentor

Deeply immersed in acquiring and creating knowledge, Roddam Narasimha enjoyed the bliss of pursuing research with meticulous attention to detail, and could masterfully communicate that enjoyment to **inspire young minds**. BY **K.R. SREENIVASAN**

BY now, the news that Professor Roddam Narasimha (RN) passed away on December 14, at the age of 87, has spread in the nation at large. He was active until nearly the end; he is survived by wife, Dr Neelima Narasimha, and daughter, Dr Maithreyi Narasimha.

Several obituaries of RN have already appeared in diverse news outlets, small and large, and one of them has just been written by me and Professor G.S. Bhat of the Indian Institute of Science, another student of RN, for *Current Science*. Even earlier, Bhat and I had the good fortune of writing a longish article, containing a perspective of RN's life-time work, also in *Current Science*, under the larger heading of "Living legends in Indian science". Our good fortune was that RN read our account of his legacy, and we have reasons to believe that it pleased him. I had earlier written an assessment of RN's scientific work for his 70th birthday meeting, and, ten years earlier, authored a similar preface for a book edited with S.M. Deshpande, A. Prabhu and P.R. Viswanath, all of whom are RN's students, following a celebratory meeting on RN's 60th birthday.

RN was an important part of my intellectual life for more than 50 years. I am still distraught and cannot bring myself to write a clear-headed account of him; and I have not yet had the time to study his writings carefully. So I will make superficial comments about his science

and personal qualities, and briefly present two additional aspects. The first is on how his personal journey as a scientist began. RN wrote about that experience, which I will share with the hope that it will inspire some young people. One shouldn't think that identical circumstances prevail today or are relevant in specific detail, so the essential takeaway is the spirit. I will next discuss RN's theory of Indic knowledge; he neither took the view that everything worth knowing was known to the ancients, nor that everything from the past is worthless. This aspect of his scholarly work, to which I can only provide a sign post, is important for the young people of India today, who should shape their opinions on the basis of serious study.

Given the perfunctory nature of this article, I should warn the reader that she has to read the articles cited above for getting a fuller picture of RN. Two autobiographical narratives published as interviews in *Bhavana* will more or less complete the picture. One of these days, it is clear that a more insightful and comprehensive essay should be written about RN.

WHAT MOTIVATED RN TO BECOME A SCIENTIST?

In 2003 I was appointed the Director of the International Center for Theoretical Physics in Trieste (ICTP), Italy. Soon after that, I edited a book called *One Hundred Reasons to be a Scientist*. This was a

collection of nearly 100 articles, two or four pages in length, written by eminent scientists on what got them interested in science as young students. Many of the writers were Nobel Laureates and Fields Medalists. They generously shared accounts of the influences of their youth; some of them spoke about parents, teachers, accidental encounters, etc., but it was clear that an external influence and opportunity of some kind was most often a principal motivator. I commissioned the book because I felt that it would inspire young people from all over the world. The book has been translated into several languages around the world and I gave away thousands of copies to many scientists from developing countries. You should google it and enjoy reading it: <http://bose.res.in/~library/FILES/ebooks/100reasons.pdf>

RN's early influences were written under the title "How I became a scientist". It begins as follows:

"It actually started at home. My father was among the early graduates in science in the small town he came from, and went on to study with the great Indian physicist Meghnad Saha, who was then teaching at Allahabad (more than a thousand km from home). Returning with a Master's degree, father taught at Central College in Bangalore, and, in his later years, wrote extensively about science in Kannada, the language of this part of India. He taught me very little phys-



BY SPECIAL ARRANGEMENT

RODDAM NARASIMHA. Almost until the end of his life, he was busy with his science, even co-authoring a paper in 2020 on the transmission of COVID-19.

ics or science directly, but his example and attitude—scientifically modern, socially liberal and culturally conservative—taught me something more basic, namely pride. My mother did not go to school beyond age ten, but she was an extremely well read and cultivated person—also proud. In the prayers she taught us to recite before going to bed the only things that we asked from God were intelligence and knowledge.

"At school I was fortunate to have some great teachers. One of them managed to get the late C.V. Raman, Nobel Laureate, to visit us. Raman was then the biggest name in Indian science, and he spoke with such wit and verve about his work that he had the audience in the palm of his hand—both kids and teachers. Mr. KVR, the teacher who arranged the Raman visit, also taught me to value writing—briefly and honestly. In those numerous examinations we used to have, there were often questions of the kind 'How many planets are there in the solar system?' I would just answer: 9, and would be severely rebuked by my other teachers for not *naming* the planets as well. This I thought was unfair, for the question had not asked for the *names*. Mr. KVR stood by me on such occasions, and so grew a bond between us—never personally close,

but full of affection on one side and regard on the other. But another teacher became personally close, and often took me and a few other students out—for coffee, snacks and long chats. He once casually presented two books to me. One was the *Lives of Great Scientists*, and it opened my eyes to the strange intellectual world of (western) science that I immediately found fascinating. The other book was a Kannada trans-creation of Lewis Carroll's *Alice in Wonderland*, which I fell in love with. How did Mr. BLA know so unerringly what books would make an extraordinary impression on me?

"By the time I was to enter university in 1949, physics was one thing that I was seriously thinking of doing, but the vast (bloodless) political and social revolution that was then sweeping south India made this impossible. I eventually went to the Government Engineering College at Bangalore to study mechanical engineering. But the most inspiring event of those years was a visit I made to the Indian Institute of Science (IISc) when they had an Open Day. In the quadrangle of the Department of Aeronautical Engineering (which had just recently been started) stood a lovely, World War II Spitfire, loaned for the occasion by the Indian Air Force. That was my first close

encounter with an aircraft, and it opened another world for me. What struck me at that time was how smooth and graceful the exterior of the Spitfire looked (in particular its beautiful elliptic wings), but how complicated it was if I looked at the insides—which seemed like a jungle of cables, pipes, ducts, valves and so on. It seemed astonishing to me that beneath those graceful curves and surfaces (which I took to come from mathematics) lay hidden a bewilderingly complex technology—and I marvelled at those extraordinary people who had apparently mastered both.

"So when I got my bachelor's degree I wanted to do aeronautics, but this was very unfashionable at the time. At my father's suggestion I consulted a family friend at the Institute [of Science]. He brusquely told me not to be a fool: the right thing to do was to join the Indian Railway Service or Burmah Shell (the equivalents those days of a fat software job in today's Bangalore). I went back dejected to my father with our friend's advice, but he only asked me very simply, 'So what do you want to do?' I said I was bent on aeronautics. He just said, 'Go ahead, then.' So a matter that I had thought might have to be discussed over hours was settled in two minutes, and I ended up at the Indian Institute of Science—where I have stayed in some capacity or the other for most of the last fifty years."

My main point here is that parents (or influential relatives), teachers and some exciting encounters (C.V. Raman and Spitfire in this instance) drive the interest of many young students towards science (interpreted broadly). This appears to be true in the lives of all those who became scientists or serious intellectuals. Science is no doubt important for the economy, defence, improved standard of living, etc., but the greatest reason for doing science is that it provides a perspective on our place in the universe as human beings—indeed on what it is to be human. It helps us overcome our otherwise preconceived notions and provides a key to basic workings of nature. But it should not be forgotten

that, even as science constantly attempts to arrive at improved models of reality, its universality drives us to great wonderment: how can one not wonder about the fact that the cosmic microwave radiation, which we can measure even today, is the relic of Big Bang after the baryonic matter separated, or that the laws of nature are universal in the heavens and on the earth? To marvel sometimes about such deep mysteries, even as we make progress a tiny bit at a time, makes us better individuals by endowing humility, grace and tolerance for other people's foibles. We should keep all this in mind as we encourage a youngster in our families or circles of friends towards taking up science.

BRIEF ACCOUNT OF RN'S SCIENTIFIC WORK

As he had desired, in 1953, RN indeed joined the Department of Aeronautical Engineering at IISc for a Diploma, working with the famed Satish Dhawan for the Associates thesis. His two papers on laminar/turbulent transition, one of them with Dhawan, are still among the most influential fluid dynamics papers to have come from Bangalore. On Dhawan's advice, RN went to Caltech in Pasadena, in 1957, for his PhD thesis. For his doctoral thesis, RN started working on aeroacoustics and also on the theory of the Boltzmann equation with the Bhatnagar-Gross-Krook (BGK) approximation developed a few years earlier. This work drew immediate attention: Russia had just launched the first space vehicle Sputnik and launching a satellite became a national objective in the United States; rarefied gas dynamics provides an approximation of flow around space vehicles, so RN's expertise assumed sufficient importance and he was hired as a consultant, while still a student, by one of several companies supporting NASA's (National Aeronautics and Space Administration) space programme. RN completed his PhD in 1961 (thesis title: "Some flow problems in rarefied gas dynamics"). The stay at Caltech was extremely satisfying, and the association with

Hans Liepmann, in particular, was very rewarding: this influence was felt even more by virtue of wide-ranging topics that were discussed informally between them over the years.

RN's performance and skill sets generated employment opportunities for him in the U.S., but he was keen on returning to Bangalore – which he did towards the end of 1962. Perhaps inspired by what he saw at Caltech, he attempted a balance between building a broad-based fluid dynamics group and doing research himself. In a few years' time there was a group of outstanding students and assistants who quickly became experts in their subjects. Much of the research those days concerned shock structure and the Boltzmann equation, turbulent bursting, supersonic flows, flow control, wake structure and turbulence modelling, reverse transition or relaminarisation (where a turbulent flow goes back to an orderly laminar state) and drag reduction. An ingenious example of how the boundary layer theory could be applied outside of fluid mechanics is his work on the vibration of elastic strings.

In the mid 1970s, an interdisciplinary group interested in the monsoons started nucleating at IISc and eventually led to the setting up of the Centre for Atmospheric (and now also Oceanic) Sciences (CAS) in 1982 with RN as its convenor. He became convinced that an important fluid-dynamical problem to tackle was the monsoons, and central to this effort were convective clouds. While there was a plethora of past studies on cloud microphysics (dealing with how cloud droplets form and grow), cloud dynamics remained poorly understood, particularly the consequences of the release of latent heat on entrainment and mixing processes. So, laboratory simulation of clouds was attempted at CAS and RN's group found a novel way to set up cloud-like plumes in the laboratory. He conceived the idea of a monsoon field programme to measure the atmospheric boundary layer properties and develop flux relations relevant to monsoon conditions, and



BY SPECIAL ARRANGEMENT

AS A student.

MONTBLEX (Monsoon Trough Boundary Layer Experiment) was carried out in the Indo-Gangetic Plains. The data analysis led to new formulation for surface flux at low winds.

Almost until the end of his life, he was busy with his science; it is astonishing, even for RN, that he co-authored some eight papers in 2020, on topics ranging from clouds to jets, from flow over turbine blades to the statistical mechanics of vortices, including one on the transmission of COVID-19. More of his papers, on both science and philosophy, will no doubt be published posthumously.

RN was greatly admired for his far-reaching science. His students and collaborators were completely aware that he was a high-level researcher. Especially the earlier generation of his students, who knew him when he pursued science with single-minded love and no other engagements, thought that he was destined to remain that way. In fact, they were certain that his temperament was not suited for becoming a great administrator. Time has proven them wrong. He has shouldered great responsibilities with a poise and effectiveness that can only come from an inner strength and confidence built up

during his young and formative days. Aside from his service as the department chairman and dean at IISc, he was the Director of the National Aerospace Laboratory for some 10 years, the Director of the National Institute for Advanced Studies for some seven, and created the Engineering Mechanics Unit in the Jawaharlal Nehru Centre for Advanced Scientific Research. He was the president of the Indian Academy of Sciences. In every administrative capacity that came his way (for he never sought one) he was never content to manage it effectively but was always engaged in new initiatives and left the place much better than it was at the time he assumed office. He has served the country in many capacities. As a member of the Scientific Advisory Council to former Prime Ministers Rajiv Gandhi and Manmohan Singh, he was instrumental in establishing a major parallel computing initiative in the country and in establishing the Ministry of Earth Sciences. He served a critical role as the longest-serving Member of the Space Commission.

Recognition of his special standing as a researcher and a leader has come from far and wide. Among the prestigious visiting positions he held, reflecting this standing, I list only three: Clark B. Millikan Professor and Sherman Fairchild Distinguished Scholar at Caltech, and the Jawaharlal Nehru Professor of Engineering at Cambridge University. He has been elected Member of the US National Academy of Sciences and of Engineering, Fellow of the Royal Society of London, Fellow of the American Academy of Arts and Science, Fellow of The World Academy of Sciences (TWAS), and Fellow of all the prestigious science academies in India. Some of other distinctions include the Bhatnagar Award, the Gujarmal Modi Award, the Ramanujan Award, the Aryabhata Award, the Padma Vibhushan, the National Science Chair, and many others. He had the rare distinction of being elected Honorary Fellow of the Indian Institute of Science in 2008.

Bhat and I wrote the following in

our latest *Current Science* article. I repeat it here without attempting to rephrase it.

"RN was a highly cultured scholar and combined the best from the West and the East. He attempted a balance between 'building' and 'doing' and brought to bear his unique perspective on every problem he touched. His awareness of the complexity of the country only enhanced his keen love for it. He firmly believed that academies should not merely recommend action to the government, but also constructively do things themselves. Deeply immersed in acquiring and creating knowledge, he enjoyed the bliss of pursuing research with meticulous attention to detail, and could masterfully communicate that enjoyment to inspire young minds. Rather than follow fashionable research trends, he taught his students to work on questions that excited them and pursue them in depth, emphasising quality over quantity. He was progressive in his thinking on social issues and seemed free of prejudices connected with region, religion, gender, and age.

"The many honours and recognitions that came RN's way made no difference to his personal qualities that endeared him to so many in the first place: easy accessibility to all—despite disparities of their stations in life (whether a novice student, a distinguished colleague, or a high-level official); the dignity with which he interacted with people of all walks of life; abiding interest in intellectual pursuits and love for truth, scientific tenor and erudition; unprejudiced and disciplined advice that he provided when it was sought; clarity of thought in spoken and written words; the personal example he naturally and effortlessly set, the genuineness of curiosity he displayed, and the inspiration he provided to a number of younger colleagues. He mentored generations of students and supported their scientific activities long after they established their own careers. He was generous with his time and gently encouraged others in their pursuits.

"These qualities made him an ex-

traordinary human being, winning a place in the hearts of many friends all over the world. All his former students and colleagues, and many others who came in contact with him, miss him and perceive the void that his demise has created; they will remember him and his legacy for a long time."

INDIC SCIENTIFIC TRADITION

Also around 2004, I established at the International Centre for Theoretical Physics (ICTP) an annual prize in the name of the spectacular mathematician, Srinivasa Ramanujan. For the funding, I had to make the case to the Norwegian Academy. My own belief was that Ramanujan, who did not have a formal training, did mathematics in ways that better trained mathematicians could not, or would not, do. I wondered if, going back in history, India had other examples of such immense intuition, even if not always in mathematics.

I knew that RN was interested in such subjects, so I posed the following question to him at one time: Though I had in mind the specific context of S. Ramanujan, I also had the likes of Shankara and Patanjali (all of them are different, of course). The commonality is that there is often no simple way you could deduce logical thinking in their intellectual accomplishments. My question was whether the great reliance on intuition, which is often a surrogate for supremely honed technical skills, though not in obvious display, is worthy in itself, though one might admit that this characteristic sometimes falters if it is not supplemented by the rigours of a formal framework and logical analysis. In the Indian way of doing science, it worked supremely well where it did but one never knew where it would fail. My question was also motivated by the worry that the appeal to intuition was all but yielding place to formality in recent years, and to excel in that way requires one to be highly proficient technically. If one did not cultivate such mastery, the advantage was lost.

In particular, in Advaita, there is the focus on direct perception which,

it is always claimed, cannot be explored by any objective means. This declaration seemed to be a short-coming to me. The greatest progress for humanity will be made, I thought, if direct perception can be explored by other means as well. Even though I have never seen anyone claim that by this means one will know Quantum Field Theory or the solutions of the Navier-Stokes equations, or any aspect of the material world, but that ability may help intuit the material world as well. If we can do that and also keep intact our ability to falsify our intuition, which is a hallmark of modern science, humanity will reach a refined level.

RN never fell into the trap of attempting to directly answer my poorly developed and muddled questions but we would occasionally, and fortunately for me, talk about similar things as he continued his serious quest on Indic epistemology. I cannot summarise his thinking adequately without further study but will try to present a partial view, as I understood it in various conversations. One has to remember that RN was well versed in Sanskrit (besides modern science and philosophy); in fact, about a year or so ago, he sent me a short email on how to accent Sanskrit words in English, something I had never learnt at school. He felt that his knowledge of Sanskrit was essential to the progress he made in this area.

A “FALSE NARRATIVE”

RN made the case, in common with many other scholars, that the popularly held Western paradigm that science was created in Greece, declined in the so-called Dark Ages, was later revived and revolutionised in Europe at the beginning of the 16th century, is a false narrative, or at best a cartoon. Yet, to a modern science student, the heroes are European and American, although Indians are fortunate to have their own examples such as S. Ramanujan. J.C. Bose and C.V. Raman, just to name three. But why have others like Aryabhata and Bhaskara disappeared from the collective consciousness? Why does the world not know

that the Pythagoras theorem was enunciated in India perhaps 300 years before Pythagoras (who himself may not have had anything to do with the theorem)?

RN got into such questions and studied them with deep attention, but would readily debunk false claims made by over-enthusiasts. For instance, he sided unambiguously with his younger colleagues H.S. Mukunda, S.M. Deshpande, H.R. Nagendra, A. Prabhu and S.P. Govindaraju when they debunked the false glorification of a non-existent ancient Indic technology on aeronautics. He was unerringly accurate in attributing nothing beyond what was justified, even to one of his heroes, Aryabhata. I once asked him if Aryabhata ever explicitly held the heliocentric view of our solar system. No, he said. He told me, in bits and pieces spread over several years, that while Aryabhata and the likes were comparable to the best in the history of science, their style of reasoning and their philosophy was different. What exactly was that? That was where my own question had started.

The ancient Greeks, RN said, indulged in conceptual models before attempting calculations and believed that they should be able to figure it all out by pure thought. The Indic methodology was primarily based on observation, experience and inference, while the Greek conception was based on deductive and axiom-based considerations. India was number-centric with algorithmic computing as the focus, and the Indic view emphasised calculation without insisting on *a priori* models. This philosophy served India until the 18th century or thereabouts. Both mathematically and technologically, the flow of ideas for several centuries was from the East to the West through the Arabs. The East, of course, included the Chinese, whose inventions dazzled the Europeans.

It was Francis Bacon who recognised the power of inventions and numbers. He blamed the Greeks for the sad state of European knowledge, and may well have been the first to equate knowledge with power (in contrast to the Indic notion that

knowledge gives rise to freedom). In RN's words, though not in any specific order, what happened in the 16th and 17th centuries was that the meaning of mathematics changed in the West. Until then it was Euclid's geometry (borrowed back from the Arabs and their translations from the Greek). After that, it began to include numbers and algebra, both of which had come from India. Newton, in particular, mathematicised science. As Hermann Weyl said, Europe moved away from Greek ideas to follow a path that had originated in India, where the concept of numbers had been considered logically prior to the concept of geometry.

Finally, even though not all Indic scholars believed in mythology (e.g., Aryabhata said that Rahu and Ketu were pure nonsense and had figured out the correct reason for the eclipses—and he paid no price for that heresy from orthodoxy, unlike Galileo or, worse, Giordano Bruno had to, many centuries later). Yet, the otherwise great mathematician Brahmagupta was quite insistent on returning to the Rahu and Ketu model. This often made it difficult to discern intellectual gems from nonsense, as far as the framework went, though the computational results were the same.

BEYOND SCIENCE

RN wrote extensively about these and other meticulous findings of his, and I have done a hasty job of presenting them here. But I hope it is enough to engage an interested reader with his writing and accomplishments. It suffices to say that I regard RN as a first-rate scientist who broke many barriers and accomplished an immense amount. His interests extended far beyond science. He was a leader, a scholar, a philosopher, and a thorough gentleman; we will miss him and his wisdom greatly. □

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Illustrious Master

What I learned from **my interactions** with Prof. Roddam Narasimha.

BY **PADMANABHAN JAYASIMHA**

ONE learns many things from association with certain persons. It is a strong indicator of that person's positive attributes and the personal character that wields its influence on others. One such person is Prof. Roddam Narasimha, whose name and style caught my attention in 1973 when I joined the Aero Department of Indian Institute of Science (IISc) in Bangalore for my Master's programme. I had learnt about his impeccable credentials from my seniors and was most impressed by his brisk movements that included literally running up the staircase to his room on the first floor above the machine shop. He offered two elective courses during my study period, one on hypersonic flows and the other on real gas dynamics. Since I was clear in my mind that I would sooner or later end up in an aircraft design office, anything more than supersonic speed was not of interest to me. Secondly, I was told that both the courses would involve high level mathematics that I was least interested in adding to my skill sets. Hence, I missed an opportunity to be in his class during those two years.

After I joined Hindustan Aeronautics Limited (HAL) in 1973, I was working in the Aerodynamics Group of Aircraft Design Bureau (as it was called in those days). After Raj Mahindra took over as Director (Design), it was announced that a new project called HF25, namely HF24 modified with a single R25 engine, would be taken up. Surprisingly, it was also learnt that Prof. Narasimha would be steering this project. The youngsters were happy that a person of that stature would be with us, but



RODDAM NARASIMHA presenting Padmanabhan Jayasimha with the Eminent Aerodynamicist award at SAROD 2015 held in Thiruvananthapuram on December 3, 2015.

the elders were apprehensive how an academic would solve their problems. Prof. Narasimha (RN hereafter) called each of the group leaders and made them present their work. He got all the work documented together, the first time we saw a consolidated document of all the work that had gone on, in a volume arranged chapter by chapter. RN was meticulous about checking the spellings and formatting. I still remember that the corrections he made, in red ink, would be sent back punctually within a few days of submission.

It was during this period that I was introduced to him as the person who was working on aircraft performance using computers and could

generate plots on the computer. Those days we were working on ICL 1901A system (a third-generation mainframe with 14K words memory). The computer program was using up all the memory even with overlay features and virtually no trace facility. He would call me every week and ask for some more features to be added. Pleading with him that we had no memory space left would cut no ice with him. So the rest of the week would be spent in finding a way and squeezing his demands in. When I showed him that I was able to meet his requirement, he would characteristically say, "I told you, it would be possible." He would add some more requirements to add to my woes. It

BY SPECIAL ARRANGEMENT

was a challenge that I could not refuse and he would not yield so easily. This exercise gave me a lot of insight into the working of computers and the operating systems called GEORGE 1S. We were also fascinated by the lunch he would bring—a sandwich, a fruit, a carrot, and he would get coffee from the HAL canteen. During the course of our discussions, we also came to know many incidents from AVRO studies, for which he had worked under Dr Satish Dhawan's leadership.

SEEKING SOLUTIONS

The first one was regarding engine calibration. To put it in his own words, "Some of the engines were found to be developing less than rated power. A meeting was arranged in London. The engineer, who was working on the 'Dart engines in India', arrived with a long roll of paper. After listening to the Indian side, he unrolled the paper that he was carrying and said as per his records, there was a load cell change on a particular date and the readings after this date appeared to be on the lower side. According to him, the problem could be in the calibration of load cell. This message was communicated to Engine Test Bed through telex, the fastest and the most efficient mode of communication in those days. After a day or two, a reply was received that the load cell was recalibrated and the power levels now recorded were in order. We felt like fools, being offered a solution 5,000 miles away from home, when the answer was only a few miles away from us." The message from this episode was clear. One has to look for solutions from nearby sources, before embarking on long journeys, finally to learn that the solution was nearby, if only we had cared to find out.

The other relates to the AVRO climb segment. Again, in his own words, "There was a deficiency noticed in the AVRO HS 748 second segment climb performance. Armed with sufficient data to back our findings, a meeting was arranged with the Designers of HS748. After hearing us, they confirmed that our find-

ings were, in fact, right. Based on the reliability levels achieved, they had taken a concession from the Certification Authorities for permitting a deficiency in this parameter. We believe blindly everyone else is meeting all the stipulated requirements and put ourselves at a disadvantage." From this episode, it becomes clear that we create problems for ourselves trying to do the impossible, which we believe others are able to achieve.

LIGHT COMBAT AIRCRAFT

After the closure of the HF25 project came the New Generation Fighter (NGF) studies. With a 2,000kg warload, the max wing loading was to be fixed at 450 kg/sq m (based on F20/F5E aircraft), twin Adour engines and the internal fuel to cater to 200 km Radius of Action in Lo-Lo profile. This concept later became the Light Combat Aircraft (LCA). A top level OR was received from Air Headquarters. The first report on the LCA was released in October 1979.

It was about this time that the personnel of the Aircraft Design Bureau got divided based on projects. Three large groups were formed, namely HPT32, Ajeet/Ajeet Trainer and Other Projects (Kiran MkI/IA/II, HF24 and others such as the re-engined HT-2). In addition, a four-member New Project (NP) team (that included me) was also formed to technically report to the Chief Project Coordinator (CPC-NP), Prof. R. Narasimha. At that time I tried to convey my feelings of such changes on the morale of the personnel. Indiscreetly I mentioned about Prof. Ananthasayanam working with him on the Indian atmospheric model. He made it clear to me immediately that academic institutes such as the IISc did not have a pyramidal reporting structure as in industry. He said people were at different levels on the basis of their qualifications, academic performance and experience, but they were all independent. The department has a Chairman, purely for administrative purposes. In a few minutes, he drove home the point and I have never had any doubts about the working principles in academia from that time onwards.

We were submitting, through RN, one report every month that included studies of single engine configurations with different engines, to Raj Mahindra, the then Managing Director (D&D), HAL. An internal committee was set up under RN's chairmanship to decide the requirements of the LCA. After a couple of meetings, he decided that it would not lead anyone anywhere. Then there was a period of low activity, and RN had stopped coming to HAL on a regular basis.

NEW PROGRAMMES

As per the Jaguar contract, BAe needed to provide consultancy on our new programmes. In that phase, there was a substantial difference between BAe and HAL in fuel burn for a particular mission. When this was pointed out to Raj Mahindra, he wanted me to consult RN. So, I went and met him in his house at IISc. We had a short discussion and he was convinced we were right. Apparently, as I later learnt from him, a message was sent to BAe, which agreed that due to oversight it had sent a wrong set of data and concurred that our computations were right. This further enhanced our confidence level. RN also expressed confidence in our capabilities to do performance computations.

An Indian team visited BAe and Rolls-Royce in June 1980, when RB199 Stage A was offered for the LCA programme. When RN briefed the then Chairman, HAL, the latter apparently told him, "Professor do not sit in an ivory tower", a remark that did not go well with RN. However, it was clear that a single RB199 would be a better option than twin Adour engines. An LCA committee was formed under Dr S.R. Valluri in June 1981. A presentation was made to the Defence Minister (Indira Gandhi), after which it was decided that the feasibility studies should be done by foreign companies and, accordingly, the contract was given to four companies. A team headed by Dr Valluri went for mid-term review to the four companies. Interestingly, M.N. Sreenivasan and I were asked to prepare the report by Raj Mahin-



K. MURALI KUMAR

INDIA'S LIGHT COMBAT AIRCRAFT Tejas takes off from HAL Airport during the Initial Operational Clearance process in Bengaluru on January 10, 2011. Prof. Narasimha set the ball rolling in the development of the LCA.

dra. When we went to meet RN to seek a few clarifications, he was upset that instead of writing it themselves, this task had been given to us. However, we assured and convinced him that this would help us understand many aspects of the discussions better. I remember working on a holiday to complete the report and hand it over to Dr Valluri at his Indiranagar residence. As we were about to leave, he stood at the gate, with a distant look and staring at the sky. We waited for a couple of minutes and he finally said, "For all the efforts you have put in, I hope the project finally comes [through]." Today (in 2019), I can proudly say that the project had not only come, but also the product has been successfully inducted into the Indian Air Force.

I used to meet RN at IISc on Saturdays, sometimes with my senior, Ibrahim. We discussed many day-to-day problems of ours, such as personal time management. He would tell us his daily schedule and advise us "go to bed if you are tired, but get up early and spend quality time reading in the morning".

The feasibility study by the four companies was completed by 1984 and detailed presentations were made. Our task was to compare all the reports and bring them to the same base. That was called normalisation studies. RN, after a detailed review, was convinced of our studies.

During this period, intense discussions were held with the German aerospace company MBB, which had proposed the tailless delta configuration that promised to best meet the air staff requirement (ASR). In one

such meeting, there was a discussion on a technical point. When I pointed out an error in the assumption being made, the MBB team was surprised and did not agree. RN turned back and asked if I was certain about what I was saying. When I stuck to my stand, he told Raj Mahindra that I would not be making such statements unless I was sure. Raj Mahindra told the German team that we would have a relook and discuss it the next day. The next morning, I wrote out my arguments and handed it over to the MBB team. After they came back from lunch, I was specifically called and told that I was right and they were sorry to have not accepted my statement the previous evening. I was indeed thrilled, not that the MBB was convinced, but on account of the trust RN had in me on this issue.

RN succeeded Dr Valluri as the Director of NAL in 1985. Sometime during 1986 or 1987, I was told by my office that there was a call from Director, NAL, and he wanted to speak to me. When I called him, he asked me whether I could drop in at his office one of the evenings on my way back home. So, within a few days one evening I was in his office. After the initial pleasantries, he asked me, "Are you happy with what you are doing?" Since my policy had been "Do what you like or if not, like what you do", I answered in the affirmative. He just said "that is good" and went back about the LCA tasks and what I had been doing. At the end, I could not resist asking him what he would have said if my answer to his question had been that I was not

happy with my current job. He simply brushed it aside saying that it was irrelevant since I had said I was happy and that the most important aspect of work was to like what you were doing. I was curious as to why he had called me. It was after a couple of months that I came to know from Dr K. Yegna Narayan [the former head and Saras Project Director at NAL's Centre for Civil Aircraft Design & Development (C-CADD)] that RN had discussed with him about hiring me at NAL for their civil aircraft programmes.

INTERACTIONS

I used to meet him at all LCA reviews at the Aeronautical Development Agency (ADA). During the early days of Intermediate Jet Trainer (IJT), I was invited by RN to give a talk at the Aero Department of IISc. Later, after I retired in 2010, I was a member of a committee for recommending wing plan form patent at the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCAR), in which he was involved. I also met him in review meetings during my NCAD (National Civil Aircraft Department) days at NAL.

I was invited to SAROD 2015 (Symposium on Applied Aerodynamics and Design of Aerospace Vehicles) held at Thiruvananthapuram to be honoured as an Eminent Aerodynamicist. It was a surprise to me that RN was the Chief Guest and it was indeed my greatest privilege to receive the award from RN.

It has been a great experience being associated with RN and I hope the above has brought out many unique qualities of RN and his involvement in the LCA programme. I have always considered it a privilege to talk to him as he always had something interesting for us to know about and learn. □

Padmanabhan Jayasimha did his ME (Aero) in IISc and joined Hindustan Aeronautics Ltd (HAL) in 1972. He was appointed Chief Designer (Aerodynamics) in 2005 and retired as General Manager (Aircraft Design and Research Centre) in 2010. He is currently Consultant (Aerospace).

Poet of the masses

Noted Hindi poet **Mangalesh Dabral (1948-2020)** lived, thought, spoke and wrote among the masses. His poems, notable for their simplicity and sensitivity, were reflections of reality and rootedness. BY **ZIYA US SALAM**

HIS language was born in better climes. It was meant for better times, too. Not for him a word written in anger, nor was language meant to be the vehicle of hatred or arrogance. Words used as weapons to alienate fellow citizens disturbed the eminent Hindi poet Mangalesh Dabral profoundly, probably reminding him of the time when he left his home in the hills of Tehri Garhwal in Uttarakhand to carve out a career in Delhi.

The city was unsettling, impersonal and alienating. But a retreat to the hills was never an option once Dabral set foot in the city in 1960. He fortified his inner defences and stayed on in the city, working as a journalist for Hindi publications such as *Jansatta*, *Sahara Samay*, *Hindi Patriot* and *Purvagrah*, as well as the National Book Trust. His literary essays, critiques and obituaries had the touch of life and the warmth of a genuine article. A poet at heart, he had the rare knack of balancing his words with the accuracy of a mathematician. Understatement characterised much of his writing.

While his day job kept the kitchen fire burning, Mangalesh Dabral also wrote and translated poetry. His poetry had the same stark simplicity of his speech. He translated Pablo Neruda and Bertolt Brecht into Hindi. In a rare instance, his translation of Arundhati Roy's *The Ministry of Utmost Happiness*, titled *Apaar Khushi ka Gharana* in Hindi, made fresh waves when it hit the market. Such was Dabral's prowess. Such was his oeuvre.

As he wrote in the Introduction



V. SUDERSHAN

to his volume of poetry titled *This Number Does Not Exist*: "My poetry was born in the mountains, lived among the stones and sang of water, clouds, trees, and birds; but soon it migrated to the cities where the world was not so simple and innocent despite all its attractions, its wide and ever-lit roads, squares and lamp posts, which looked like the signifiers of a new civilisation. It was filled with the strains between the loss of native spaces and the difficulties of coming to terms with the place of refuge."

There is an interesting anecdote about how *This Number Does Not Exist* owes its origins to a translation

workshop organised by the Sahitya Akademi in 1990, in which the poems of 10 Hindi poets were translated into English. It was here that Dabral's poems were first translated into English by Arvind Krishna Mehrotra. While the translations continued long after the workshop, it was over two decades later that the book itself was published, in 2014. Keeping Mehrotra's translation company were those by poets such as Sudeep Sen, Asad Zaidi and Rupert Snell. Dabral was pleased. And in a manner slightly uncharacteristic of his self-effacing ways, he conceded: "My poetry is quite translatable. It does not have linguistic intricacies...

I write in very simple, understandable language."

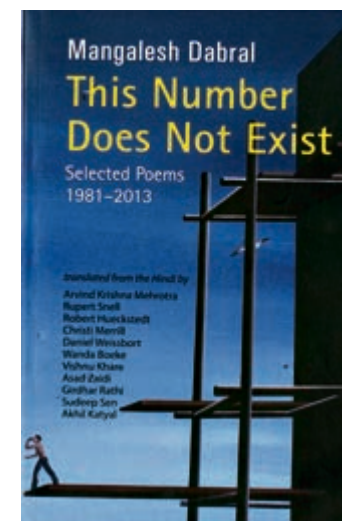
This simplicity and sensitivity extended to five collections of poems, including *Pahad Par Lalten* (A Lantern on the Mountain), *Ghar Ka Raasta* (The Way Home), *Hum Jo Dekhte Hain* (What We See), *Aawaz Bhi Ek Jagah Hai* (The Voice is Also a Place) and *Mujhe Dikha Ek Manushya* (I Saw a Human Being). Dabral received the Sahitya Akademi prize in 2000 for his work *Hum Jo Dekhte Hain*; he returned the award in 2015 in protest against growing intolerance and increasing violence against minorities and dissenters in India.

It was this innate simplicity, and a longing for life without malice and manipulation, that made Dabral unhappy with cities. He once said in an interview with *The Hindu*: "It (the city) is a lamp post for civilisation, but its tensions, its cruelty are also very overpowering." He expressed his angst in a poem titled "The City": "I looked at the City/ and smiled/ and walked in/ who would ever want to live here/ I wondered/ and never went back."

Dabral thrived in cities such as Bhopal, Lucknow and Delhi, yet the village never left him. He longed for the sparkle of childhood spent in a Tehri Garhwal village listening to his father play music. As he once wrote in *The Indian Express*: "I sat before Father as a pup sits before a gramophone on the records of His Master's Voice. The entire family gathered around him as he sang a foot-tapping melody from the tribal region of Jaunpur-Jaunsar; full of rare and restless imagery. In the dim light of a lantern, he played the Durga, Malkauns, Sarang, Bhopali ragas and soulful songs of distant dialects of Jaunpur-Jaunsar. Malkauns and Durga were perhaps his favourite ragas. He immersed himself in music as he sang the basic composition of Durga 'Sakhi Mori Rum Jhum, Badal Garaje, Barse', which is often taught in curriculum."

It was this music and this lantern that stayed in his subconscious, and helped him appreciate the good that the city offered, and accept the disap-

pearance of villages as a collateral consequence of development. He once said that the biggest of civilisations, such as the Indus Valley Civilisation, had emerged from cities. He admitted: "I could never come to terms with a big city like Delhi, nor could I retain the identity of my native place. It's a kind of refugee condition—as if I were a dislocated persona unable to be rehabilitated. When I arrived in Delhi, I suddenly felt that I have been banished from a raga. When I saw the last tree of my village diminishing away, the absence of that raga made its home within me."



"THIS NUMBER DOES NOT EXIST: SELECTED POEMS 1981-2013" by Mangalesh Dabral, Poetrywala, 2014.

Every time he visited his home in the village, he would listen to Raga Durga on the way. But that was a mere visit, not a return to his roots. This dislocation and sense of displacement equipped him to write about the loneliness of a poet in *Kavi Ka Akelapan*, just as his long innings in journalism equipped him to analyse the world around him, and appreciate the events unfolding in front of him.

When the last tree in his village was submerged in order to build the Tehri Dam, it was the lantern of his childhood that continued to flicker in Dabral's mind. When confronted with the darkest of times, it was this

lantern that lit the path for him. Whether it was expressing his anguish at a book launch or participating in a protest march, he was always there. In 2014, inspired by Modi's demagoguery, he wrote the poem "Tanashah". Then came a poem called "Folk Tale", which talked of a king in a fictional land who changed clothes ever so often as he felt his clothes were stained. His reign would forever be remembered as the era of dirty and stained clothes.

That was typical of Dabral. His language was not that of a man confined to his ivory tower. He lived, thought, spoke and wrote among the masses. His work was a reflection of reality, not an expression of unbounded hope, nor a song of unrestrained sorrow. The rootedness of his craft provided the warmth of familiarity. For sixty years, he nourished the language he wrote in; he used it to talk of the vicissitudes of humanity and the longing for hope and fulfilment. He, more than most contemporary litterateurs, had the right to feel cheated, even robbed, when the language he so loved was used as an instrument of social exclusion, abetting the spread of fascism. He wrote: "Although there is much that is being written by way of poetry, stories and novels in Hindi, in truth these forms have died, although there has been no pronouncement to this effect, simply because of the spate of writings. However, it is only themes like 'Jai Shri Ram', Vande Mataram and 'just one place for Muslims: Pakistan or the graveyard' that are alive in Hindi now. The fact that I write in this language fills me with remorse. How I wish it was not my mother tongue!"

Fellow poets and writers expressed disappointment at his interpretation; others understood his predicament. Dabral thought it best not to elaborate. He expressed anguish at the language being used to exclude, maybe even exterminate, people "not like us", yet he himself did not wallow in sorrow. For him, it was more important to be human, and he continued to be engaging, articulate and persistent until the very end when COVID took him away on December 9, 2020. □

Kapila Vatsyayan and the IGNC

WHEN Dr Kapila Vatsyayan, the cultural studies scholar and institution builder, passed away in September 2020, Frontline had carried a tribute by Suhas Borker ("Kapila Vatsyayan: Polymath of the arts", October 23, 2020).

Sachchidanand Joshi, Member Secretary of the Indira Gandhi National Centre for the Arts (IGNCA), took issue with certain aspects of the tribute. He wrote:

It is indeed a matter of satisfaction that the Frontline magazine in its issue of October 23, 2020 has remembered the great scholar and cultural thinker ever produced by our country, Dr Kapila Vatsyayan. Shri Suhas Borker has written quite extensively about her contribution in the field of art and culture.

However, we would like to bring to your notice some facts about this on page 70 under the sub-heading: 'Long Stint at IGNC'. The statement "In May 2014, when the NDA returned to power, Kapila Vatsyayan was a prime target and she was soon removed from the trusteeship of the IGNC" is incorrect. The fact is that Dr Kapila Vatsyayan was a trustee of the IGNC until 2015 and she attended the last the meeting of the Board of Trustees of IGNC on December 15, 2015. She was not removed from the trusteeship of the IGNC, but the entire Board of Trustees was reconstituted by the Government of India on April 13, 2016.

In the article, it is stated that "In April 2017, it was reported that 6,000 books donated by her to the IGNC were removed from the galleries and dumped in a godown". It is true that Dr Kapila Vatsyayan donated 6,000 books to the IGNC which were kept in boxes and not opened as these were to be accessioned and displayed in a proper way. The President of the IGNC Trust, Shri Ram Bahadur Rai, and I informed her that her collection was being properly displayed in a specially created section of the IGNC Library and invited her for its inauguration. Dr Vatsyayan came for its inauguration on November 7, 2017. It is appropriate to mention here that after her death, and as per her wish, more books and artefacts have come to the IGNC which will be accessioned and properly displayed in her collection in the IGNC library soon.

The IGNC has always sought the blessings of Dr Kapila Vatsyayan and in this connection Shri Ram Bahadur Rai

and I have met her on several occasions.

Suhas Borker responds:

The Member Secretary, IGNC, writes that it is "incorrect" to say that Dr Kapila Vatsyayan was "removed from the trusteeship of the IGNC". He asserts that "She was not removed from the trusteeship of the IGNC but the entire Board of Trustees was reconstituted by Government of India.". His letter is couched in officialese but what it means is the same: the reconstitution of the board resulted in the removal of Dr Kapila Vatsyayan from the Board of Trustees of the IGNC.

My article says: "In April 2017, it was reported that 6,000 books donated by her to the IGNC were removed from the galleries and dumped in a godown". The Member Secretary, IGNC, is in denial mode but as mentioned by me, my assertion was based on news reports of April 2017. In fact, it was reported in The Indian Express of April 25, 2017 that Dr Kapila Vatsyayan was "very upset" and "reached IGNC and protested angrily", and was "in tears". The report said that about 6,000 books, donated to the IGNC by its founder Member Secretary Kapila Vatsyayan "were removed this month from the galleries where they had been on display for 10 years, and packed into a godown". The report, quoting sources, said that a new Joint Secretary, Vinita Srivastava, had taken "the decision" without consulting Vatsyayan, who had donated the books in 2007. The report said that the newspaper had tried to contact Srivastava's office but there was no response from her. The report quoted Dr Vatsyayan as saying: "Those books were my lifetime collections. They were my life. I had given them for future generations. I was told that they just removed and dumped them." The report further said that IGNC Member Secretary Sachchidananda Joshi met Vatsyayan and apologised to her.

If the packed boxes of books had indeed been just shifted as the letter of the Member Secretary, IGNC, suggests, why was Dr Vatsyayan so upset? It is also hard to believe that from 2007, when the 6000 books were donated by Dr Vatsyayan, until 2017, a period of 10 years, the books had been "kept in boxes" and had not been "accessioned and displayed in proper way". In fact, the gifted books had been "on display for 10 years" and were then unceremoniously "dumped". The Indian Express report cited the above

mentioned that "The shelves where Vatsyayan's books had been displayed are now empty. The guard said the room is locked."

So if the IGNC made amends six months later in November 2017, as the Member Secretary, IGNC, writes, it was a positive development.

It is interesting to note that The Financial Express of November 26, 2017 carried a report about this "sudden turnaround":

"Kapila Vatsyayan was the founding director of the Indira Gandhi National Centre for the Arts (IGNCA), and remained the presiding deity whenever the Congress was in power. It was not surprising that in the new government, the Gandhis' cultural czarina had no role to play. Even the books which she had earlier donated to the IGNC were dumped in a godown. But this month the IGNC did a turnaround and tried to make amends with the octogenarian. A new gallery was inaugurated to house Vatsyayan's collection of 6,000 books. At the inaugural function, IGNC head Ram Bahadur Rai did not flinch as Vatsyayan effusively praised her late mentor, Rajiv Gandhi. The sudden deference towards Vatsyayan is because Rai, a veteran Hindi journalist who played a leading role in the JP movement, is an admirer of Vatsyayan's late husband Agyeya Vatsyayan, even though they were estranged. Agyeya, a renowned Hindi poet and journalist, was editor of Jayaprakash Narayan's publication Everyman's Weekly."

Intriguingly, Jyoti Sabharwal quotes Dr Kapila Vatsyayan her biography Kapila Vatsyayan: Afloat a Lotus Leaf (2015) as saying that she was against naming of institutions after political leaders because organisations get "thwarted by pettiness and misconception" in the event of a change in the political dispensation. This was obviously based on her IGNC experience, where, as I wrote in my article, "the political weathercock kept heaping humiliation on her intermittently." Dr Kapila Vatsyayan further said that "Once there is political hostility, then the same arms of the state are used in order to destroy the very institutions that are built by a decision of the state."

ANNOUNCEMENT

Letters, whether by surface mail or e-mail, must carry the full postal address and the full name, or the name with initials.

ECONOMIC PERSPECTIVES



C.P. CHANDRASEKHAR

Little value from global chains

The episode of violence at a Wistron iPhone assembling facility near Bengaluru was not the ploy of a set of rogue managers but is in tune with the nature of global value chains, where companies engage in **exploitative practices** to be profitable.

ON December 12, in an outburst of suppressed anger, workers employed at a factory assembling iPhones in Narasapura near Bengaluru ransacked its premises and damaged parked vehicles. The facility is a unit of Wistron, a Taiwanese vendor engaged in the assembly of Apple iPhones, which had begun commercial operations only recently. This made the worker action surprising, to say the least. Workers recently employed in a known foreign-invested firm are not likely to turn against the management in a matter of months. Something was clearly amiss.

The initial response of the administration was to get the workers involved arrested for criminal violation and launch an image-saving exercise to appease existing and potential foreign investors, whom the National Democratic Alliance (NDA) governments at the Central and the State

levels are desperately wooing.

But investigations soon revealed that the workers had been wantonly provoked by the management in the Wistron unit in serious violation of labour laws. Apple, which is known to turn a blind eye to poor working conditions in factories run by its vendors,

had to admit that Wistron had violated its supplier code of conduct, and declare the launch of an inquiry.

Interestingly, Wistron too decided to acknowledge serious lapses at this particular unit and sacked its vice-president in charge



THE WISTRON facility in Narasapura on December 14.

of India operations. The implicit narrative was that the violations were not typical of the company's operations but the result of errors of judgement or rogue behaviour of some managers responsible for the operations of the Narasapura unit.

With Apple keen on increasing its presence in an expanding Indian market for its products, this incident is likely to be papered over, and the workers mollified at least temporarily. But the incident highlights certain characteristics of global production value chains and their implications for policies that attempt to expand domestic manufacturing by inserting India into segments of those chains.

VALUE ADDITION

As has been demonstrated in numerous case studies, much of the value addition in most global value chains occurs at the pre-production stage (involving payments for patented research and development and design contributions, for example) and the post-production stage (involving distribution, marketing and after-sales services). Little value addition is recorded in production *per se*, which is where the product is manufactured.

This structure has distributional implications. Much of the value added in the pre- and post-production stages accrue to the technology- and brand-controlling 'parent' firm, whereas the value addition in actual production is shared with production workers engaged in offshored manufacturing segments. The 'smiling curve' that represents shares in value added of different segments declines sharply as we move from pre-production to production, and then rises as we move on to post-production stages. That implies that a little of the value of the final product is available to pay out production workers.

Thus, a 2011 study by economists Kenneth L. Kraemer, Greg Linden and Jason Dedrick, estimated that Apple receives 58.5 per cent of the sales price of an iPhone as its profits. Some 14.5 per cent accrues as profits of non-Apple suppliers within and

outside the United States (including Japan, the European Union, South Korea and Taiwan). With material inputs absorbing 21.9 per cent of the remaining value of the product, workers in China get only 1.8 per cent and those outside China 3.5 per cent. These low labour cost shares are not so much the result of low employment numbers as they are of the extremely low wages paid to workers, especially those in assembly plants run by vendors. Wistron, along with companies such as Foxconn and Pegatron, is one such vendor for Apple.

The low share of the final price accruing to offshored manufacturing in global value chains increases the pressure on vendors to keep wages down, maximise 'productivity' by lengthening the working day, and limit costs associated with ensuring better and safer working conditions. This is a strategy that vendors of transnational giants have adopted in many locations, especially in places such as China where labour resistance is relatively weak and provincial competition to attract investors results in lax monitoring by the government. This has implications for countries such as India, where the government harbours ambitions of partly displacing China as a global manufacturing hub by integrating local manufacturing more closely with global value chains.

While rising wages in China fuels such ambitions, India needs to offer vendors an environment where they can ride on depressed wages and poor working conditions, for which labour laws are being diluted and implementation of even these di-

luted laws is slack. Besides the new labour codes pushed through at the Centre, the Karnataka government attempted in May, in the midst of the pandemic, to extend (by mere notification) the length of the normal working week from 48 to 60 hours, with the length of a normal shift raised from eight to 10 hours.

Even that move, which did not stretch to accommodate Wistron's desire for a 12-hour shift, had to be withdrawn as the government realised that the popular response was extremely adverse. Thus, although Wistron may have misjudged how far it could push workers and get away with it, this was by no means the ploy of a set of unscrupulous, rogue managers. It is what the nature of global value chain dictates. Foxconn, for example, has been accused of indulging in excessively exploitative practices in China on more than one occasion. Wistron was doing what it takes to be a successful and profitable player in a value chain that benefits Apple the most. So, the latter's protestations that Wistron had violated its supplier's code is not all too convincing.

From the point of view of the country serving as the chosen location of such a vendor, a low share of final value accruing to the production or assembly stage in the value chain, and the low wages associated with it, implies that domestic value addition is extremely low. This raises questions on the wisdom of the government's move to attract such vendors by offering them subsidies euphemistically identified as production-linked incentives.

In the 10-plus sectors for which the NDA government has announced this production-linked incentive (PLI) scheme, it plans to spend around Rs.2 lakh crore as subsidy over a five-year period, even as expenditures on social welfare are woefully inadequate and even falling. The PLI scheme offers financial incentives to producers, both domestic and foreign, in selected industries. In the case of mobile phones it amounts to 4-6 per cent of the value of incremental sales of firms meeting threshold sales and investment

Riding roughshod over workers is not the way to an 'Atmanirbhar Bharat'.



THE HINDU ARCHIVES

THE RANSACKED premises of Wistron's Narasapura unit on December 12.

requirements.

Given the estimate by Kendrick et al, that labour in Chinese production facilities gets less than 2 per cent of the value of iPhone sales, this provision of 4-6 per cent of incremental sales value as an incentive to attract the vendor concerned seems to make little economic sense.

There are two ways in which the PLI scheme is being justified. The first is that it is a clever way of incentivising export production in the manufacturing area without the payout being identified as WTO-violative, since the subsidy is not directly trade-related. The scheme does not speak of export production and is not presented as an export subsidy, but is linked to production, whether for the domestic or the export market. The premise seems to be that the areas chosen to be included under the scheme would be ones in which India has the capacity to emerge as an export hub. Exports would rise, it is hoped, although the link between the subsidy and exports is not direct, but indirect at most.

However, as noted, given the

nature of global value chains, the capacity of a developing country to serve as an export hub seems to be dependent on offering producers a field where labour costs can be kept at a minimum. Perhaps the official perception is that India is now more 'capable' of making that offer than China, where labour costs are seen as rising after long years of fast growth. However, the Wistron episode suggests that despite the current political strength of the ruling coalition, getting workers to accept an environment of low wages and poor working conditions is not easy.

Moreover, China is not the only location that India competes with even in Asia. Countries varying from Bangladesh to Vietnam are looking to tread a similar path, making both the task of keeping labour costs 'adequately low' difficult and the benefits from traversing that path all too limited. Also, in the wake of the harmonisation of rules of origin and tariffs across East Asia through the signing of the Regional Comprehensive Economic Partnership (RCEP), even Chinese investors may

plan to relocate production facilities to low-wage locations to retain buyers and markets they currently serve.

The other justification for the PLI scheme does not refer to exports but sees the scheme as a means of encouraging manufacturing production and addressing India's long-standing weakness reflected in a low share of manufacturing value added in gross domestic product (GDP). But, if value added in these activities is very low, and that value addition is ensured through a subsidy that enhances profits of foreign firms that are transferred abroad, any GDP increase on this count can only be an illusion.

In sum, the Wistron incident may not be an isolated worker response to an abnormal set of rogue managers but reflective of a fundamental flaw in joining a race to the bottom in the search for manufacturing growth at the expense of workers. Riding roughshod over workers, standing on the shoulders of foreign firms and depending on foreign markets, is not the way to journey to an *Atmanirbhar Bharat* or self-reliant India. □

Seismic shocker

Even as lignite mining operations in the seismically unstable region of Bhavnagar district in Gujarat cause mild tremors and sudden elevations in patches of surrounding farmland, the State administration responds with ‘alarming silence’. BY **LYLA BAVADAM**

ON November 16, 2020, a few farmers from Ghogha taluka in Bhavnagar district of Gujarat were on their way to greet their families on the occasion of *bhau beej* when they chanced upon a sudden elevation in the flat farmland surrounding Badi-Hoidad village. This “hillock” was about 13 metres tall and 700 metres long, with a 300-metre-wide “tabletop”.

No one in this small farming village had any idea when and how this hillock had come up. But as word spread across the region, people recalled a similar occurrence in December 2019 on farmlands at nearby Thordi village, where about 250 metres of land had risen 100 metres high and remains so to this

day. The common factor between the two occurrences was that both happened around the lignite mining site which has been operated by the Gujarat Mineral Development Corporation Limited since 2017. The Gujarat Power Corporation Ltd (GPCL), too, has an interest in this project because the lignite is meant to feed a thermal power plant that will be built on site.

The lignite mine is an open cast one, hence such an elevation in land in its vicinity is considered an unusual event. Activist Rohit Prajapati of Paryavaran Suraksha Samiti, a Vadodara-based non-governmental organisation for environmental rights, believes that the elevation could be a result of mining-stimu-

lated tectonic activity and says this is reason enough for officials to look into the matter seriously.

Bhavnagar district is a tectonically active zone, with a fault line running through the region about three kilometres away, near the town of Khambat. Although the actual mining site is on agricultural and *gauchar* (grazing) land, it is not an isolated rural area. The 12 villages house about 30,000 people and the city of Bhavnagar is 18 kilometres from the site. Prajapati says these are all strong reasons for the mining to be halted while thorough investigations are carried out.

According to Prajapati, the residents of the 12 villages said that in November, when the land rose in

Badi-Hoidad village, they had initially experienced tremors but ignored it because they knew about the fault line. But when they noticed the sudden elevation in land, they panicked and informed the authorities. The officials attributed the elevation to high pressure of water in the upper strata of the earth in the region. However, large cracks had appeared in the land around the lignite mining site, pointing to seismic activity.

Meanwhile, the records of the Seismological Survey of India noted that there had been an earthquake (measuring 2 on the Richter scale) in the region which lasted for two minutes at 4 a.m. on November 16, the day the land upheaval occurred.

VILLAGERS PROTEST

The local people have been struggling with changes in their lives ever since mining operations began in the area. They have had to contend with land acquisition, damage to farmland, damage to agriculture, air and ground water pollution and the ensuing effects on their health and livelihood. Between 1993 and 1994, more than 3000 acres of their grazing land and farmlands were acquired on paper by the then Bharatiya Janata Party (BJP) State government. The land was acquired, with little option offered to the village residents. They were told they would get Rs.48,000 per hectare for non-irrigated land. Most of them wanted to continue farming but were presented with a fait accompli.

There have been at least two major protest marches held by villagers since their lands were physically taken over in 2017, soon after which the GPCL started mining operations. Farmers have filed cases challenging the acquisition of their lands and continue to do so.

Prajapati and his colleague Krishnakant have written three letters to the authorities. One was on November 25, after they visited the site, the second was on November 30 as a follow-up, and the third was dated December 18. The letters were addressed to the State Chief Secretary, with copies to the Chief Executive Officer, Gujarat State Disaster



BY SPECIAL ARRANGEMENT

RESIDENTS of Badi-Hoidad at a meeting with Assistant Collector Pushp Lata (white saree) and other officials after the incident in their village in November.

Management Authority, and officials of the State Environment and Industries and Mines departments, demanding an immediate cessation of lignite mining activities in Bhavnagar district in order to prevent “further irreversible damage to the environment and the villagers”.

The letter states: “It is utterly shocking and surprising that even after our detailed letter, dated November 25, 2020, with required basic information available at that point in time with our team, followed by site visit led by the Assistant Collector Bhavnagar, Pushp Lata, with the team members, Mamlatdar, Regional Officer of Gujarat Pollution Control Board (GPCB), Officers of the industries and mining department, Officers of the Gujarat Power Corporation Limited (GPCL) with us, no action has been taken to direct the GPCL to immediately stop the mining activities till the Expert Committee submits its interim report. It is utterly surprising that even fencing of the disaster affected area has not been done by the GPCL despite verbal direction was given by the Assistant Collector Ms. Pushp Lata, during her team visit on November 25, 2020 between 12.15 pm to 3.45 p.m... Are we waiting for a major disaster in the short or the long run by ignoring the ‘Precautionary Prin-

ciple’ which directs to take measures proactively to thwart a disaster? Are the incidents of December 2019 and now recently dated November 16, 2020 not enough to act upon? We feel very sorry to state that non-serious, casual, and unscientific approach and attitude of the concerned authorities and the company will be fully responsible for the short-term and long-term consequences of the December 2019 and November 16, 2020 disasters.

“The ‘Precautionary Principle’ is often used by the authorities and experts to avoid the risks of serious and irreversible damage to nature, the environment, and the villagers (project affected parties or PAPs) living nearby in such cases. The principle has become an underlying reasoning for a large and increasing number of international treaties and declarations in the fields of sustainable development, environmental protection, health, and safety. We expect that you will not disagree with the facts that mining activities in fault line areas have resulted in number of human-induced earthquakes worldwide.”

The Paryavaran Suraksha Samiti’s letter presents a list of demands relating to safety but as their letter of December 18 says, there has been “an alarming silence on the disaster” from the administration. □



THE HILLOCK that rose overnight at Badi-Hoidad village. Environmentalists attribute it to mining-stimulated tectonic activity.

BY SPECIAL ARRANGEMENT



SURENDER SOLANKI

Sand miners turning violent

SANDRP’s report on deaths caused by incidents relating to illegal sand mining and attacks on law enforcement agencies **exposes the devastating impact** of the operation on the lives and livelihoods of riverine communities and underlines the need for regulating the activity. BY **LYLA BAVADAM**

SAND mining, fuelled by the booming construction industry, has grown into a huge business in India though much of it is illegal. The *South Asia Network on Dams, Rivers and People* (SANDRP) has documented the impact of illegal sand mining on the lives of people in a report titled “Sand Mining Violence

India: 2019-20”. According to the report, for almost two years, between January 2019 and November 15, 2020, at least 193 people died in incidents relating to illegal sand mining such as riverbed pit mine collapse, drowning, gang rivalry and attacks on journalists and environmentalists by the sand mafia.

The report, compiled by Bhim Singh Rawat of SANDRP from press reports from all over India, does not claim to be a comprehensive one. While some of the deaths such as those caused by mine collapses or drowning are directly related to sand mining interests, deaths due to road accidents caused by speeding sand-

ILLEGAL SAND mining in the river Somb, a tributary of the Yamuna, at Kanalsi village in Haryana.

laden lorries may require validation before its connection with illegal sand mining is established. In view of its illegal status, sand mining is not monitored and the operators naturally bypass all regulations.

Himanshu Thakkar of SANDRP said: “We do not know the full extent of the violence... but by the existing figures it is clear that at least two people have been killed every week in sand mining-related incidents in this period in India.” Brutal violence, injuries and threats are not included in the list.

The report presents the situation zone-wise (north, south, east, west and central), but there are gaps in the information. For instance, the north segment has data only from Uttar Pradesh, Haryana, Punjab, Uttarakhand and Himachal Pradesh as “there are insufficient media reports on the issue from Jammu & Kashmir, Delhi, Chandigarh and Ladakh. Likewise, though sand mining is rampant in Chhattisgarh, Maharashtra and Goa it is poorly documented in the media.” Despite “insufficient media reports”, the facts collated by the SANDRP are a shocking eyeopener.

Ninety-five people were killed in the north zone States, 42 in the west and central zones, 41 in the east zone and 19 in the south.

In all, 95 deaths were caused by drowning in sand mining pits and 27 following collapse of sand mounds and caving in of sand mines. Twenty-six deaths are attributed to road accidents connected with illegal mining operations. Illegal miners killed 23 farmers/villagers and 11 government officials, including forest guards, policemen, revenue officials, mining personnel and district officials.

Fighting between rival mining groups resulted in the death of three illegal miners while three people were killed in police encounters. Forty-five deaths, including that of illegal miners, occurred as a result of direct assault on villagers, government officials, activists and reporters.

Illegal mining indirectly claims other victims, too. Of the 95 people who died by drowning in sand mining pits, 76 were minors or teenagers.

The report shows that these deaths occurred in Haryana, Uttar Pradesh Bihar, Punjab and Uttarakhand.

Reporters and activists are a common target. One reporter in Uttar Pradesh and two activists in Odisha and one each in Bihar and Tamil Nadu were killed “for opposing and exposing illegal sand mining”. One reporter each in Uttarakhand and Chhattisgarh and one Right to Information (RTI) activist in Kerala were attacked by the sand mafia.

There were 84 incidents of threats and attacks on citizens, reporters, activists and even on government officials. Illegal sand miners were reported to have fearlessly attacked forest guards in Himachal Pradesh and Uttarakhand and the police personnel in Madhya Pradesh, Uttar Pradesh and Bihar. Twenty-six policemen were injured in two major attacks in 2020; in Kutch, Gujarat, in July, and at Panchkula, Haryana, in November.

There were 47 incidents of threats and attacks in the north zone, 18 in the west and central zone, 11 in the east and eight in the south. SANDRP said the figures for west, central, east and south regions were lower because local media reports were not accessible.

While the situation is grim all over India, it is worst in Uttar Pradesh and Haryana. Uttar Pradesh “has topped the chart with 62 deaths caused by riverbed mining and transportation. 31 or 50 per cent of the deceased are either young children or teenagers”. The report found a steep rise in such incidents in recent years. The sand mafia killed five

Death toll in India due to illegal sand mining from January 2019 to November 2020								
Zone	Drowning in sand pits	Mine collapse	Road accidents	Killing of citizens/villagers/farmers	Killing of reporters/activists	Killing of government officials	Killing in gang war/encounter/infighting	Total
North	60	3	18	6	1	5	2	95
West & Central	9	20	4	3	NA	2	4	42
East	26	NA	4	4	3	4	NA	41
South	NA	4	NA	5 [+5*]	1	NA	NA	15
Total	95	27	26	23	5	11	6	193

*Construction workers in Andhra Pradesh have committed suicide because of sand scarcity following mining ban by the State government. Source: SANDRP report



GROUNDZERO

KAMAL SHUKLA, Editor of Bhumkal Samachar, mobbed and assaulted outside a police station in Kanker in Chhattisgarh's Bastar region. He had gone to the police station in connection with the alleged assault on a journalist by municipal corporators for filing RTIs on illegal sand mining.

villagers and five government officials, including policemen and forest guards. Constable Sonu Chaudhary was killed in Agra on November 8, 2020. In October, two policemen were killed in Rae Bareilly. The report has recorded several instances of attack on villagers and threats to government officials and activists.

It says, "Such is the terror of the sand mafia here that even MLAs (Member of Legislative Assembly) are not spared. In July 2020, Yoghesh Dhama, MLA Baghat, appealed to the Chief Minister to save his life from the notorious gangster Sunil Rathi. In his letter, the MLA expressed fear for his life as the gangster held him responsible for administrative actions on Rathi's illegal sand mining activities. Similarly, another MLA, Yogesh Verma of Lakhimpur Kheeri, sustained bullet injuries in March 2019. [News] reports mention that the MLA had faced lethal attacks in the past for being active against illegal sand mining in his area. A relative of an MLA of Banda of the ruling Bharatiya Janata Party has alleged threats and attacks by the sand mafia in January 2020. It is shocking that [the

family of] Ram Lal Verma, a DIG rank police official, has been seeking justice 16 years after an attack on him by the sand mafia. The official, who was then SP, Unnao, had sustained multiple bullet injuries when the sand mafia opened fire in 2004. The culprits have not been brought to justice so far."

ATTACKS IN HARYANA

Haryana has reported 19 sand mining-related deaths primarily caused by drowning in riverbed sand pits and road accidents.

There were eight threats and attacks on villagers and government officials in Haryana. In October 2019, a police team was attacked by illegal miners in Panchukula. In the first week of November 2020, the roles were reversed. Villagers opposed illegal mining in the Rattewali river but the administration permitted it. The villagers objected to sand mining as it lowered ground water levels and riverbed pits caused cattle deaths. But the administration was keen on allowing more mining there. The clash between the villagers and the police resulted in injuries to 21

police personnel, which is the highest for a single incident in the north zone. The villagers are facing administrative actions for opposing river sand mining.

The report says: "Similarly, the villagers of Yamuna Nagar and Panipat have been facing attacks, threats and hostile administration for opposing illegal mining in the Yamuna river for the past two years. A local reporter in Panipat also faced false report against him by the police for highlighting illegal mining impacts. The regular media is afraid of publishing reports and the independent ones have been silenced by the threats."

In Ganjam, Odisha, the local administration was reluctant to fight the sand mafia. In April, the local people set fire to eight vehicles engaged in mining. According to the SANDRP report, the administration registered cases against eight villagers. This further infuriated the villagers who staged a protest demanding the withdrawal of cases. The police resorted to lathi charge to disperse the crowd. Two policemen and several villagers were injured in the melee.

Stringent regulations are required to regulate sand mining especially since big infrastructure projects are coming up. When sand is mined there are important implications for local economies. Dredging alters river currents. In drastic cases, it can alter a river's course thereby affecting farming, fishing and riverbed cultivation and other livelihood activities of the local population. Entire riverine ecosystems and communities will be affected in ways that may not be visible immediately but will manifest after a few seasons. Courts have been issuing orders in favour of regulation of sand mining but they are hardly implemented. With many political parties and politicians involved in the mining business the situation is bound to become worse. □

(For SANDRP's full report and photographs visit <https://sandrp.in/2020/11/22/193-dead-in-river-sand-mining-incidents-in-india-in-2019-20/>)

SEDITION... SEDITION ... SEDITION...

K.M. Munshi's amendment had removed "sedition" from the Constitution, arguing that its scope was too broad to be compatible with free speech in a democracy, but the Supreme Court's judgment in the **Kedar Nath Singh case** in 1962 brought it back by the back door.

BY **A.G. NOORANI**

READ the newspapers carefully and you will find that second only to murder and rape, the offence which has seized the small minds of our ministers and the police is sedition. It is as if the country is infested with sedition and the people are in a mind to revolt. The offence is initially tried by magistrates, and they have to grapple with the elastic definition of sedition.

Two English barristers of high eminence agreed that the definition of sedition "is frighteningly broad and the crime has been used in the past to suppress political views" (*Media Law* by Geoffrey Roberts and Andrew Nicol, Q.C.). What a burden to impose on the poor magistrate, the struggling High Court judge, and the very mighty, self-conscious Supreme Court judges who delight in delivering long judgments embellished with high sounding and irrelevant quotes!

The roots of the problem lie in our *desi* political and legal culture. Read this and ask yourself if any of the *desi bhai* judges would dare to speak like this: "Free speech included not only the inoffensive but also the irritating, the contentious, the eccentric, the heretical, the un-

welcome, and the provocative, as long as such speech did not tend to provoke violence. Freedom only to speak inoffensively was not worth having. What Speakers' Corner, where the law applied as fully as anywhere else, demonstrated was the tolerance which was both extended by the law to opinion of every kind and expected by the law in the conduct of those who disagreed, even strongly, with what they heard. From the condemnation of Socrates to the persecution of modern writers and journalists, our world had seen too many examples of state control of unofficial ideas. A central purpose of the European Convention on Human Rights had been to set close limits to any such assumed power. We in this country continued to owe a debt to the jury which in 1670 refused to convict the Quakers, William Penn and William Mead, for preaching ideas which offended against state orthodoxy." (*Redmond Bate vs Director of Public Prosecutions* before Lord Justice Sedley and Justice Collins on July 23, 1999; *The Times*, July 28, 1999.)

The criminal offence of sedition was born in sin in India — the sin of racism. It was gasping for breath in its home, Britain, and was consigned to the grave of obsolete laws for good reason, as a news report in India read: "A colonial era law intended to suppress the voice of freedom continues in force in India, but Britain itself abolished sedition as a criminal offence in 2009 as it was considered to be a relic of an era where freedom of expression was not considered a right as it is now."

Sedition was abolished through the Coroners and Justice Act, 2009, under the Gordon Brown government. Three offences were abolished: the offences of sedition and seditious libel; the offence of defamatory libel; and the offence of obscene libel.

Claire Ward, the then Justice Minister, said at the time of the Act's enactment: "Sedition and seditious and defamatory libel are arcane offences — from a bygone era when freedom of expression wasn't seen as the right it is today. Freedom of speech is now seen as the touchstone of democracy, and the ability of indi-



SUPREME COURT of India.

SUBRAMANIAM

viduals to criticise the state is crucial to maintaining freedom.” Britain’s Law Commission had recommended the abolition of the law of sedition in 1977.

According to Ward, “The existence of these obsolete offences in this country had been used by other countries as justification for the retention of similar laws which have been actively used to suppress political dissent and restrict press freedom.”

Claire Ward did not know the Indian mentality. Britain’s repeal of sedition in 2009 notwithstanding, India hugely enjoys the presence of sedition in its obsolete laws.

K.M. MUNSHI’S AMENDMENT

Bal Gangadhar Tilak, Annie Besant, the Ali Brothers, Maulana Azad, Gandhi and very many others suffered imprisonment under this archaic, barbaric law. It is to the credit of K.M. Munshi that he single-handedly secured its deletion from the Constitution. It is the lasting disgrace of the Supreme Court that it brought it back by the back door 14 years later, ignoring totally the Constituent Assembly Debates and the enormous labour preceding it. K.M. Munshi was a member of the Drafting Committee.

The Draft Constitution was published in February 1948 and reprinted in October 1948 with changes by the Drafting Committee. The Constituent Assembly debated the offending provision on December 10, 1948. K.M. Munshi moved his amendment:

“Sir, the importance of this amendment is that it seeks to delete the word ‘sedition’ and use a much better phraseology, viz., ‘which undermines the security of, or tends to overthrow, the state’. The object is to remove the word ‘sedition’ which is of doubtful and varying import and to introduce words which are now considered to be the gist of an offence against the state.

“I was pointing out that the word ‘sedition’ has been a word of varying import and has created considerable doubt in the minds of not only the members of this House but of courts of law all over the world. Its definition has been very simple and given so far back as 1868. It says ‘sedition embraces all those practices whether by word or deed or writing which are calculated to disturb the tranquillity of the state and lead ignorant persons to subvert the government’. But in practice it has had a curious fortune. A hundred and fifty years ago in England, holding a meeting or conducting a procession was considered sedition. Even holding an opinion which will bring ill-will towards government was considered sedition once. Our notorious Section 124-A of the Penal Code was sometimes construed so widely that I remember in a case a criticism of a District Magistrate was urged to be covered by Section 124-A. But the public opinion has changed considerably since, and now that we have a democratic government a line must be drawn between criticism of government, which should be welcome, and incitement, which would undermine the security or order on which civilised life is based, or which is calculated to overthrow the state. Therefore, the word ‘sedition’ has been omitted. As a matter of fact, the essence of demo-

cracy is criticism of government. The party system necessarily involves an advocacy of the replacement of one government by another. This amendment therefore seeks to use words which properly answer to the implication of the word ‘sedition’ as understood by the present generation in a democracy and therefore there is no substantial change; the equivocal word ‘sedition’ only is sought to be deleted from the article. Otherwise, an erroneous impression would be created that we want to perpetuate 124-A of the IPC [Indian Penal Code] or its meaning, which was considered good law in earlier days.”

This is exactly what the Supreme Court did 14 years later.

The adoption of K.M. Munshi’s amendment unanimously by the Constituent Assembly on December 1, 1948, in effect erased Section 124-A of the Penal Code on sedition. The Assembly was not deliberating in a blank. All talk of sedition implied reference to Section 124-A of the Penal Code which defined sedition.

Let us trace the course of the litigation. First comes *Romesh Thapar vs. State of Madras*. A decision was made by a bench of five Supreme Court judges on May 16, 1950. The judgment was delivered by one of the court’s finest judges, Justice Patanjali Sastri, erudite, clear-headed and liberal. He said, “It is also worthy of note that the word ‘sedition’ which occurred in Article 13 (2) of the Draft Constitution prepared by the Drafting Committee was deleted before the Article was finally passed as Article 19(2). In this connection it may be recalled that the Federal Court had, in defining sedition in *Niharendu Dutt Mazumdar vs The King-Emperor* held that ‘The acts or words complained of must either incite to disorder or must be such as to satisfy reasonable men that this is their intention or tendency’ but the Privy Council overruled that [602] decision and emphatically reaffirmed the view expressed in Tilak’s case to the effect that ‘the offence consisted in exciting or attempting to excite in others certain bad feelings



K.M. MUNSHI, who argued that the word ‘sedition’ was of ‘doubtful and varying import’.



JUSTICE PATANJALI SASTRI, who upheld the right of free speech in the *Romesh Thapar* case.



M.K. GANDHI and Maulana Azad in an undated photograph. Both were tried for sedition under colonial rule.

towards the government and not in exciting or attempting to excite mutiny or rebellion or any sort of actual disturbance, great or small.” (*King-Emperor vs Sadashiv Narayan Bhalerao*.)

“Deletion of the word ‘sedition’ from the draft Article 13(2), therefore, shows that criticism of government exciting disaffection, or bad feelings towards it, is not to be regarded as a justifying ground for restricting the freedom of expression and of the press, unless it is such as to undermine the security of or tend to overthrow the state. It is also significant that the corresponding Irish formula of ‘undermining the public order or the authority of the state’ [Article 49 (6) (i) of the Constitution of Eire, 1937], did not apparently find favour with the framers of the Indian Constitution. Thus, very narrow and stringent

limits have been set to permissible legislative abridgement of the right of free speech and expression, and this was doubtless due to the realisation that freedom of free speech and expression of the press lay at the foundation of all democratic organisations, for without free political discussion, no public education, so essential for the proper functioning of the processes of popular government, is possible...

“We are therefore of opinion that unless a law restricting freedom of speech and expression is directed solely against the undermining of the security of the state or the overthrow of it, such law cannot fall within the reservation under clause (2) of Article 19 although the restrictions which it seeks to impose may have been conceived generally in the interests of public order.”

Romesh Thapar had challenged in the Supreme Court the Madras government’s order banning the entry into the State of *Cross Roads*, a lively, pro-communist weekly published from Bombay, where Romesh Thapar was then resident. The Supreme Court held that the order was unconstitutional.

Justice Fazal Ali dissented.

ORDER UPHOLDING “SEDITION”

On January 30, 1962, came the disastrous *Kedar Nath Singh vs State of Bihar* which upheld sedition as defined in the colonial Section 124-A of the IPC. It was also a

The apex court in 1950 held the Madras government’s order banning a pro-communist weekly in the State unconstitutional.

bench of five, and *Justice S.R. Das was a member of both benches*, in Thapar's case and this. The judgment was delivered by Chief Justice of India Bhuvaneshwar Prasad Sinha. The offending speech that was under litigation had been delivered by a communist (Kedar Nath Singh) in intemperate language, but it was *not* seditious.

There is a clear distinction in law between extolling revolution, as the British politician Harold Laski did, and inciting it.

Chief Justice Bhuvaneshwar Prasad Sinha ignored completely the Constituent Assembly Debates, as did the concurring judges in the case. Unlike K.M. Munshi, they had not been to jail or suffered under British rule. What is astonishing is that Justice S.R. Das was a member of both benches. Like the Vicar of Bray, he merrily went along with both sides.

Chief Justice Bhuvaneshwar Prasad Sinha cited English cases. One such case said as far back as in 1867 that sedition was “nearly allied to that of treason”.

The tendency of sedition is to incite the people to “insurrection and rebellion” or “public disturbances or to lead to civil war”. Justice Patanjali Sastri's words in *Romesh Thapar* were quoted, “It is also worthy of note that the word ‘sedition’ which occurred in Article 13(2) of the Draft Constitution prepared by the Drafting Committee was deleted before the Article was finally passed as Article 19(3). *But the framers of the Constitution may well have reflected with Madison who was ‘the leading spirit in the preparation of the First Amendment of the Federal Constitution’ that it is better to leave a few of its noxious branches to their luxuriant growth, than, by pruning them away, to injure the vigour of those yielding the proper fruits.*” This is pure guess work to reach a desired end.

How wrong-headed can you possibly get? Justice Sastri did not use the italicised words. The entire tenor and tone of their two judgments are fundamentally different, with Justice S.R. Das playing on both sides.

Chief Justice Bhuvaneshwar Prasad Sinha spoke of “subverting” the government by bringing that government “contempt or hatred”. Ergo, love thy government as thyself. Do Donald Trump, Boris Johnson or Emmanuel Macron demand the people's love on pain of imprisonment? Does lack of “affection” imply subversion? Chief Justice Bhuvaneshwar Prasad Sinha and his four colleagues denounced “vilification and condemnation of the government in words which incite violence or have the *tendency* to create public disorder”. This is not sedition. If it were, cartoonists and columnists would be out of busi-

ness. “It is only when the words, written or spoken, etc. which have the pernicious tendency or intention of creating disorder or disturbance of law and order that the law steps in to prevent such activities in the interest of public order. So construed, the section, in our opinion strikes the correct balance between individual fundamental rights and the interest of public order. It is also well settled that in interpreting an enactment the court should have regard not merely to the literal meaning of the words used, but also take into consideration the antecedent history of the legislation,” the judgement said. The antecedent history of the sedition law belongs to the British colonial era.

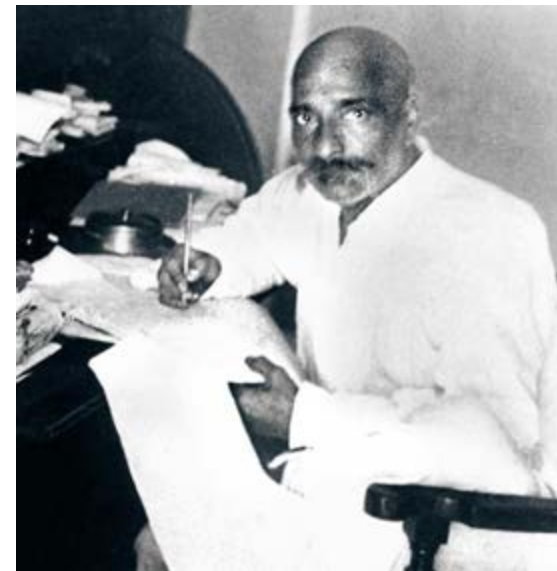
HISTORY OF SEDITION IN INDIA

It is doubtful if any of those fine judges was aware of the history of sedition in India. It was carefully traced by Walter Russell Donogh, an English barrister who practised in the Calcutta High Court, in “A Treatise on the Laws of Sedition and Cognate Offences of British India, Penal and Preventive with an Excerpt of the Acts in Force Relating to the Press, the Stage and Public Meetings” (Calcutta, Thacker, Spark & Co. 1991).

A maxim on the frontispiece of the work reveals his outlook: “*Salus Reipublicae Suprema Lex.*” The safety of the republic is the supreme law. This did not apply to colonial rule.

In 1837, the idea of sedition existed *in gremio* as one of the clauses of Thomas Babington Macaulay's draft Criminal Procedure Code. That Bill was shelved for more than 20 years, and when at last it saw the light of day in 1860, the sedition clause for some unaccountable reason had been omitted. It was not until 1870, 10 years later, that the want of such a provision in a complete code of crimes came to be recognised. The result was that a Special Act (XXVII of 1870) was passed by way of amendment to the Penal Code, introducing Macaulay's original clause practically unaltered, 33 years after its conception. Sir James Fitzjames Stephen, when introducing this Bill in August 1870 to amend the Penal Code observed that the provision in question was one which, by some unaccountable mistake, had been omitted from the Penal Code as ultimately passed. It stood as Section 113 in the draft Code published in 1837, and Sir Barnes Peacock was quite unable to account for its “omission” when the Code was enacted. It punished “attempts to excite feelings of disaffection to the government”.

“No one in his senses would contend that because a given law is good and suitable in England, it is therefore



THE HINDU ARCHIVES

BAL GANGADHAR TILAK. He, too, was tried for sedition.

good and suitable in India. If a rule of law exists in England we may fairly consider whether it is suitable to India, but the answer to the question must always depend on the conditions which prevail in India. How much licence of speech can be safely allowed is a question of time and place. If I smoke a cigar on the *maidan* it pleases me, and hurts no one else. If I smoke a cigar in the powder magazine of the Fort, I endanger the lives of many, and do an act well deserving punishment. Language may be tolerated in England which it is unsafe to tolerate in India because in India it is apt to be transformed into action instead of passing off as harmless gas. In legislating for India we must have regard to Indian conditions, and we must rely mainly on the advice of those who speak under the weight of responsibility and have the peace and good government of India under their charge.

“The difference between the social conditions prevailing in England and those of India appears to have been entirely overlooked by the most vigorous opponents of the Bill, for their arguments would seem to be based on the assumption of their complete similarity.”

This would account for the strenuous efforts made for the introduction of the English law, or what the colonial administration supposed to be the English law of sedition, in India.

On this point the observations of the Lieutenant-Governor of Bengal, Sir Alexander Mackenzie, carry with them the weight of authority and experience. “Much of the outcry,” he said, “against the present Bill rests upon its supposed divergence from the law of England on seditious libel, and on the assertion that the law as settled in 1870 was sufficient and ought to be final. Now I venture to assert these two propositions — first, that the law of England, built up by judicial rulings to meet the circumstances of a homogeneous people directly interested in and sharing in its own government, is not neces-

sarily a norm to which the law of India ought strictly to conform; and second, that the conditions of the country have themselves so altered since 1870 that what was adequate then is not necessarily adequate now. As to the first point — If the section is in strict accord with the English law, all criticism of it loses weight; if it is not, there is in the very great difference in the conditions of the two countries ample justification for any deviation from the English law necessary for effectively checking the offence of sedition in India. It is clear that a sedition law which is adequate for a people ruled by a government of its own nationality and faith may be inadequate, or in some respects unsuited, for a country under foreign rule and inhabited by many races, with diverse customs and conflicting creeds. It is impossible in India to accept the test of direct incitement to violence or intention to commit rebellion, and limit the interference of the government to such cases.”

“To anyone,” he continued, “who studies, as I do from week to week, the utterances of the press in India, nothing can be more clear than that, though we seldom have such bold sedition preached as led to the recent trials in Bombay, or as prevailed here in 1870, we are now face to face with a far more insidious and equally dangerous style of writing and speaking. And, this is an evil which is yearly growing, and with the spread of what is called education is becoming more far-reaching in its noxious effects. It is indeed, in my opinion, to our own system of education that we owe all the trouble. I have long been convinced that it is thoroughly unsound. We are turning out by scores of thousands young men who are trained only in words, look mainly for government employment, and failing to get it become, as the Maharaja of Travancore described them, ‘a host of discontented, disobedient, and sometimes troublesome young men’. This is the class that writes for the Native Press, perorates on platforms, and generally vents its spleen upon the government which has not been able to find appointments for more than a fraction of its members. To honest, well-informed criticism no English government would ever object. But every government has the right to object when its critics wander off from criticism to calumny. No government, such as ours in India can afford to allow the minds of an ignorant and credulous oriental population to be gradually poisoned and embittered by persistent calumny of the government and all its measures. If these sections lead to a more careful, well-considered and responsible journalism, they will confer a benefit not only on the state and the public, but on the journalistic profession itself.”

The Supreme Court's ruling in 1962 gave birth to oddities. For example, in *Nazir Khan* in State of Delhi (2003) & SCC 458 at 488. Sedition was designed by a colonial regime to contain discontent. It yearned for acceptance and affection. It has no place in a democracy. But this is what the Supreme Court rules. Sedition was deliberately omitted from the Constitution. Section 124 of the IPC became non esse. It was deliberately restored by the Supreme Court. □

Do Donald Trump, Boris Johnson or Emmanuel Macron demand the people's love on pain of imprisonment? Does lack of “affection” imply subversion?... If it were, cartoonists and columnists would be out of business.



WORLD AFFAIRS

YURI GRIPAS/BLOOMBERG

ISRAEL'S TRUMP

It seems like there is almost nothing President Trump will not do, even in his last days in office, to please the Israeli leadership and the evangelical Christian and Zionist lobby in the U.S. that helped him win in 2016. BY JOHN CHERIAN

AS UNITED STATES PRESIDENT DONALD Trump enters the final months of his presidency, he is working overtime to help Israel achieve its political, diplomatic and military goals. All U.S. Presidents have been good benefactors of the Jewish state, but no other President so far has handed so much on a platter to Israel. Trump has ridden roughshod over international law and United Nations Security Council resolutions to please the evangelical Christian and Zionist lobby that helped him win the presidency four years ago. Trump even refused to pay lip service to the two-state solution to the Arab-Israeli conflict. All previous administrations, both Democrat and Republican, had backed the two-state solution since Israel and the Palestine Liberation Organisation signed the Oslo Peace Accords under U.S. tutelage in 1993.

Almost all of Israel's outstanding demands have been fulfilled at the expense of Palestinians. Trump ordered the shifting of the U.S. embassy from Tel Aviv to Jerus-

alem in 2017. This was a long-standing demand of the Israeli government and the evangelical Christian movement in the U.S. The Christian Zionists repaid the favour by voting solidly for Trump this time too. The Palestinian Authority (P.A.) criticised Trump's move as East Jerusalem is the designated capital of the state of Palestine. The P.A. suspended diplomatic relations with Washington in protest.

Trump retaliated by ordering the suspension of humanitarian aid worth hundreds of millions of dollars to the beleaguered Palestinians and the closing down of the Palestinian embassy in Washington. Even aid for critically ill Palestinians suffering from diseases such as cancer was suspended. However, military aid to the P.A.'s security services, which work in close coordination with U.S. and Israeli security services, continues uninterrupted. The U.S. trained the P.A.'s security force.

In January 2020, Trump finally unveiled his so-

PRESIDENT DONALD TRUMP flanked by Benjamin Netanyahu, Prime Minister of Israel; Abdullatif bin Rashid Al Zayani, Bahrain's Minister for Foreign Affairs; and Sheikh Abdullah bin Zayed bin Sultan Al Nahyan, United Arab Emirates' Minister of Foreign Affairs and International Cooperation; at the White House on September 15, 2020, the day the two Arab countries signed agreements normalising relations with Israel.

called "deal of the century", which he bombastically claimed would end the Israel-Arab conflict. The international community was not surprised that the terms offered in the deal were only beneficial to one side, Israel. The deal sought to legitimise the widespread Israeli settlements in the West Bank, which would have made a mockery of the proposed Palestinian state. Trump's so-called "vision of peace" handed sovereignty of the Jewish settlements in the West Bank to Israel. Undivided Jerusalem was described as the capital of Israel. The Trump administration wanted the Palestinians to give up their sacrosanct "right of return" for the millions of refugees, who were forced out of their homeland when the state of Israel was violently created, and their descendants. The Trump plan envisaged the Israeli army having control over security along the border between the West Bank and Israel. It was no surprise that Palestinians and most of the international community summarily dismissed Trump's "deal of the century".

Israeli Prime Minister Benjamin Netanyahu praised Trump for being the first foreign leader to recognise the sovereignty of Israel over the West Bank and went on to announce that Israel was on the verge of formally annexing 30 per cent of the West Bank. "Trump is creating not only a new Israel, but a new world. A world without international law, without honouring international resolutions, without even the appearance of justice," the Israeli journalist Gideon Levy wrote in his *Haaretz* newspaper column.

GOLAN HEIGHTS

Trump's contempt for international law was again exemplified when, in an abrupt reversal of decades of U.S. policy, he recognised the annexed Golan Heights as being part of Israel. The Golan Heights were captured from Syria in the 1967 Six-Day War. Before the war, more than 200,000 Syrians lived in the area. It was with U.S. help that Israel managed to retain the Golan Heights when Syria tried to regain the territory in the 1973 Yom Kippur War. U.N. Security Council resolution 242, which was passed in 1967 after Israel's takeover of Golan, upholds the "inadmissibility of the acquisition of territory by war". This was a basic principle of the post-Second World War international system. If Trump had been re-elected, he would have given Israel the go-ahead to formally annex the West Bank too.

The six-party nuclear deal with Iran, the Joint Comprehensive Plan of Action, was also broken to a large extent to please the domestic Zionist lobby and Israel. It was an international agreement that the U.S. was party

to. The U.S. President's sanctioning of the assassination of the Iranian Major General Qassem Soleimani while Soleimani was on an official visit to Iraq is yet another illustration of the Trump administration's penchant for bending over backwards to fulfil even the most extreme demands of the Zionist state. Soleimani had been on top of the Israeli hit list for a long time. The Israeli government was well aware that its direct involvement in his assassination could have disastrous consequences. The Iranians reacted militarily after the assassination by targeting a U.S. military base with a missile barrage.

ASSASSINATION OF MOHSEN FAKHRIZADEH

It is unlikely that the Israeli secret services would have assassinated the top Iranian nuclear scientist Mohsen Fakhriadeh without getting the green signal from the White House. Israel had hoped to provoke Iran into reacting militarily and spark another Gulf war. One of Netanyahu's fondest hopes was that Trump would wage war against Iran on Israel's behalf. The President was on the precipice of doing so after the assassination of Soleimani but was constrained by his pledge to his political base to bring a closure to the never-ending wars the U.S. is waging in West Asia and other parts of the world.

Although Trump's "deal of the century" had no takers, he finally managed to break Arab unity on the Palestine issue to some extent by getting four Arab states to agree to the normalisation of relations with Israel. The United Arab Emirates (UAE) was the first to break ranks followed by Bahrain, Sudan and Morocco. In return for the UAE's formal recognition of Israel, the Trump administration will be selling the country the top-of-the-line F-35 fighter jets, Reaper drones and electronic warfare planes. In a joint statement, Netanyahu and his Defence Minister, Benny Gantz, said that Israel no longer objected to the sale as the U.S. "is upgrading Israel's military capabilities and maintaining Israel's qualitative military edge".

Saudi Arabia was also expected to announce normalisation of relations with Israel but has held back owing to the fear of a domestic public backlash. Mohammed bin Salman (MBS), the Crown Prince and de facto ruler of the kingdom, was said to be in favour of it but was reportedly overruled by his father, King Salman. The King apparently is in favour of sticking to the Arab League's position that diplomatic relations should be established only after the creation of a Palestinian state. But the Saudis have opened their airspace to Israeli air traffic. The Israeli Prime Minister was in Saudi Arabia in late November for a "secret" meeting with MBS and U.S. Secretary of State Mike Pompeo. It may not have been a coincidence that Fakhriadeh's assassination took place soon after the meeting.

Bahrain would not have established diplomatic relations with Israel without the express approval of Saudi Arabia. In 2011, the Saudis and the Emiratis sent troops to Bahrain to prop up the monarchy when it was facing popular street protests, and they continue to be present there. The Saudis and the Emiratis also played a role in



PATRICK SEMANSKY/REUTERS

U.S. SECRETARY OF STATE MIKE POMPEO and Israeli Foreign Minister Gabi Ashkenazi after a security briefing on Mount Bental in the Israeli-occupied Golan Heights on November 19, 2020.

helping the Trump administration advance Israel's goals in the region and undermine the Palestinian cause by lobbying with the governments of Sudan and Morocco.

It was the Sudanese military leadership, which is close to the Saudis, that was keen on signing the deal Trump proposed. Civilian Prime Minister Abdalla Hamdok and other civilian leaders, according to reports, initially had serious reservations about the plan to normalise relations with Israel. The U.S. had branded Sudan a "terrorist state" since the twin attacks on its embassies in Nairobi and Dar es Salaam in 1998. Sudan has always denied its involvement, but because Osama bin Laden was allowed to stay in the country for a few years in the early 1990s, the U.S. deemed it guilty and imposed tough sanctions, which adversely impacted Sudan's economy. The Trump administration indicated to the government in Khartoum that it would be removed from the U.S. State Department's list of states "sponsoring terrorism" if it broke with the Arab consensus and recognised Israel. The government in Khartoum finally relented, and President Trump announced in October that Sudan and Israel had agreed to open diplomatic and economic ties. "Huge win for the United States and for peace in the world," Trump tweeted on the occasion. Senior Sudanese officials admitted that their government was under immense pressure from the Trump administration to establish diplomatic relations with the Jewish state at a time when the country was in the throes of an economic meltdown and its health system was in tatters because of the pandemic.

'ANOTHER STAB IN THE BACK'

While welcoming Sudan's removal from the "terror list", Hamdok has so far not said anything about establishing "diplomatic relations" with Israel. It seems that the interim government prefers to leave the decision to the

civilian government that will be formed after Sudan goes to the polls in 2022. Removal from Washington's "terror list" will enable the government in Khartoum to access international debt relief and financial aid. The Trump administration has promised hundreds of millions of dollars in investment and aid for the step it has taken. Netanyahu hailed the Sudanese decision as a "dramatic breakthrough". P.A. President Mahmoud Abbas strongly criticised Sudan's move, with Palestinian officials describing it as yet "another stab in the back".

In the second week of December, Morocco became the fourth Arab country to agree to recognise Israel in exchange for the U.S. openly siding with Morocco on the Western Sahara issue (see story on page 83) and for the supply of sophisticated military weaponry. Trump further sweetened the deal by promising more than \$3 billion in U.S. investments in Morocco's tourism and banking sectors and a renewable energy company the Moroccan King owns. With this move, Morocco has given up all pretensions of solidarity with the Palestinian cause.

Anyway, Morocco has had long-standing relations with Israel. Liaison offices were opened in the capitals of the two countries in 1994 following the Oslo Peace Accords. Morocco closed the liaison offices following the second Palestinian intifada (uprising) in 2000, but security relations between the two countries continued. Israel has helped the Moroccans with their spyware. The Mossad, the Israeli intelligence service, has had a presence in the Kingdom of Morocco for the last 60 years. Every Mossad chief since 1960 has visited the Moroccan capital, Rabat. Morocco had used the Mossad to carry out the assassination of the charismatic opposition leader, Mehdi Ben Barka, in France, where he was living in exile. The current Moroccan King has been trying for years to get Israel to convince the Trump administration to recognise Western Sahara as part of Morocco.

Palestinian leader Hanan Ashrawi said that the Trump administration "was scrambling to do anything it can to extract concessions and benefits for Israel". She said that there was "something extremely immoral in the way they are exploiting countries' needs and demands". The Moroccan authorities have used strong-arm methods to put down attempts to stage protests. An opposition leader said that the attempt of the authorities to ban pro-Palestinian demonstrations indicated that the decision to normalise relations with Israel "was imposed on the Moroccan people".

It is not only the U.S. that is helping Israel in its efforts to break the international solidarity with the Palestinian cause. The Narendra Modi government has done its bit by giving Bhutan the green signal to establish diplomatic relations with Israel. Israel and Bhutan signed an agreement in the second week of December to establish full diplomatic relations. India closely supervises Bhutan's foreign policy. The country has diplomatic relations with around 50 countries. Bhutan has so far not been able to establish full diplomatic relations with China though the two countries share a border. □

A colony in Africa

Trump gets Morocco to establish [diplomatic ties with Israel](#) by recognising Western Sahara as part of the Kingdom of Morocco. BY JOHN CHERIAN

IN HIS LATEST TRANSACTIONAL DEAL JUST weeks before leaving office, United States President Donald Trump persuaded Morocco to establish diplomatic relations with Israel. The move made Morocco the fourth Arab country to break ranks with the rest of the Arab and Muslim world in the last three months. While announcing the deal, Trump announced that Washington was abandoning its long-established policy on Western Sahara and was recognising the region as an integral part of the Kingdom of Morocco.

Western Sahara is often described as the 'last remaining colony' in Africa. Trump tweeted on December 10 that he had recognised Moroccan sovereignty over western Sahara and that "our two GREAT friends, Israel and Morocco, have agreed to full diplomatic relations". It was

a classic example of a quid pro quo: Morocco had insisted on the U.S.' acquiescence on the Western Sahara issue in lieu of the establishment of diplomatic relations with the Jewish state.

The Sahrawi Arab Democratic Republic (SADR), as the former Spanish colony of Western Sahara is officially called, is a full-fledged member of the African Union (A.U.) and its sovereignty has been recognised by many states all over the world. The U.S. now has the dubious distinction of becoming the first country to formally recognise Western Sahara as part of the Kingdom of Morocco. Jared Kushner, the U.S. President's son-in-law, did most of the back-room negotiations with Morocco and Israel. Kushner confirmed that recognition of Moroccan sovereignty over Western Sahara was linked to

FADEL SENNA/AFP



A MOROCCAN ARMY vehicle driving past car wreckages in Guerguerat located in Western Sahara on November 24, after the intervention of the royal Moroccan armed forces in the area.

the kingdom's normalisation of relations with Israel.

The U.S. move violates several United Nations Security Council resolutions. Within days of Trump's announcement, the U.S. government printed a new map showing Western Sahara as part of the Kingdom of Morocco and said that an American consulate would be located in the region.

Jim Inhofe, Chairman of the U.S. Senate's Armed Services Committee and a Republican, said that Trump was "poorly advised" and that he could have made the Israel-Morocco deal "without trading the right of a voiceless people". Elliot Engel, a Democrat who is the Chairman of the House Foreign Committee, said that the Trump administration "had upended a credible, internationally supported U.N. process to address the dispute over Western Sahara, which successive administrations of both parties have supported."

Previous U.S. administrations were involved in efforts to find a solution to the long-running conflict in Western Sahara. In 1998, the U.N. proposed a referendum to ascertain the wishes of the people in Western Sahara. But the Moroccan government, with the help of France and to some extent, the U.S., kept on stonewalling. However, James Baker, who was Secretary of State under President George H.W. Bush, tried his best to make the Moroccans agree to a referendum in his capacity as the U.N. Secretary-General's personal representative to the region from 1997 to 2004.

Baker issued a strong statement criticising the recent move, remarking that Trump had "cynically traded the right of self-determination" of the Sahrawi people. "It would appear that the United States of America, which was founded on the principle of self-determination, has walked away from that principle regarding the people of Western Sahara. This is very regrettable," he said.

U.N.'S ROLE

The International Court of Justice (ICJ) had ruled in 1975 that there was "no evidence of any legal tie of territorial sovereignty" between Western Sahara and Morocco. In 1991, the U.N. established a mission to find a solution to the issue through negotiations. After the U.N.-mandated talks, it was agreed that a referendum would be organised to decide the territory's future. The Sahrawi people would be given the choice of either joining Morocco as an autonomous province or opting for independence. After playing for time and trying to wear out Sahrawi resistance, Morocco in the end refused to accept a referendum plan in which independence for Western Sahara was an option. In 2007, Morocco unilaterally announced an 'autonomy' plan for the region. The SADR rejected this offer outright and instead demanded the immediate holding of a referendum on "independence" for the region.

The Security Council unanimously supported the plan for a referendum. But when Morocco sabotaged the plans, the Security Council did nothing. France has been using its diplomatic clout in the Security Council to block a meaningful solution. The U.S., notwithstanding the

role played by Baker, has helped Morocco's efforts to thwart a referendum.

On October 30, 2020, a month before Trump upended previous Security Council resolutions and international law, the Security Council once again extended the mandate of its mission to Western Sahara. The October resolution emphasised "the need to achieve a realistic, practicable, and enduring political solution to the question of Western Sahara, based on compromise". The Trump administration did not object then. But it has now notified the Security Council about its recognition of Morocco's sovereignty over Western Sahara.

U.N. Secretary-General Antonio Guterres' spokesperson said that there was no change in the U.N.'s position following the Trump administration's "volte-face".

Germany has called for a special Security Council session to urgently discuss the issue. Spain, the occupying power until 1975, has rejected the American recognition of the territory as part of Morocco.

POLISARIO FRONT'S RESISTANCE

The Polisario Front, which leads the decolonisation struggle in Western Sahara, condemned in the "strongest terms" the outgoing American President's decision and vowed to fight until Moroccan forces withdrew from all of Western Sahara. Polisario's representative in Washington, Mouloud Saad, said that Trump's decision "was a flagrant breach of international law". He emphasised that the Sahrawi Republic was "an irreversible reality" and that "the times when foreign powers can change the borders of Africa is over". The Sahrawis and the international community are hoping that the incoming Joe Biden administration in the U.S. will restore the status quo. So far, only the Gulf monarchies have supported Trump's move to recognise Moroccan sovereignty over Western Sahara.

Morocco hosts the annual U.S. Africa Command (Africom) military exercises on the continent. Israel had



U.S. PRESIDENT DONALD TRUMP'S surprise backing of Morocco's claim to sovereignty over disputed Western Sahara upended years of international consensus on the status on Western Sahara as disputed territory. In this combination photograph, Israeli Prime Minister Benjamin Netanyahu (left), Trump and Morocco's King Mohammed VI.

provided counter-insurgency training to the Moroccan army during the war with the Polisario guerillas.

The Polisario Front fought a 16-year-old war with Morocco and Mauritania, which divided the territory after the departure of the Spanish in 1975. Mauritania soon gave up its claim, but Morocco has held on to the territory it has seized. The war ended in 1991 after a ceasefire agreement was signed between the two sides. The Polisario Front moved from armed struggle to diplomacy. Morocco has retained control over 80 per cent of the territory where the voice of the Sahrawi people has been muzzled. Many Moroccans have now settled in the area, which has one of the richest known deposits of phosphates. The sea along the Western Sahara coastline is teeming with bountiful marine life and is reputed to have bountiful oil and gas reserves.

The American decision on Western Sahara came immediately after the first serious outbreak of hostilities between Morocco and the Polisario Front after the 1991 ceasefire agreement. In the second week of November, Morocco sent in troops to forcibly reopen a road occupied by Sahrawi protesters. The road connects Morocco and Mauritania but passes through Sahrawi-controlled territory. The peaceful demonstration was happening at the Guerguerat Crossing, through which much of Morocco's trade with sub-Saharan Africa is conducted. The Sahrawis consider the road illegal, saying that it contravenes the 1991 truce.

The Moroccan army crossed into Sahrawi-controlled territory patrolled by the U.N. peacekeeping force to disperse the protesters and secure the area by establishing a military post there. Sahrawi forces moved in to confront the Moroccan army. According to reports, they evacuated the civilians and then exchanged fire with the Moroccan forces.

Brahim Ghali, secretary general of the Polisario Front, said that the Moroccan military operation consti-

tuted an "act of aggression and a flagrant violation of the ceasefire" of 1991. He also announced a "resumption of armed struggle in defence of the legitimate rights of our people". In a letter to the U.N. Secretary-General, he said that Morocco had undermined any chance "of achieving a peaceful and lasting solution to the decolonisation question in Western Sahara" by launching a military attack.

The Polisario Front has since announced its withdrawal from the ceasefire agreement. Its forces have started staging hit-and-run guerilla attacks against the Moroccan forces along the 2,700-km-long military wall that the Moroccans had built to keep out the Sahrawi fighters when the two sides were at war from 1975 to 1991. The militarised wall is the world's longest military barrier.

Sidi Wakal, Secretary General of the Saharawi Security Ministry, said in a statement: "The Moroccan Royal army has made a mistake again as it did in 1975 and got involved in a war without expecting such a fast and powerful response from the Sahrawi Peoples Liberation Army, which forced the Moroccan regime to play its last and dirtiest card by trading normalisation with a tweet from a departing President." He said that the Sahrawi army was now involved in "a large-scale war with the invasive Moroccan army".

Algeria, the strongest backer of the Sahrawis and host to over 1,70,000 Sahrawi refugees, strongly condemned the Trump administration's move. Prime Minister Abdulaziz Djerad said that Trump's decision was designed "to destabilise" his country. The destabilisation of Libya by the West had plunged the Sahel region into deep turmoil. Another war on its doorstep is the last thing the Algerian government wants. "There is now a desire by the Zionist entity to come closer to our borders," the Algerian Prime Minister said.

South African President Cyril Ramaphosa, who chairs the African Union, has urged both sides to de-escalate tensions and return to the negotiating table. South Africa has recognised the SADR as an independent state.

END OF THE TETHER?

The Sahrawis may have finally run out of patience after waiting for more than half a century to be free. The Sahrawis, along with the Palestinians, are among the people betrayed by the world. Both have been promised a lasting solution only to be let down, and both are victims of postcolonial settlements. In both Palestine and Western Sahara, the U.S. has played a key role in disenfranchising the sons of the soil.

The Sahrawis have reason to be disappointed by the U.N.'s abject failure to find a resolution to the fundamental issue of decolonisation. The U.N. mission in Western Sahara was not given the power to monitor human rights violations in the territory. Morocco thwarted all efforts by the U.N. to hold a referendum, with the active connivance of France. Now with the U.S. also openly in Morocco's corner, it will be a tougher struggle for the Sahrawis. □

Policy hangover

Under Joe Biden the foreign policy goal of U.S. primacy will remain. To this end the U.S. will continue to undermine the ties China and Russia have established with countries such as Iran and Venezuela. BY VIJAY PRASHAD

A FEW DAYS BEFORE THE PRESIDENTIAL election in the United States in 2020, Joe Biden reflected on the tragedies of the Donald Trump administration. “Tragically, the one place Donald Trump has made ‘America First,’” Biden said, “is his failed response to the coronavirus: we’re 4 per cent of the world’s population yet have had 20 per cent of the deaths.” This is a clear statement that avoids Trump’s racist attempt to blame China for the deaths in the U.S.; the blame must rest where it belongs, which is in a failed public health system, an overly profit-based medical and pharmaceutical industry, and an incompetent executive branch. Biden stated a clear difference between what the Trump administration had done and what his administration would do.

But, as he expanded on his observations, it became clear that the gap between Biden and Trump is not as coherent as it seems. The problem with Trump, he suggested, was that he embraced “the world’s autocrats” and poked “his finger in the eye of our democratic allies”. It was because of this, Biden said, that “respect for American leadership is in free fall”. In other words, the problem for the U.S. is not its foreign policy, but only how the Trump administration had shifted the strategy to enact the policy. In March, Biden wrote in *Foreign Affairs* that he too wanted to assert U.S. power on the world so that it would maintain its position as the sole superpower. He did not use Trump’s—and before him Ronald Reagan’s phrase—“America First”, but he did talk about how this “is the time to tap the strength and audacity that took us to victory in two World Wars and brought down the Iron Curtain”. The goal of U.S. primacy remains; Biden will not inaugurate any new form of multilateralism. He will merely try to rebuild the “Atlantic alliance”—the North American countries of Canada and the U.S. with the European countries—to pursue U.S. primacy against anyone who stands in the way of U.S. objectives.

BELLIGERENCE AGAINST CHINA

Trump’s trade war and belligerence against China was not authored by Trump but inherited from the Barack Obama administration. This pressure on China is not a political matter alone, but is rooted in large sections of the U.S. elite who have come to understand that China’s

scientific and technological advances threaten U.S. monopoly advantages. At an event hosted by the conservative Hoover Institute, Eric Schmidt (the former head of Google and the head of the National Security Commission on Artificial Intelligence) said the U.S. was “a year or two ahead of China” when it came to artificial intelligence; “we’re not a decade ahead”. “We’re in a contest,” he said, “and part of the reasons I think that China may win is that they have five times as many people. They’re very focussed on STEM (Science, Technology, Engineering, Mathematics) education.” The fear that China might “win” defines U.S. policy regarding China.

The liberal Brookings Institute, from where Biden will draw many people for his administration, released a report recently called *The United States, China, and the Contest for the Fourth Industrial Revolution* (July 2020). The idea that the countries are in a “contest” is entirely the view from Washington; there is no such rhetoric coming from Beijing. The author of this report notes that China could “win” because it has heavily invested in research and development, it has industrial policies that support the growth of China’s tech sector, it has “manufacturing prowess and centrality to global supply chains”,

and China will likely be setting “the global technology standards”. As an example, in July, China’s National People’s Congress approved a plan for \$1.4 trillion to be spent to build fifth generation wireless networks; this is far more than any other country or any corporation has pledged for the advances in telecommunications. China started the year with 2,00,000 5G towers but will end the year with 5,00,000 such towers towards its ultimate goal of erecting five million 5G towers.

Biden’s Secretary of State will be his National Security Adviser Antony Blinken. In September, Blinken said that “China poses a growing challenge, arguably the biggest challenge we face from another nation state: economically, technologically, militarily, even diplomatically.” It is important to note the sequence of the problems—economic and technological challenges far above the military and diplomatic challenges. Unlike Trump’s Secretary of State Mike Pompeo, Blinken admits that this relationship will have “adversarial aspects, competitive aspects, but also cooperative ones”; it is this last form, the cooperative, that differentiates Pompeo from Blinken, although the only examples here (climate change, non-proliferation, global health) do not come to the main issue that will divide the U.S. from China, namely China’s technological advance.

What is the strategy to deal with China’s technological advance? Blinken said the U.S. had to assemble a “league of democracies,” basically the old European allies and Japan—the G7 and NATO—that will stand against China. He has a small supplement to the old idea of “league of democracies” (which is floated out each time a Democratic Party administration takes office in Washington); Blinken wants to create a league of “techno-democracies” and position them against “techno-autocracies, like China”. The U.S., he said, had to “do a much better job in leading, coordinating, working with the other techno-democracies to make sure that we carry the day and not China”.

There is no recognition that China has advanced technologically, and its advances cannot be reversed

short of a war. Rather than recognise that China is a technological power which should be allowed to compete in the world market, the U.S. wants to use its political and military power to demand that China surrender its technological advances. This will be as much Biden’s policy as it was Trump’s policy, with the only difference that Biden and his team will seek to suborn the Europeans to fully back the policy and not rely so much on the Quad (the U.S. with Australia, India and Japan). The rhetoric of war-mongering might be less direct, but it will be the same kind of imposed warlike atmosphere against China.

SANCTIONS AGAINST VENEZUELA

One of the great outrages of our time is the use of unilateral and criminal sanctions by the U.S. against Venezuela and 30 other countries. This use of sanctions long predates Trump. The sanctions policy against Venezuela was ramped up by Obama, and then taken to an extreme level by Trump. Some of Biden’s advisers told Bloomberg anonymously that the new President would welcome a dialogue with Venezuela’s President Nicolás Maduro but only if Maduro held new elections; such a precondition is unacceptable in Venezuela, where they say that new elections would be against Venezuela’s Constitution and would constitute interference in their political process.

The Bloomberg story is not illustrative of the broad policy that Biden will follow when it comes to Venezuela. In March 2019, Jake Sullivan—the National Security Adviser-designate—spoke to Walter Russell Mead of the Hudson Institute about a range of issues. When Mead asked him about Venezuela, Sullivan gave an honest but chilling answer. Sullivan agreed with Mead that “a military solution driven by the U.S. is too big a risk to entertain”.

The U.S., Sullivan said, should therefore “be focussed on all of the non-military tools we can bring to bear”. In other words, he said that the U.S. must deepen the hybrid war of Obama and Trump. What does this mean in practice? It meant, Sullivan said, “doubling down on the sanctions pieces and continuing to build the international coalition around this”. This comment comes after the Trump administration’s failed attempt to conduct two coups in 2019, and after the United Nations had on several occasions pointed out that the sanctions policy was cruel and illegal. The “progressive idealism” of Sullivan and Blinken are unmoved by the considerations of human suffering.

What was more important to indicate for Sullivan was how to use the situation of Venezuela to undermine the power of China and Russia. The U.S. must, he said, “focus on breaking off China, Cuba and Russia from Venezuela through whatever means we have available to us because those, effectively, are the lifelines”. The Biden administration will put its energy into undermining the ties that have been established by China and Russia with countries such as Iran and Venezuela. There will, therefore, be no change in the broad regime change policy of Washington against these countries. Only the mood will be different, the smiles broader, the sneers hidden for the back rooms. □



A TV SHOWING the live broadcast of the U.S. presidential debate between Donald Trump and Joe Biden, in Seoul, South Korea, on October 23, 2020.

AHN YOUNG-JOON/AP

‘The end of the oil state era in West Asia is approaching fast’

Interview with **Patrick Cockburn**, journalist and author.

BY JIPSON JOHN AND JITHEESH P.M.

PATRICK COCKBURN is one of the most acclaimed journalists and a leading Middle East [West Asia, hereafter] reporter. He was the first journalist to spot the emergence of the ISIS (Islamic State of Iraq and the Levant). As a reporter, he has covered some of the major events in West Asia since the Islamic Revolution of 1979: the Iran–Iraq war, the Gulf war, U.S. invasion in Afghanistan, U.S. invasion in Iraq, the Lebanon–Israel war, the Arab Spring, the Syrian civil war, the emergence of the ISIS, the Libyan crisis, the U.S.–Iran crisis, civil wars throughout West Asia, and other regional sectarian and ethnic conflicts.

Cockburn believes that “most of the world’s media reflect the views of their governments because they are state-controlled directly or indirectly”. His reports and articles are among the most sought-after commentaries on the events happening in West Asia. Through detailed ground reporting from one of the most vulnerable conflict zones in the world for the past 40 years, Cockburn has uncovered the political, economic, social and cultural interests of various players involved in the region and the tragic destiny of millions of common people who are directly victimised in the unending conflicts.



BY SPECIAL ARRANGEMENT

According to him, some of the major issues the world faces today are directly linked to the Western intervention in West Asia. He observes that “America’s War on Terror that followed 9/11 has displaced 37 million people—this is the true cause of Europe’s refugee crisis.” He concludes that “the War on Terror created the world’s most powerful terror group, ISIS.” As someone who has closely observed West Asia for

decades, Cockburn forecast the emergence of the ISIS before the world came to know about it. He has written a number of articles on the ISIS and its operations in both Iraq and Syria. In his career of four decades, he has documented, with prescience and precision, how the world order is shaped by the events in West Asia. He says that “Great powers in the world fight out their differences in the Middle East [West Asia].”

For his contribution to journalism, Cockburn has received widespread recognition, including the Martha Gellhorn Prize 2005, the James Cameron Prize 2006, the Orwell Prize 2009, the Peace Through Media Award at the 2010 International Media Awards, the Foreign Commentator of the Year 2013, the Foreign Affairs Journalist of the Year 2014, and the Foreign Reporter of the Year 2014.

He has authored several books, including *War in the Age of Trump: The Defeat of Isis, the Fall of the Kurds, the Conflict with Iran; The Age of Jihad: Islamic State and the Great War for the Middle East; Chaos and Caliphate: Jihadis and the West in the Struggle for the Middle East; The Jihadis Return: ISIS and the New Sunni Uprising; Muq-*

era in West Asia



REUTERS

tada: Muqtada al-Sadr, the Shia Revival, and the Struggle for Iraq; The Occupation: War and Resistance in Iraq; and Getting Russia Wrong: The End of Kremlinology.

Beginning his journalism career in 1979, Cockburn worked with *Financial Times* until 1990 and has been with *The Independent* for the past 30 years. He is a regular contributor to the *London Review of Books* and *CounterPunch*.

In this interview, the first with any Indian media, Cockburn speaks on issues such as the regime change in the U.S. and the possibilities of that country’s policy change towards West Asia, the future of the Iran nuclear deal, which was given up by Donald Trump, the chances of the ISIS’ revival, the decline of oil states, the impact of the War on Terror in West Asia, the Palestinian cause and the recognition by United Arab Emirates (UAE) and Bahrain of Israel, the role of proxy groups in West Asia, the history of colonial intervention in the region, changes in the political

ISLAMIC STATE MILITANTS parade along the streets of northern Raqqa province on June 30, 2014. The ISIS was born out of the chaos in the region, says Cockburn.

landscape and Western withdrawal from the region, the Western media’s coverage of West Asia and the challenges of war-conflict reporting.

Excerpts from the interview:

With Joe Biden in the White House, do you foresee any policy changes by the United States on West Asia?

Let us look at what we are changing from before we look at what we are changing to. This is difficult to do because Donald Trump’s policies, assuming them to be coherent strategies, were chaotic in both conception and implementation. Trump did not start any new wars in West Asia, though he did green-light the Turkish invasion of northern Syria in 2019. He withdrew from the nuclear deal with Iran in 2018, but relied on economic sanctions, not military action, to exert pressure on Iran. In the three countries where America was

engaged in military action—Afghanistan, Iraq and Syria—before Trump was elected President in 2016, surprisingly little has changed. Keep in mind that his foreign policy was heavily diluted with the more interventionist policies of the Pentagon and the U.S. foreign policy establishment in Washington. They successfully blocked or slowed down Trump’s attempted withdrawals from what he termed as the “endless wars” in West Asia. It is not clear, however, that they have a realistic alternative approach.

Biden will be subject to the same institutional pressures as Trump was and is unlikely to resist them. He may be less sympathetic to Crown Prince Mohammed bin Salman in Saudi Arabia and Benjamin Netanyahu in Israel, but I doubt if the relationship between the U.S. and either country will change very

‘It was America’s post-9/11 wars, supposedly against ‘terrorists’, that created or increased chaos in Afghanistan, Iraq, Libya and Syria.’

much. The next Secretary of State, Tony Blinken, approved the Iraq invasion of 2003, the regime change in Libya in 2011, and wanted a more aggressive policy in Syria under Barack Obama. It does not sound as if he has learned much from the failure of past U.S. actions in West Asia. This is not just a matter of personalities: the U.S. establishment is genuinely divided about the merits and demerits of foreign intervention. It is also constrained by the fact that there is no public appetite in America for more foreign wars. For all his rhetorical bombast, Trump was careful not to get Americans killed in West Asia, and it would be damaging for Biden and the Democrats if they fail to do the same.

The Joint Comprehensive Plan of Action, or the Iran nuclear deal, was considered to be of the successes of the Obama administration's foreign policy. But Donald Trump gave up the deal unilaterally. How important was this deal? Will there be a possible change in it with the change in the White House?

Biden says he wants to resume negotiations, but there will be difficulties. One, security establishments in the West are against it. Two, Saudi Arabia and its allies are against it, and so, more significantly, is Israel. Three, the Iranians did not get the relief from sanctions they expected from the nuclear deal of 2015, so they have less incentive to re-engage.

A misunderstanding—perhaps an intentional one—on the side of Western states, Israelis and Saudis/Emiratis about the nature of the deal may prevent its resurrection. They claim that Iran used it as cover for political interference elsewhere in the region. But Iranian action, and its ability to project its influence abroad, is high in countries where there are powerful Shia communities such as Iraq, Syria, Lebanon, Yemen, Afghanistan—and low elsewhere. Iran is never going to stop its intervention in these countries in which, in any case, the Iranians are on the winning side.

Gulf countries such as the United

Arab Emirates and Bahrain have recognised Israel and established diplomatic relations with it recently. What are the real reasons behind more Arab states recognising the state of Israel? What would be its effect on Israel-Palestine relations?

This weakens the Palestinians, though they were very weak already. The UAE and Bahrain (the latter is significant only as a proxy of Saudi Arabia) did not do much for the Palestinians in any case. Yet, however weak the Palestinians become, they are not going to evaporate so, as before, Israel holds all the high cards but cannot win the game.

COLONIAL HISTORY

You have covered West Asia for almost 40 years. You have said that 'Great powers in the world fight out their differences in West Asia.' Why do they fight out their differences in the region?

West Asia has been unstable since the end of the Ottoman Empire. It has been an arena for international confrontation ever since. Reasons for this include, one, oil; two, Israel; three, states in West Asia look weak but societies are strong and very difficult to conquer—witness Israel's disastrous invasion of Lebanon in 1982 and the even more self-destructive U.S.-led invasion of Iraq in 2003. Invaders and occupiers in West Asia have great difficulty turning military superiority into political dominance.

How has colonial rule been responsible for major ethno-

political, social conflicts in West Asia? How do you read this history?

Foreign intervention usually exploits and exacerbates sectarian and ethnic divisions, though it seldom entirely creates them. Britain relied on the urban Sunnis to rule Iraq; the French looked to minorities such as Christians in Lebanon to rule there. More recently, foreign powers gave money, arms and political support to factions in Iraq to enhance their own influence but fuelling civil war. Opponents of Saddam Hussein genuinely believed that he had created religious divisions and these would disappear when he was overthrown. But, on the contrary, they got much deeper and more lethal. The same is true of Syria: the battle lines generally ran along sectarian and ethnic boundaries. Intervention in West Asia has traditionally ended badly for British and American leaders: three British Prime Ministers (David Lloyd George, Anthony Eden and Tony Blair) lost power or were badly damaged by the West Asian interventions they launched, as were three American presidents (Jimmy Carter, Ronald Reagan and George W. Bush).

You have observed that 'the Iran-Iraq war was the opening chapter of a series of conflicts centred on Iraq and the Gulf that have shaped the politics of the modern world.' Why do you attribute the uncertainties in the recent history of West Asia to the Iran-Iraq war?

The Iran Revolution was a turning point for the region out of which came the Iran-Iraq war that in turn

exacerbated Shia-Sunni hostility throughout the region. Saddam Hussein won a technical victory in the war but then overplayed his hand by invading Kuwait. Aside from Iraq, the sides confronting one another in West Asia are much the same now as they were 40 years ago. One big change is the recent emergence of Turkey as an important player, intervening militarily in Syria, Iraq, Libya and Nagorno-Karabakh.

To what extent do proxy groups have a role in West Asia? Could you tell us about major incidents in which proxy groups played important roles in the recent past?

One has to be careful to distinguish between different 'proxy groups'. The phrase is often used as a form of abuse to denigrate movements with strong indigenous support as mere pawns—and sometimes this is true. The Houthis in Yemen, for instance, have been fighting for years and receive little material help from Iran, but are almost always described in the Western media as 'Iranian-backed Houthis', implying that they are simply Iranian proxies, which they are not. In Iraq, some of the Hashd al-Shaabi (Shia paramilitaries) are under orders from Iran, but others are independent. The Kurds in Syria rely on the U.S. militarily and politically because they fear Turkey, but they are certainly not American puppets.

WAR ON TERROR AND THE RISE OF ISIS

You have also observed that 'the America's War on Terror is the cause of the European refugee crisis and also that it (the War on Terror) created the world's most powerful terror group, the ISIS.' What is the real outcome of 'the War on Terror' in West Asia?

It was America's post-9/11 wars, supposedly against 'terrorists', that created or increased chaos in Afghanistan, Iraq, Libya and Syria. These wars turned out to be endless, so populations had no choice but to flee. In Europe, the refugee exodus from Syria peaked in 2015-16 and



KING SALMAN BIN ABDULAZIZ AL-SAUD of Saudi Arabia with Egyptian President Abdel Fattah el-Sisi (left) and U.S. President Donald Trump during the inauguration of the Global Centre for Combating Extremist Ideology, in Riyadh in May 2017. Saudi Arabia's more aggressive foreign policy under Crown Prince Mohammed bin Salman produced few successes, aside from cultivating Trump and his entourage.

was probably a decisive factor in the vote for Brexit in the U.K. referendum. All the anti-immigrant parties in Europe were boosted. The intervention by Britain and France in Libya (backed by the U.S.) in 2011 destroyed the Libyan state and opened the door to a flood of refugees from further south seeking to cross the Mediterranean. The Europeans in particular remain in a state of denial about the role of their own foreign policy in sparking these population movements.

One of the important developments we saw in West Asia this decade was the emergence of the world's most powerful terror group, the ISIS, and its end. You were the first to warn about the rise of the ISIS. As a reporter from the battle ground, what prompted to give that warning? What led to the emergence of the ISIS? How did such an organisation last for years without sophisticated weapons and other funding despite nations across the globe declaring war against it? The ISIS was born out of the chaos in the region. Before 9/11, Al Qaeda was a small organisation. Al Qaeda in Iraq, created by the U.S. invasion, was far more powerful. Defeated by

2009, it was able to resurrect itself as the ISIS after the start of the civil war in Syria. I am surprised now that more people did not understand how strong the ISIS had become by 2014, the year they captured Mosul in northern Iraq. They had already taken Fallujah, 40 miles west of Baghdad earlier in the year, and the Iraqi Army had failed to get them out. This should have been a sign that the ISIS was stronger and the Iraqi government weaker than had been imagined. The ISIS was a monstrous organisation, but militarily it was very effective in using a mixture of snipers, suicide bombers, improvised explosive devices [IEDs] and booby traps. Its weakness militarily was that it had no answer to air power.

Do you expect the ISIS' resurgence in West Asia? Many people view the anti-Western rhetoric of Islamist groups as the real resistance to imperialism. But scholars like Samir Amin have written about how political Islam serves imperialism. What is your experience?

There is a resurgence of the ISIS in Iraq and Syria, not on the scale of [its activities in] 2012-14 but still significant. I am not convinced that clones



of the ISIS in other countries are as significant as is sometimes made out to be. The ISIS lost its last territory with the fall of the Baghouz pocket in eastern Syria in March 2019. The ISIS leader and caliph, Abu Baqr al-Baghdadi, killed himself during a raid by the American Special Forces on a house in northwest Syria in October the same year. Since then events have favoured the ISIS: the U.S.-led coalition against it has fragmented and the defeat of the ISIS no longer has the priority it once had; Sunni Arabs, the com-

munity from which the ISIS springs in Iraq and Syria, remain impoverished and disaffected; the ISIS has plenty of experience in guerilla war, to which it has reverted, because holding fixed positions led to it suffering heavy losses from artillery and airstrikes. The Syrian and Iraqi governments, as well as the Kurds, all have weaknesses like corruption that the ISIS can exploit.

That said the ISIS no longer has the advantage of surprise, the momentum that comes from victories, or the tolerance—and probably the covert support—of foreign countries (notably Turkey) that it had in 2014–16. The Sunni Arabs suffered hideously because of the last ISIS offensive with the part destruction of Mosul and Raqqa, their two biggest cities. Many will not want to repeat the experience. Local security forces are more effective than they were five years ago.

Was the ISIS an anti-imperial force? Not primarily, since their main enemies were Shia and other non-Sunni minorities. Objectively, the ISIS energised and legitimised foreign intervention wherever it has strength.

One of the main reasons for superpower interventions in West Asia is the presence of oil. In a recently written piece, you observed



CHRIS HONDROS/JAP

SADDAM HUSSEIN

during his trial in Baghdad in 2006. “Opponents of Saddam Hussein believed that he had created religious divisions and these would disappear when he was overthrown. But they got much deeper and more lethal.”

single year. In other words, the ability of the rulers of a state like Saudi Arabia to project power abroad and retain power at home has significantly diminished. A country like Iraq has just half the income it needs from oil—and it has no other exports—to pay state employees and to prevent the bankruptcy of the Iraqi state. People forget what a peculiar situation we have had in West Asia over the last half century, with countries that would have had marginal or limited importance in the world—like Saudi Arabia, the Gulf states, Libya and Iran—becoming international political players thanks to their oil wealth. They could afford to buy off domestic dissent by creating vast patronage machines that provided well-paid jobs. But there is no longer the money to do this. The end of the oil-state era is not yet entirely with us, but it is approaching fast.

THE ROLE OF SUPERPOWERS

‘The Independent’ recently carried an article of yours titled ‘The U.S. is losing its world superpower status due to its failure to lead on the COVID-19 crisis—and this time, it might not recover.’ What makes you conclude so? If it is so what would be its impact on the political landscape of West Asia?

Superpowers need to show basic

that ‘oil states are declining’. If so, what would be its political, economic and social implications in West Asia in particular and international politics at large?

Biden or no Biden, the nature of power in West Asia is changing. Oil states are no longer what they were because the price of oil is down and is likely to stay that way. This is profoundly destabilising: between 2012 and 2020, the oil revenue of Arab oil producers fell by two-thirds, from \$1 trillion to \$300 billion, in a

competence in ruling themselves to maintain their power. They need this to maintain domestic unity and present themselves as an example to the world. The U.S., and to a lesser extent the U.K., failed to do this during the COVID-19 pandemic, both suffering a higher number of fatalities relative to their populations than many equivalent countries, notably in east Asia. This failure comes on top of ebbing American economic predominance, but the perception of American decline should not be carried too far. Much will depend on how far the U.S. remains internally divided post-Trump and we will see if his presidency was an aberration in American history or the sign of an imploding political system.

Would you say that the Western powers are now trying to somehow leave the scene in West Asia after years of imperialist intervention? Has the situation become unmanageable for them?

Obama and Trump both said they wanted to reduce on-the-ground commitments in West Asia, but somehow the U.S. is still there. In reality, the Americans would like to enjoy the advantages of imperial control or influence but without the perils it involves. They would prefer to operate by employing other means such as economic sanctions or local proxies. The Obama foreign policy was meant to see ‘a switch to Asia’ but this never really happened, and it was the West Asian crises that continued to dominate the agenda in the White House. In other words, the U.S. would like to withdraw from West Asia, but only on its own terms.

Secular forces and Left movements have had a significant presence in many West Asian countries. But today the political landscape has changed significantly with secular forces being replaced by Islamist forces. How would you explain this change?

I am not sure that this is quite as true as it used to be because Islamist rule in its different varieties has turned out to be as corrupt and violent as secular rule. Both have been discred-

ited by their years in power. Secularism was always strongest among the elite in countries like Iraq, Turkey, Egypt. It never offered much to the poor. To a substantial degree the same thing that happened to the Left is now happening to Islamist forces. Elites with a supposedly socialist ideology were as kleptocratic as everybody else. The same was often true of nationalism because religious identity often remained stronger than national identity.

THE MEDIA’S ROLE

You have reported wars and conflicts for the past 40 years in West Asia. The world opinion regarding these wars is mainly shaped by the Western media. But journalists like you have always provided an alternative view. Do you feel that most of the Western media are institutionally biased in their reporting?

Most of the world’s media reflect the views of their governments because they are state-controlled directly or indirectly. This has always been the case, but the degree to which free expression is feasible is obviously crucial. I have always worked for publications that allowed me to write what I wanted to, while most journalists do not. This situation has not changed as much as it should have since the Internet enabled people in much of the globe to express their opinions to a large audience. Generally speaking, governments everywhere control the news agenda most but not all of the time.

The cinematic view of journalists telling truth to power is largely fantasy since such truth-telling is likely to lead fairly immediately to the sack. Even when a journalist is not under the thumb of the powers that be, he or she may well fear accusations that they are unpatriotic or even treacherous in criticising their own side. There is also a genuine romanticism among many journalists who see uprisings and protests as pitting evil rulers against the risen people like a scene from an opera. Dictators like Saddam Hussein or Muammar Qaddafi may be cruel and evil men,

but they did not create all the problems of their countries—and the alternative to their rule may be something even worse. In places like Libya, this should have been obvious.

POLITICAL DYNAMICS

How do you foresee the changes in political dynamics and the possible change in the role of different states involved in West Asia?

States have gone up and down. The crucial change in the relative strength of states was the fall of the Soviet Union in 1991, so regional powers that it had protected became vulnerable to regime change. Russia’s military intervention in Syria since 2015 has somewhat reversed this—but not entirely. Iran became much more of a regional power thanks to the elimination of its two hostile neighbours—the Taliban in Afghanistan and Saddam Hussein in Iraq—by the U.S. post-9/11. It is under strong pressure from U.S. sanctions, but these were never likely to bring about its effective surrender. Iraq and Syria are too divided for state power to be rebuilt. Saudi Arabia’s more aggressive foreign policy under Crown Prince Mohammed bin Salman produced few successes, aside from cultivating Trump and his entourage. Does the embrace of Israel by some of the Gulf rulers enhance their power or that of Israel? Probably less than they hope. Likewise, the Palestinians are weakened, but the ‘Palestinian Question’ has not gone away, will not do so, and will always return.

What would be the outcome of the ongoing civil war and ethnic conflicts both in Syria and Iraq?

The main sectarian and ethnic communities—Sunni, Shia, Kurd—will still be there in both countries, though there are winners and losers. The Sunni Arabs lost power in Iraq in 2003 and the Shia Arabs and Kurds have been dominant ever since. The Sunnis have failed to reverse this despite two rebellions, roughly 2003–07 and 2013–17 during which they suffered severe losses. The Kurds expanded their power

(taking Kirkuk), but could not cling on to their gains. Nevertheless, they remain a powerful player.

In Syria, the Alawites (a variant of Shi’ism) hold power now as they did in 2011 at the start of the Arab Spring. The majority Sunni Arabs, under jihadi leadership, have suffered a catastrophic defeat with more than five million of them refugees. The Kurds expanded their power thanks to their military alliance with the U.S., but they are under serious threat from Turkey that has invaded two Kurdish enclaves and expelled the inhabitants.

The Kurd community is one of the prominent communities in West Asia. They have been fighting for an independent state for a long time. What would be the future of the Kurds in West Asia and their political dreams?

The Kurds’ problem is that they are a powerful minority in Turkey, Syria, Iraq and Iran, but all these states oppose them becoming an independent nation state. They did achieve quasi-independence in Iraq and Syria thanks to central governments in Damascus and Baghdad being weakened by the ISIS and thanks to American backing. Without these two factors the Kurdish communities will be squeezed. They will remain a power in Iraq, but in Syria their position is more fragile.

What challenges do journalists face while reporting from a conflict zone? How do you look back at the four decades of your career?

I am still amazed by the regularity with which Western powers, notably the U.S., launch military and political ventures in West Asia without knowing the real risks. They do not seem to learn from their grim experience. Reporting this was always dangerous and is getting more so. □

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Digital exclusion

The experience of Vidya Bhawan Society (VBS) in Udaipur shows that an enormous gulf exists between the digital haves and have-nots in the realm of online school education.

BY RAMA KANT AGNIHOTRI

THE COVID-19 pandemic has uncovered the most ugly and frightening aspects of the digital divide in the domain of education. It reproduces the urban, semi-urban and rural divide ruthlessly; it also shows what might potentially be the narrative across different kinds of schools such as government schools (municipal, Central, Navodaya, and so on) and public schools (private elite schools in urban metros, urban street, rural English-medium, and so on).

Even if we try to paint the intra-area and intra-school type heterogeneity with a broad brush, every member of the urban elite family is likely to have a dedicated high-end digital device (Android or Apple smartphone, tablet or laptop) with high-speed uninterrupted broadband connectivity; the semi-urban may have dedicated or shared devices among the school/college-going members with a middle-level device and frequently interrupted broadband connectivity; the rural areas, populated largely by the most marginalised sections of society, are likely to have at best a low-end Android or Reliance Jio phone with extremely low connectivity.

The minimal requirements for a meaningful online interaction would be the availability of a laptop or tablet (phone screens are not just large enough for interactive work and large files), uninterrupted broadband connectivity and a quiet corner at home to study.

We will look at the issue of online teaching through the lens of the experience of Vidya Bhawan Society (VBS), Udaipur (Rajasthan).

VIDYA BHAWAN SURVEY

VBS has seven teaching institutions: three schools, two teacher training colleges, a rural institute offering graduate and postgraduate courses and a polytechnic. It undertook an online survey during June and July this year to find out how best to reach out to its students online to minimise the academic loss being caused by the pandemic lockdown.

In terms of its philosophical underpinnings, VBS is committed to reaching out especially to girls and students from minorities and marginalised backgrounds.

It conducted an online survey (through the school register and calling families on phone) to collect data of 37 variables regarding the stu-

dents and their families, including gender, class, category, family's socio-economic status in terms of parents' education, occupation and income, number of members in the family and the size of the house, nature of connectivity and the number and kind of digital devices available.

It reached out to 3,159 students and their families through phone. It was a matter of great surprise and pleasure for VBS that over 72 per cent students had some smart device and the online project could be started in all earnestness. But it soon became obvious that what the students had essentially belonged to the whole family (head of the family, to be more precise) and was largely used as a phone. Most students did not have their own device, nor did they have the kind of connectivity needed for online classes. They also did not know how to operate these phones for educational purposes.



ANINDITO MUKHERJEE/GETTY IMAGES

AT AN IMPROVISED CLASSROOM for poor students set up by unemployed graduates at a construction site in New Delhi, on December 9.

Of the 3,159 students surveyed, 261 (about 8 per cent) had no device; depending on the institution, this proportion could be as high as 20 per cent. As far as connectivity was concerned, 631 (about 20 per cent) had only 2G or 3G connectivity. Ideally, students should have a broadband connection to be able to do anything substantial online but only 4 per cent of the total number of families surveyed had broadband connectivity. Even in the cases where 4G or broadband was available, there was a major issue of a specific point in or around the house where uninterrupted connectivity was available.

Less than 8 per cent of the students had laptops, desktops or tablets where large screens could be in sync with the demands of online teaching. Even in these cases, there were issues of dedicated device, con-

nectivity and quiet space at home. Given this situation, synchronous online teaching seemed impossible; even asynchronous online-offline combination appeared to produce limited results.

SOCIO-ECONOMIC BACKGROUND

In spite of VBS' proactive philosophy of promoting education of the girl child, girls remain highly under-represented in almost all its institutions except in the case of teacher training colleges, where the social pressures themselves are in favour of girls. Out of the total of 3,159 VBS students, only 1,082, or 34 per cent, were girls.

In the case of education of parents, 12 per cent of the men had none, 8 per cent only primary education, 20 per cent middle-school level and 25 per cent high-school level of

education. Some 18 per cent had attended senior secondary school; only 11 per cent were graduates and 6 per cent postgraduates.

The educational background of the mothers of students was expectedly still lower. Some 29 per cent had no education, 16 per cent only primary, 20 per cent middle-school level and 17 per cent high-school level of education. Only 12 per cent of the mothers were either graduates or postgraduates. It would be reasonable to conclude that students in general received very little academic support at home.

As far as parents' occupations were concerned, over 71 per cent of the men worked as farmers, construction workers, vegetable vendors, tea stall owners, guards, gardeners, small contractors, electricians, plumbers, carpenters, drivers, embroidery workers, and so on. About 94 per cent of the women were either homemakers managing the enormous responsibilities of running the household or did small jobs like selling vegetables or worked as labour on a daily basis.

Over 55 per cent of the students came from households where the family's monthly income was less than Rs.10,000. About 25 per cent of them were from families with a monthly income of about Rs.15,000. Only 19 per cent came from families with monthly incomes above Rs.20,000. There were just 11 families, or 1 per cent of the total VBS population, where the monthly family income was above Rs.50,000.

In spite of VBS' proactive philosophy of encouraging students from the minorities, only 1.6 per cent of the total number of students hail from minority backgrounds, when over 16 per cent of Udaipur's population consists of minorities.

Udaipur district is representative of urban, semi-urban and rural areas including minority and tribal groups; if you map these numbers nationally, the picture in terms of students who are without any device or any worthwhile connectivity indeed looks very grim. It is even more depressing when we consider the fact that the data pertain to the family as



INDRANIL MUKHERJEE/AFP

STUDENTS access e-learning content on mobile phones during the Online Education Mobile Library initiative in Mumbai on October 17.

a whole—that is, the whole family owns one device in the case of the 72 per cent who have a device. Needless to say, it is primarily meant for the use of the head of the family who, in most cases, would be out of the house for long periods and the device may be available to the learners for a very limited period.

There were indeed some houses with two or three devices, but in such houses as many people were employed. One can only imagine the not-so-uncommon situation of a family with two or three school- or college-going children. If we add the features of Internet and data storage to these requirements, the online project at the moment appears to be fraught with dangers in the sense that it is out of reach for most of the students for any significant use.

One should, therefore, not be surprised at the results of the 2018 National Sample Survey, which found that only 14.4 per cent of urban and 4.4 per cent of rural households had a computer and only 42 per cent of urban and 15 per cent of rural households had any Internet facility. Devices, connectivity and data all cost money, and most of the VBS families are poor.

We are told that the quality and number of digital devices is going to

multiply manifold soon and that it will be within the reach of a common person to have a dedicated device. We are also told that the quality and speed of connectivity, data and Internet access will soon improve dramatically and cover the entire country. It is indeed possible that the unequal distribution of the digital devices, connectivity and virtual classrooms may be levelled out, although the damage done during the current pandemic is past that stage.

VIRTUAL CLASSROOMS

The moot question is whether the virtual classroom, even at its best, can ever become a substitute for a real-life classroom. Even in cases where all was in order in terms of dedicated devices, connectivity, data

and a quiet corner at home, there were complaints from both teachers and students. Those who had just low-end smartphones complained of their inability to download images, tables and graphs as well as PDF files since they had no access to Adobe. Most missed the two-way dialogue possible only in a classroom, where every gesture is an integral part of the pedagogical transaction. A glow in the eyes of students or a smile or an indication of feeling lost may speak volumes that any virtual classroom may fail to capture.

In the VBS online classes, students hardly ever asked questions. Those who were not serious simply left their image on the screen; videos of instances of students watching TV, films or WhatsApp messages during online classes have gone viral. Teachers found it difficult to handle a situation where they were regarded as being on duty all the time. Since everything was being done from home, timetables could be organised any which way and meetings could be organised at any odd hour. Also, for the first time the teachers had to get prepared for every lecture being recorded, completely losing the spontaneity of classroom interaction. Even in countries where the best of the digital world is available, students, teachers and parents insist on real-world classroom learning. There is no substitute for a classroom where peer-group interaction is the essence of learning.

A carefully crafted combination of common schools and online programmes may add considerable value to education.

Unfortunately, the National Education Policy 2020 moves away from the idea of a common school system, encouraging privatisation of education and pushing the marginalised sections of society further to the margins. For them, the future looks dismal both in terms of schooling and digital empowerment. □

(Thanks are due to Pushpraj, Arun and Aditya for their inputs.)

Rama Kant Agnihotri retired from Delhi University and is currently Professor Emeritus with Vidya Bhawan Society, Udaipur.

Most students did not have their own device or the connectivity needed for online education.

Conservation challenges

Comprehensive and thought-provoking essays dealing with the state of India's wilderness and wildlife and the conservation strategies under way. BY **LYLA BAVADAM**

THE very first photograph in the book has you hooked. Soaring trees in a lush forest, dappled light and a sense of peace and well-being, an image from a dream. The caption lends further weight to the visual: "Occupying just 2.4% of the earth's total land area and harbouring 7% of the world's flora and 6.5% of the world's fauna, India ranks among the world's 17 most mega-diverse countries and has ecosystems representing practically every biome of the world."

With such an engaging opening, one is ready to plunge headlong into *Saving India's Wilderness: Challenges and Solutions*. The book, edited by Asad R. Rahmani and Kedar G. Gore, is a compilation of 25 essays. It has two introductory pieces—one by Dilip Khatau, founder and chairman of The Corbett Foundation, and the other by Ravi Singh, secretary general and CEO of the World Wide Fund for Nature-India (WWF-India).

The articles have been penned by conservationists with decades of dedicated work in their specialised fields. They include Dr A.J.T. Johnsingh, Dr Renee Borges, Dr Ullas Karanth, Dr Bivash Pan-



Saving India's Wilderness Challenges and Solutions

Edited by Asad R. Rahmani and Kedar G. Gore

The Corbett Foundation

Pages: 241

Price: Rs.1,500

day, Vivek Menon, Dr Deepak Apte, Dr Naveen Panday, Dr Alice Bacon, Aparajita Datta, Isaac Kehimkar, Dr Varad Giri, Prof. Claudio Sillero, Dr Anish Andheria, Dr Bibhab Talukdar, Dr Sanjay Shukla, Prerna Bindra, Devesh Gadhavi and Ashok Mahindra.

THREATENED ECOSYSTEMS

Saving India's Wilderness is a comprehensive, thought-provoking volume, simultaneously heartening and disheartening, dealing with the various crises facing India's wilderness. Attention is drawn to threatened ecosystems such as the grasslands of the Terai, the wetlands and the Western Ghats, to threatened species such as the lesser florican, the sloth bear, the dugong, corals, butterflies, turtles and, of course, the tiger and the Asian ele-

phant, and issues such as attrition of land and safe corridors to facilitate movement of animals, construction of railway lines and highways through sanctuaries, marine pollution, destructive fishing, and human encroachment into animal habitats.

This book is not only a confirmation of all that is known and feared about the state of India's wildlife and wilderness, but it also shines a light on the solid, scientific foundations laid by conservationists. There is no dearth of well-planned conservation strategies. There is only an absence of political support and will. All that is required to put conservation plans into action is a green signal from the government and support in terms of policies, funds and security for those working in the field.

The book primarily focusses on the need for ur-

gent action. Here is what some of the experts have stated in their essays on the state of India's wilderness.

Dr Asad R. Rahmani, former Director of the Bombay Natural History Society, is an expert on bustards. In his article titled "The enigmatic lesser florican", he draws attention to habitat loss. "Due to apathy and lack of appropriate government policies grasslands remain to be the most neglected ecosystems in India....The tragedy of our country is that we give importance only to forest—all other habitats such as wetlands, grasslands, mudflats, mangroves, alpine meadows, desert, etc. are neglected. Some of the most threatened species of birds, mammals, reptiles and plants are found in these habitats. Despite having the largest livestock population in the world, we still do not have a National Grazing Policy. We have 'Wasteland Development Board', but no 'Grassland Development Board'. As long as we have this myopic vision, the grassland or wetland-dependant species will keep on disappearing."

In his essay "Wetlands or wastelands?", Kedar Gore, a biodiversity conservationist and currently



POWER LINES are a disaster for heavy-bodied birds such as the great Indian bustard. Even renewable energy projects, installed around bustard habitats in Rajasthan and Kutch in Gujarat, take their toll on the birds. Studies by the Wildlife Institute of India show that around 18 bustards die every year in the Thar because of collisions with power lines.

head of The Corbett Foundation, bears out Rahmani's point. He writes: "We equate wetlands with wasteland; a place to let off sewage, effluents, construction waste...." He reminds us that "wetlands are essentially for human health and prosperity. More than 660 million people rely on fishing and aquaculture for a living. Despite all the jobs and other vital benefits that wetlands provide, 64% of the world's wetlands have disappeared since 1900. It is estimated that by 2025, 35% of people will directly face declining water supplies."

In Renee Borges' article on "Saving the Western Ghats: Moth vs squirrel" makes the point that while biodiversity flourishes it can be wiped out easily. He writes: "The Western Ghats harbour

around 7,400 species of flowering plants, 1,800 species of non-flowering plants, 130 mammals, 500 birds, 180 amphibians and 290 freshwater fish species out of which 325 species are globally threatened. It is likely that many undiscovered species live in the Western Ghats."

Harendra Singh Bargali, in "The bear truth", highlights a less known fact. "Wildlife research and management in India," he writes, "is primarily focussed on protected areas and charismatic species such as tiger, elephant and one-horned rhino. There has not been much attention on bear conservation so far, resulting in the lack of information to formulate any sound conservation strategy." This affects bears because significant populations of bears live outside protected areas.

The human-bear conflict is on the rise, with bears suffering the worst of it.

This idea is further developed in the essay titled "Spreading conservation beyond Protected Area boundaries" by Raghu Chundawat and Joanna van Gruisen. Although they have written specifically about the tiger, what they say is relevant to other species, too. They write: "One of the greatest successes of tiger conservation in India is not the number, but how successfully it has managed to hold on to its geographies.... India needs to find solutions to three major conservation issues—range expansion, viability of protected populations, and connectivity [between protected areas]. For this, conservation action cannot remain within the Protected Area boundaries."

K. Ullas Karanth, the conservation scientist known for his work on predators and prey, points out in "The science of tiger conservation": "If current recovery efforts [of wild tigers] are to succeed, they must be backed by passionate public support for investing necessary resources."

INFRASTRUCTURE PROJECTS

Conservationists have been constantly fighting against infrastructure projects. When Kishor Rithe was on the Standing Committee of the National Board for Wildlife, there were a slew of proposals for linear infrastructure projects. In the same period, he writes in the essay titled "Linear development and conservation: Can they coexist?", a "steep rise on human-wildlife



MAHARASHTRA FOREST DEPARTMENT

THE SEVERED carcass of a leopard killed in a train mishap. Despite appeals by conservationists, linear infrastructure continues to be laid through forests and in the known paths of wildlife.

conflict [was recorded] probably due to habitat fragmentation.... [there were] also a large number of wild animal deaths... in accidents due to existing linear projects. This prompted us to frame guidelines in 2010 to address the probable threats associated with linear infrastructure projects." The Wildlife Conservation Trust has found that of the 1,700 proposals for roads and other infrastructure projects, almost 400 would either go through or disrupt tiger corridors.

Officialdom's vision is blurred when it comes to the environment. Almost all policymakers give it low priority. Pankaj Sekhsaria, in "BrahMos in the Emerald Islands", criticises the test firing of the BrahMos supersonic cruise missile by the Indian Army from Car Nicobar island. He

writes: "There was some excitement and chest thumping... but for me the first question was... what was the target? Which island did this BrahMos successfully hit? What did that missile travelling faster than the speed of sound actually 'take out' on the ground? Could it have been a just-about-to-hatch nest of a giant leatherback turtle? Lush green mangroves and rich inter-tidal life..."

Pointing out that "nearly 100% of the Nicobars is a tribal reserve", he asks: "Were the Nicobarese asked before the BrahMos was being tested in their island?... What was the impact of the test on the people and the ecosystems here? How will we ever know? Do we even care?" At the online launch of the book, Sekhsaria said bluntly: "The biggest

threats come from things we don't talk about like the defence structures in the Andaman and Nicobar Islands."

POLITICAL WILL

In his musing "Is political will extinct in India?", Bittu Sahgal recalls what Prime Minister Indira Gandhi wrote in 1972, a year Project Tiger was launched: "Wildlife conservation is not a political issue. It concerns the survival of our natural heritage. It is hard to think of an India devoid of its magnificent animals, of the hard-pressed tiger going the way of the now extinct cheetah'.... For the past decade virtually no politician has demonstrated his or her belief in this fundamental value articulated by Indira Gandhi. Those that do privately prefer to keep silent publicly even as their

more aggressive colleagues push forward an economic agenda that is not only devastating to India's tigers but India's people too."

The book tries to maintain a balance between telling about the challenges and providing a sense of hope for the future.

Dilip Khatau emphasises this in his introductory piece: "Under the umbrella of tiger conservation, much has been achieved even for many other species, but there are still so many more species that occupy habitats that are different from the tiger's forests such as the Gangetic dolphin, dugong, brown-antlered deer and countless more that still suffer from rampant poaching and illegal wildlife trade activities. Coral reefs, sea turtles, salamanders, pangolins, mongooses and lorises, to name a few. Given that India has one of the most magnificent coastlines, a staggering 7% of the world's flora and 6.5% of the world's fauna, The Corbett Foundation has plans to take up more work in some of these challenging landscapes in the coming years."

The interconnectedness of all living things comes through in the book and so does the realisation that the losses are solely due to conscious, wilful behaviour of humans. The sense of impending doom is only slightly dismissed by Sehgal's optimistic-realistic assessment of the situation. He writes: "The political will to save natural India is not extinct in India yet... but we are fast getting to that point." □

CONSERVATION

ELEPHANTS WITHOUT BORDERS



A HERD OF BULL ELEPHANTS in the Savuti region of the Chobe National Park (11,700 sq. km) in Botswana.

S. MURALI

The excellent field protection that Botswana provides elephants has led to a steady movement of the animal into that country from neighbouring countries in southern Africa. But the rising numbers are putting stress on the vegetation of this mostly dry landscape and increasing instances of conflict with people.

BY A.J.T. JOHNSINGH AND S. MURALI

“Africa changes you forever, like nowhere on earth. Once you have been there, you will never be the same.”

— Brian Jackman in the book *The Last Elephants*

IN September 2019, we spent three memorable weeks in Botswana travelling from the Chobe National Park to the Central Kalahari Game Reserve and camping at different places (“Unforgettable Kalahari”, *Frontline*, January 3, 2020, and “Breathtaking Botswana”, *Frontline*, April 10, 2020). After this trip, we realised that Botswana had come to occupy a special place in our hearts. The trip was all the more memorable because of our 10 wonderful Indian travelling companions and the obliging and excellent African staff who accompanied us.

In the Chobe National Park (11,700 square kilometres) and the Moremi Game Reserve (5,000 sq. km), we saw about 160 adult elephants and 28 calves and other wildlife, including the African wild dog, the leopard, the lion and the rare roan antelope. Our visit was brief, but we observed that the vegetation was reeling under pressure from the elephant population, which in Botswana alone numbers around 130,000. This figure is based on the 2016 Elephants Without Borders (EWB) Great Elephant Census of sa-

vannah elephants carried out under the leadership of the dedicated Mike Chase, director and founder of EWB.

A BIT OF HISTORY

Botswana (581,730 sq. km), a land-locked country in southern Africa bounded by Angola and Zambia in the north, Namibia in the west, Zimbabwe in the north-east and South Africa in the south, is globally known for its varied, abundant and well-protected wildlife. Around 90 per cent of Botswana is under savanna, which consists of shrub savanna in the south-west in the dry areas and tree savanna composed of trees and grass in the wetter areas. The famous landscapes within Botswana, known for their characteristic plant and animal life, are the Central Kalahari Game Reserve and the Okavango Delta (a UNESCO World Heritage Site), which is influenced by seasonal floods.

Botswana is also an active participant in the ambitious Kvango-Zambezi Transfrontier Conservation Area (about 520,000 sq. km) peace park, whose primary goal is to sustainably manage the Kvango-Zam-

A BULL IN AN OVERUSED

HABITAT. Bulls who are responsible for the death of trees from ring barking and uprooting may have a daily range of 15-20 km from water-available areas.



S. MURALI

bezi ecosystem for the benefit of the wildlife, people and communities in and around the region.

Botswana is home to more than 33 per cent of Africa's savanna elephants as opposed to less than 3 per cent some 50 years ago. Botswana, which has the potential habitat for up to 200,000 elephants, provides the pachyderm with excellent field protection, and this has led to the steady movement of elephants into the country from neighbouring countries, where they were under pressure because of expanding rural communities and increasing levels of poaching. Elephants faced severe problems in Angola because of the civil war there from 1975 to 2002 (Maps 1 and 2).

In the decades leading up to the 1980s, ivory was a sought-after international fashion product. African elephants were slaughtered in great numbers for their tusks and other products. It is said that at one time, close to 100,000 elephants were killed annually, equivalent to an elephant being poached/killed every six minutes. The current situation is that an elephant is killed approximately every 15 minutes, which is an improvement but still a huge cause for worry.

During the period of harassment and poaching, elephants were listed under Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which mentions animals that could become threatened if commercial trade in the animal and/or its parts is not controlled; trade in ivory and other elephant products was permitted if certain conditions were met. In those days, security was non-existent along Botswana's porous and unfenced borders, and poachers had a free run in the country's wilderness. As a result of experiencing massacres, elephants, known for their amazing intelligence, were understandably nervous, withdrawn and aggressive, often chasing tourist vehicles.

The wary elephants would hide in the forest during the day, rapidly moving to the waterways late in the evening for a quick drink before

dashing back to the safety of the forest. But the situation turned around in the early 1990s, when Africa's elephants were listed in Appendix I of CITES, which led to a worldwide ban on all ivory trade. Elephant populations across Africa finally had some peace, stabilised and began increasing for the first time in many decades. Botswana's elephants began to relax and quickly learnt that people in vehicles no longer posed a danger.

In the early 1990s, Botswana turned its back on mass tourism and

actively put in place high-tariff/low-volume/low-impact tourism. Visitors were given opportunities to create jobs and training for rural citizens. The country's former vast hunting grounds were carved into smaller concessions (on average 1000 sq. km each), which were given to tour operators solely for photo tourism. Safari companies invested in building small, high-end lodges, and many jobs were created in rural areas, which reportedly benefited about 40 per cent of the people who had been weaned from poaching for

bush meat to conservation. The many eyes and ears in the concession areas deterred poachers; the elephants calmed down even more and no longer chased safari vehicles.

Interestingly, when elephant hunting for sport resumed in 1996 and CITES downgraded Botswana's elephants back to Appendix II, which lasted until 2013, some elephants again became aggressive and many became very shy of people. It is reported that late in 2017, one of the safari concessionaires in northern Botswana noticed that his normally

relaxed elephants were suddenly jittery and aggressive. A few days later, the reason for their aggression came to light: the carcasses of a number of poached elephants were discovered nearby. Lawrence Anthony, author of the book *The Elephant Whisperer*, and Mike Chase vouch for the remarkable reasoning ability of elephants.

CHOBÉ AND MOREMI

Our first encounter with elephants was in the Chobe riverfront. The peacefully flowing and life-giving

Chobe river, which arises in a mountain spring in Angola forms the northern boundary of the Chobe National Park, but the river often becomes dry before it flows as the Chobe, and the bulk of its waters are the backwaters of the Zambezi river. It is said that in Africa, the oldest roads are largely along elephant paths. As we drove along the right bank of the river, a herd of elephants—bulls, cows and calves—was walking on the road. We stopped our vehicles to watch and photograph them. Although they were a little



WATCHING WILDLIFE from cruising boats is popular on the Chobe river.

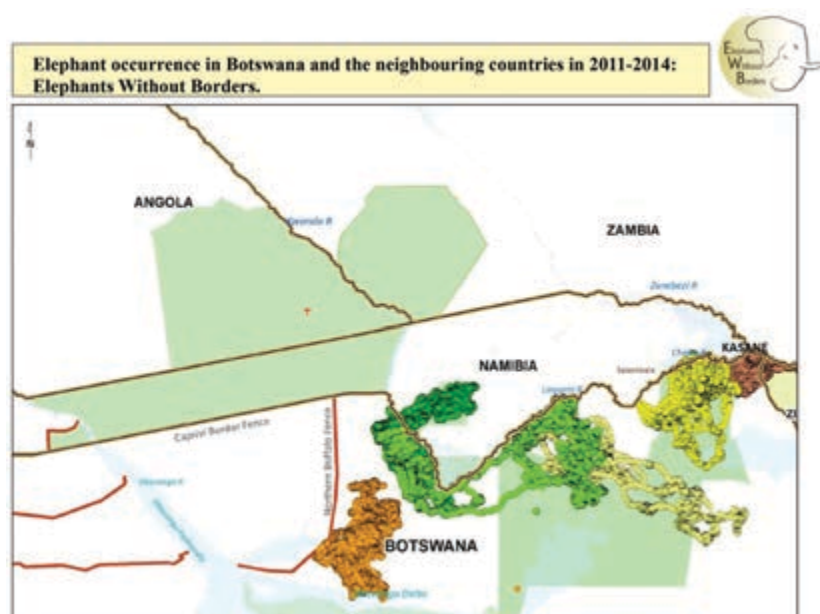
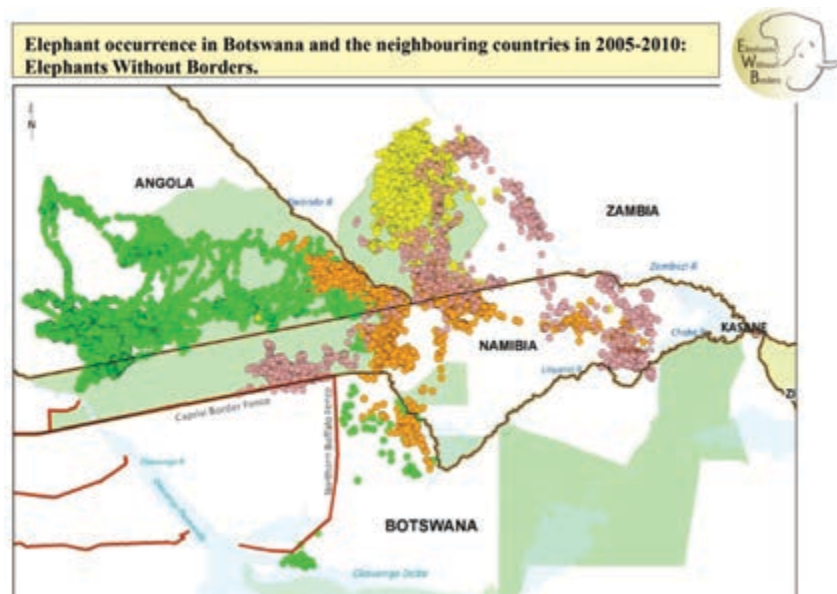
MIKE JOHNSINGH



A DEBARKED BAOBAB TREE. The elephants debark and feed on the fleshy interior part of the stem. This behaviour is much more widely prevalent in the dry season and in the very dry areas. (Below) Mopane trees in the Moremi Game Reserve with no signs of elephant feeding on them as they are far from any perennial source of water.



A BULL ON THE WATERFRONT
and broken trees behind him.



alarmed by our presence, they walked across the road calmly and made a beeline for the river.

The negative impact of a high-density elephant population on vegetation has been studied in Botswana and many other African countries. We observed that the vegetation on the Botswana side of the Chobe was sparse, yet there were more trees and shrubs than on the Namibian side across the river, where it looked more like a marshland with reeds and tall grasses. On the Chobe riverfront, feeding by elephants, in particular, and fire were found to be the major factors affecting the vegetation. It is to be noted that before 1980, when hunting was allowed in Botswana, the reported elephant population was around 10,000. Naturally, their impact on vegetation was less.

An aerial study showed that the woodland vegetation on the Chobe riverfront declined from 60 per cent to 30 per cent between 1962 and 1998, while the shrub land, most



A.J.T. JOHNSINGH

A COW AND HER GROWN-UP CALF at an artificial waterhole.

likely because of coppicing, increased from 5 per cent to 33 per cent. Riparian (riverine) vegetation in 1962 covered a continuous area along the riverfront, but in 1998, only fragments were left. There were more signs of feeding on the browsable species—such as red bushwillow (*Combretum apiculatum*), oleaster bushwillow (*C. elaeagnoides*) and knobby creeper (*C. mossambicense*)—closer to the river (< 2 km) than away from the river (> 7 km), where there were more frequent signs of fire damage.

It is often said that African elephants do not need a passport and can move to any African country they like. Elephants in Botswana can move to parks in Namibia and Zimbabwe because they all occur in the same landscape. If that happened, it would reduce the pressure on vegetation. However, the Great Elephant Census indicates that there may be no benefit in having parks nearby as

elephants tend to come into Botswana rather than leave it and go to other countries.

After the Chobe National Park, our next destination was the Moremi Game Reserve, which is named after the third wife of Chief Moremi, who was the chief of the Ba Tawana tribe. We saw more elephants in the reserve as we stayed there for four nights (compared with two nights in Chobe). The ecological strength of the Moremi Game Reserve is that it has permanent water: the Okavango Delta covers nearly 70 per cent of the reserve, and water is also provided for the wildlife in the dry woodland and savannah habitat in the north-east of the reserve. In Moremi, one can go on foot accompanied by an armed guard (which the lodges usually arrange) or by boat in the waterways of the Okavango Delta or drive around in vehicles or cruise in a mokoro (a type of canoe common in the delta) along one of the channels

leading to Okavango. We drove around in our vehicles, sailed by boat in Okavango, avoiding the hippos, and saw elephants close up and cruised by mokoro on the narrow Khwai river, observing and photographing the elephants peacefully feeding on the bank.

The diversity of flora of the Okavango Delta and surrounding landscape is noteworthy: papyrus (*Cyperus papyrus*)-lined waterways are peppered with flowers such as the white Egyptian lotus (*Nymphaea lotus*) and the blue water lily (*N. nouchali*) and the open grass plains are dotted with the strong-smelling inedible wild sage (*Pechuel-loeschea leubnitziae*) and trees such as the real fan palm (*Hyphaene petersiana*), the wild date palm (*Phoenix reclinata*), the marula (*Sclerocarya birrea*), the sausage tree (*Kigelia africana*), the African mangosteen (*Garcinia livingstonia*), the jackalberry (*Diospyros mespiliformis*), ancient baobabs (*Adansonia digitata*), the camel thorn (*Acacia erriobola*),



the candle thorn (*A. hebeclada*), the knob thorn (*A. nigrescens*) and the mopane (*Colophospermum mopane*).

A large number of elephants stay in and around the Okavango Delta as the floodplains support extensive tall-grass habitats with excellent fodder species such as common reed (*Phragmites australis*), hippo grass (*Vossia cuspidata*), pampas grass (*Cortaderia selloana*) and wild rice (*Oryza longistaminata*). Adult elephants shake the real fan palm trees and feed on the fallen nuts while the young search for fallen nuts on the ground. The feeding of elephants helps in the dispersal of seeds. The bark and fruit of marula trees are eaten, but research has concluded that the legendary stories about elephants getting drunk after eating fermented marula fruit are not true!

The fruit of baobab trees is eaten; the seeds are dispersed and the elephants debark and feed on the fleshy interior part of the stem. This behaviour is much more widely prevalent in the dry season and in the very dry areas; such feeding can lead to the death of baobab trees. We saw at least three species of birds (the helmeted guineafowl, the red-billed spurfowl and the southern red-billed hornbill) getting some food from elephant dung.

IN THE DRY ZONE

Elephants using the dry zone have forage trees such as African teak (*Baikiaea plurijuga*), camel thorn and mopane, which are not that edible and so grow fast and do not leave much space for other species; thus they look like a monoculture crop. The leaves and bark of the mopane tree are rich in tannin, which elephants do not usually like but will eat when nothing else is available. In the dry zone, the elephants have larger ranges as they move between water and the foraging grounds. Research shows that the daily range of cow-calf herds can be a maximum of 5 km, but the bulls who are responsible for

CALVES ARE KEPT in the middle of the herd because of the threat from lions.



MIKE JOHNSINGH



A.J.T. JOHNSINGH

MORE YOUNG WERE SEEN in areas where perennial water was available.



A.J.T. JOHNSINGH

ONE HAS TO BE WARY of the hippos while travelling by boat in the Okavango river.



A.J.T. JOHNSINGH

MARABOU STORKS nesting in the Okavango Delta.



A.J.T. JOHNSINGH

THE REAL FAN PALM. The elephants eat the fruit and this helps with seeds dispersal.

the death of trees from ring barking and uprooting may range 15-20 km from water-available areas. Calves, particularly those born in herds with large home ranges, become weak during the dry season because of insufficient feed of adequate quality. Weak calves often get killed by lions.

Lion predation on the calves may be necessary to check the growth of the elephant population in Botswana as it is preferable if the population stays below the carrying capacity of the land. A large number of elephants in a dry country like Botswana could be the great enemy of the vegetation there. The assumption that the country can have more elephants may not be ecologically healthy for it as its human population grew from five lakh in 1960 to two crore in 2010 and is bound to increase further.

RECENT DEATHS AND HUNTING

The mysterious deaths of 350 elephants in and near the Okavango Delta in May-June 2020 makes one wonder whether this was related to the large number of elephants in Botswana. President Mokgweetsi Masisi



A.J.T. JOHNSINGH

BROKEN ELEPHANT DUNG indicates that the helmeted guinea fowl get a good amount of their food from it.



A.J.T. JOHNSINGH

CRUISING BY MOKORO (a type of canoe common in the Okavango delta) on the narrow Khwai river, one can observe and photograph elephants from close up. Here, unruffled young bulls on the riverbank.



A.J.T. JOHNSINGH

A MAN in his donkey-driven cart in a mopane woodland.

recently came forward with a plan for the hunting of nearly 200 bulls in areas of high human-elephant conflict and to use the money thus raised to alleviate the problems of the people living in these zones. However, the President has been criticised for withdrawing the military grade weapons that wildlife guards had carried and were vital for them to fight heavily armed poachers. It is reported that the withdrawal of such weapons has in led to a boom in the poaching of elephants.

Africa has fewer than 450,000 elephants according to the Great Elephant Census, well down from the three to five million just 100 years ago. And while the human population is rapidly increasing, elephant

numbers are plummeting in most places other than in Botswana. Botswana has a population of 500 rhinos (450 white and 50 black), and in 2019, although the best possible protective measures were in place, the country lost 50 of them.

Prince William wrote in his foreword to *The Last Elephants* that in 1982 when he was born, there were about one million African elephants, but in 2015 when his daughter Charlotte was born, that number had come down to 350,000 and he feared that the elephant might be extinct by the time she turned 25.

Increasing human population, growing levels of human-elephant conflict and poaching seem to be the inevitable order of the day. Common

sense should make us understand who will be the loser.

Interestingly, Asian elephants, of which there are around 40,000, may survive as poaching removes only the tuskers and there are tuskless bulls (makhanas) to continue breeding. Also, in most parts of the Asian elephant's range, the pachyderm is not killed for meat, which is a problem in Africa. In 2018-19, well over 500 people were killed by elephants in India, which has around 25,000 of the animals, according to the noted elephant conservationist S.S. Bist, who served as Director of Project Elephant and retired as the chief of the West Bengal Forest Department. But in Botswana, the number of people who get killed by elephants seems to be fewer than 50 (no accurate figures are available), which is a reflection of the human population density: Botswana's is about 4/sq. km and India's nearly 400/sq. km.

If poaching is not stopped, the epitaph for the African elephant could perhaps read as follows: The loss of such an intelligent and magnificent species that has been with us throughout our existence would be a dark stain on the human race and a reflection of the unbridled greed of man, whose population and consumption rate sadly grows uncontrolled. □

A.J.T. Johnsingh is with the Nature Conservation Foundation, Mysuru, WWF India and the Corbett Foundation. S. Murali is a retired professor of the Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu.

This article is dedicated to Ajay A. Desai, who had served as the co-chair of the IUCN Asian Elephant Specialist Group and who had a heart attack and died on November 20; he was just 62. He was passionate about wildlife conservation and good-natured, so his death is deeply mourned by elephant lovers and wildlife conservationists.

The authors thank Madhavi Sethupathi, R. Raghunath and Mervin Johnsingh for their help with the article.



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