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TESTING TIME

The relatively small number of COVID-19 cases in India may be illusory. The need of the hour is to move beyond lockdowns and travel restrictions; carry out widespread diagnostic tests; detect and isolate confirmed cases; and issue effective advisories for self-quarantine in suspected cases, physical distancing among the asymptomatic, and avoidance of gathering of people



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In New Delhi, a rickshaw driver at work amid coronavirus fears, on March 14.

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VIRUS CHALLENGE

The deceptively small number of COVID-19 cases (and deaths) in India should not drive the nation into complacency: it needs to be prepared for a massive spread of the pandemic disease. BY R. RAMACHANDRAN

ON DECEMBER 31, 2019, CHINA REPORTED TO the World Health Organisation (WHO) the detection of a number of cases of an atypical pneumonia from an unknown cause in the city of Wuhan in Hubei province, ground zero of what has now spread worldwide to be a true pandemic. Eleven weeks afterwards, this previously unknown infection ("Evolving epidemic", *Frontline*, February 28), now called COVID-19 (for novel coronavirus disease 2019), has afflicted over two lakh individuals and consumed over 8,500 lives across 168 countries spanning five continents. China alone accounts for over 81,000 of these cases, followed by Italy with over

35,000 cases. (As on March 19, the number of cases and deaths stood at 2,09,839 and 8,778 respectively.)

Scientists are still searching for the exact epidemiological reason for this unprecedented rapid escalation in the number of cases across the globe, particularly in Italy where cases have mounted at an alarming rate.

The case log in Italy has jumped from a single-digit figure to this five-figure mark in just under a month beginning February 20, overwhelming the country's resources so much that doctors and hospitals are having to make the morally difficult ethical choice of prioritising

who should be extended intensive care and who should be denied.

Even as the WHO assessed the situation on March 11 (when there were 1,18,319 cases and 3,162 deaths spread over 114 countries) and declared COVID-19, caused by a previously unknown virus belonging to the coronavirus family (which has now been renamed SARS-CoV-2 from its earlier 2019-nCoV), to be a pandemic, the daily increase in the number of cases in China had dropped from over 3,000 to one-hundredth that figure in just one month. "[M]ore than 90 per cent of cases are in just four countries [China, Italy, Iran and South Korea] and two of those—China and South Korea—have significantly declining epidemics," WHO Director-General Dr Tedros Adhanom Ghebreyesus said while declaring the pandemic. The epicentre of the continually growing global epidemic has now moved from China to Europe, with Italy and Spain emerging as the new hotspots.

UNPRECEDENTED MEASURES IN CHINA

Extraordinary situations call for extraordinary steps. On January 23, with China accounting for 571 of the 581 worldwide cases of COVID-19 (66 per cent from Hubei province alone) and with the epidemic threatening to become huge, the Chinese authorities imposed unprecedented measures to curb the spread of the novel viral infection, some of which like those on travel restrictions could be even viewed as going against the

WHO's advisories. Not surprisingly, China's strategies gave rise to controversy, with some steps even being termed draconian.

Movement in and out of ground zero, Wuhan and 15 other cities in Hubei province, was blocked. Travel by all modes was severely curtailed. People in many Chinese cities were advised to stay home. According to *The New York Times*, nearly half of the people of the country were confined to their homes. Anthony Fauci, Director of the National Institute of Allergy and Infectious Diseases of the United States' National Institutes of Health, noted at that time that China's extreme approach could work in the given context of rapidly escalating spread of infection.

Two months after such extensive lockdowns, some of which are still in place, the daily increase in the number of cases has now drastically reduced. So the question is whether these extraordinary but controversial measures were key to containing the epidemic and what lessons they offer to countries that are still on the upward slope of the epidemic and which of China's non-pharmaceutical interventions were really instrumental in flattening the curve and taking the country on a downward slope.

Assuming that each infected person would infect two others (a reproduction number, or RO, of 2), early models of the disease's spread that did not take into account such drastic measures estimated that the virus would infect nearly 40 per cent of the country's population. But, according to Adam Kucharski of the London School of Hygiene & Tropical Medicine, who has been quoted in *Nature* online, the RO had an amazing drop to 1.05 between January 16 and 30, a period that included the first week of lockdowns.

On February 28, the report of a WHO-China Joint Mission on COVID-19, which comprised 25 national and international experts, made the following observation: "In the face of a previously unknown virus, China has rolled out perhaps the most ambitious, agile and aggressive disease containment effort in history. The strategy that underpinned this containment effort was initially a national approach that promoted universal temperature monitoring, masking, and hand washing. However, as the outbreak evolved, and knowledge was gained, a science and risk-based approach was taken to tailor implementation. Specific containment measures were adjusted to the provincial, county and even community context, the capacity of the setting, and the nature of novel coronavirus transmission there."

It went on to say: "The remarkable speed with which Chinese scientists and public health experts isolated the causative virus, established diagnostic tools, and determined key transmission parameters, such as the route of spread and incubation period, provided the vital evidence base for China's strategy, gaining invaluable time for the response.... China's bold approach to contain the rapid spread of this new respiratory pathogen has

HEALTH WORKERS SPRAY DISINFECTANT as a precautionary measure against COVID-19 in a residential area in Jammu on March 14.



CHANNI ANANDIAP

changed the course of a rapidly escalating and deadly epidemic... China is already... working to bolster its economy... even as it works to contain the remaining chains of COVID-19 transmission.”

However, questions have been raised in epidemiological circles about the efficacy of such lockdowns in handling the situation when the likely second wave of the epidemic surfaces as restrictions are lifted. It has been argued that such lockdowns prevent large sections of the population from being exposed to the virus and building up “herd immunity” within the community. How China phases, both spatially and temporally, the easing of restrictions in the weeks to come will be critical.

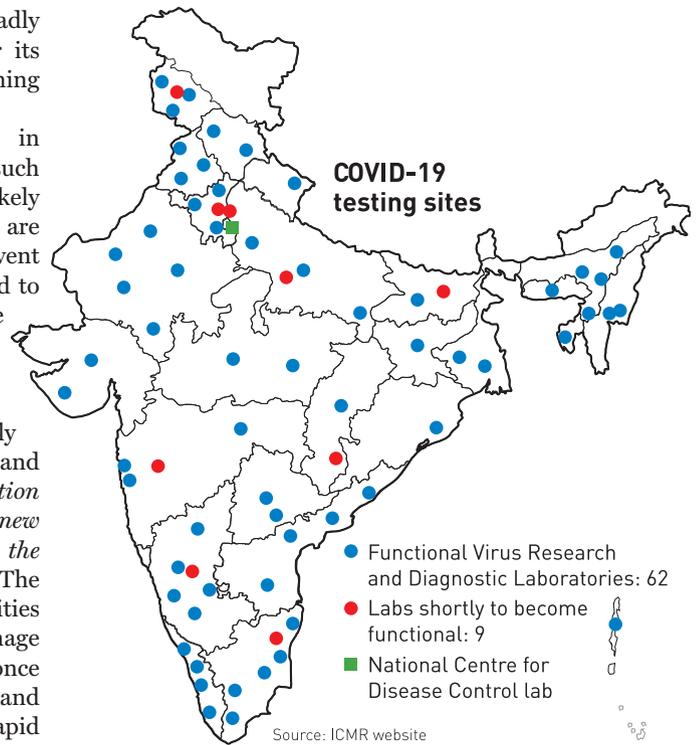
In this context, however, the report reassuringly said: “Appropriately, a science-based, risk-informed and phased approach is being taken, *with a clear recognition and readiness of the need to immediately react to any new COVID-19 cases or clusters as key elements of the containment strategy are lifted* [emphasis added].” The mission endorsed the belief of the Chinese authorities that it should soon be possible for the country to manage a resurgence in COVID-19 cases if that should occur once the restrictions are lifted “using even more tailored and sustainable approaches that are anchored in very rapid case detection, instant activation of key containment activities, direct oversight by top leadership and broad community engagement”.

In an interview to *The New York Times*, Bruce Aylward of the WHO, who led this mission, said: “... hundreds of thousands of people in China did not get COVID-19 because of this aggressive response”. According to him, China’s counter-attack can be replicated, “but it will require money, imagination and political courage”. Added to this was nationwide people’s commitment. “There was tremendous sense of ‘We’ve got to help Wuhan’, [and] not ‘Wuhan got us into this’. Other provinces sent 40,000 medical workers, many of whom volunteered,” Aylward said.

But there is criticism that China’s slew of measures came only after an initial phase of opaqueness about the epidemic and authoritarian dealing with any attempt by individuals trying to speak out about cases of a mysterious infection and the real ground situation, which perhaps led to a delay of two to three weeks in taking steps to contain the growing epidemic. “The delay of China to act is probably responsible for this world event,” *Nature.com* quoted Howard Markel, a public health specialist at the University of Michigan in Ann Arbor.

ASYMPTOMATIC CASES DROVE RAPID SPREAD

A study published in *Science* on March 16 suggests that undocumented mild and asymptomatic cases of infection during the early phase of the epidemic in China before travel restrictions and other isolation measures were put in place drove its rapid spread across the country. The study used data on people’s movement between 375 Chinese cities between January 10 and 23, focussing



particularly on the time leading up to the Chinese lunar new year, to simulate how SARS-CoV-2 spread across China and has estimated that these account for 86 per cent of all infections.

According to the study, while these undetected cases were only half as infectious as the known cases, the large number of such cases out there became the source for over 80 per cent of the diagnosed infections across the country. It is thus the undocumented cases that drove the spread and growth of the outbreak, at least in the initial phase, as per the study. The researchers also found that the tide turned following the travel curbs, self-quarantine and physical distancing advisories and widespread testing implemented on January 23 and thereafter, and documented cases accounted for 65 per cent of all infections.

Clearly, asymptomatic transmission has indeed occurred in China and is presumably occurring in other parts of the world as well. “Depending on their contagiousness and numbers, undetected cases can expose a far greater portion of the population to the virus than would otherwise occur,” said Jeffrey Shaman, one of the authors of the study. “These stealth transmissions will continue to present a major challenge to the containment of the outbreak going forward,” he added, an observation that should hold good for other affected countries as well.

According to a model simulation carried out by scientists at the University of Southampton, which *Nature.com* reported, if China had implemented its control measures three weeks earlier than January 23, it could have prevented 67 per cent of all cases there and would have cut the global number of cases to 5 per cent of the total. A study on the containment measures used in

296 Chinese cities says that cities that suspended public transport and banned public gatherings and events before their first cases showed up had 37 per cent fewer cases than cities that did not implement such measures speedily.

Several studies on the travel bans suggest that these did slow down the disease spread initially but not for long. According to a study published in *Science* in early March, banning travel in and out of Wuhan on January 23 delayed its spread to the rest of China only by three to five days. But it had a larger immediate impact on the international spread of the virus; there were 77 per cent fewer cases imported from mainland China than would have been expected otherwise. However, this only delayed the international spread by a few weeks because by mid February importation from other places in China, like Shanghai and Beijing, where the virus had got established, resulted in a rise in the global spread.

According to the study, even blocking 90 per cent of travel slows down the spread only by a matter of weeks on its own unless other measures are implemented. Of course, many countries across the world, including India, have now imposed severe travel restrictions. Their success in containing the spread will depend on the attendant national measures, such as widespread diagnostic testing, detection and isolation of confirmed cases, effective advisories for self-quarantine in suspected cases, physical distancing among the asymptomatic and avoidance of gathering of people.

So, does China's aggressive approach, and its apparent success at stemming the spread of COVID-19, provide any lessons for other countries? Are lockdowns and travel bans the answer? Even as Italy and Spain, confronted with massive surges in the number of cases and deaths—Italy, with over 4,000 deaths, has overtaken China's death toll of 3,242—imposed partial or total lockdowns in their different regions, it would be difficult to implement China-like measures given the latter's political system. Elsewhere, adherence to such measures can only be voluntary. The high fatality rate in Italy (8.3 per cent compared with China's current average of 4 per cent) is perhaps attributable to the high fraction of people above 65 years of age, who, as has become clear, are more vulnerable to COVID-19 than younger age groups. According to another commentary, the familial setting one obtains in much of Italy, where the very young, who can be asymptomatic carriers of the virus and can unwittingly transmit the infection, mingle and interact with the aged could be another contributing factor to the high mortality rate in Italy.

"Much of the global community," noted the WHO-China Joint Mission report, "is not yet ready, in mindset and materially, to implement the measures that have been employed to contain COVID-19 in China. **These are the only measures that are currently proven to interrupt or minimise transmission chains in humans.** *Fundamental to these measures is extremely proactive surveillance to immediately detect cases, very rapid diagnosis and immediate case isolation, rigorous*

tracking and quarantine of close contacts, and an exceptionally high degree of population understanding and acceptance of these measures [emphasis added]."

Actually, the observation made by the report (in bold above) is somewhat off the mark. The successes in South Korea and Singapore, the sizes of these countries notwithstanding, offer excellent examples of how measures (in italics above) can be effectively and efficiently deployed to contain the outbreak in other settings. From the peak of 909 cases on February 29, South Korea, a country of 50 million people (very small compared with China or India), has brought the number of daily cases down to about a tenth, and it has done so without taking any authoritarian measures or locking down towns and cities.

The reason for the Korean success has been the world's most expansive and meticulously planned and organised testing programme, followed by effective isolation of confirmed cases and tracing and quarantining their contacts. According to www.ourworldindata.org, which compiles data from official and other published sources, South Korea has tested more than 2,80,000 people, that is, nearly 5,700 tests per million population, which is more than any other country. In comparison, India (as of March 19) has carried out tests on 14,175 samples (from 13,285 individuals), which works out to a meagre 11.7 tests per million people. This is far fewer than what many other neighbouring countries, such as Thailand (about 120/million) and Vietnam (40/million), have managed to achieve.

This suggests that the number of confirmed cases in South Korea is closer to the total number of cases than in other countries, notes the website. South Korea's experience shows that diagnostic capacity at scale, case isolation and contact tracing are key to epidemic control. After SARS-CoV-2 emerged in China, South Korea ramped up its manufacturing capacity quickly in collaboration with manufacturers after the first kit was approved on February 7. A similar strategy has been adopted by Singapore too, which has been in a state of advanced readiness, including availability of hospitals, beds and adequate intensive care and quarantine facilities, so that the situation does not become unmanageable at any point of time.

THE INDIAN SITUATION

The Indian situation, with just 256 cases (and four deaths) as per the Union Health Ministry data of March 21, might seem comforting, but as epidemiologists and health experts have pointed out, this could be a big illusion arising out of the abysmally low level of diagnostic testing based as it is on some minimalist criteria of testing individuals only if they develop COVID-19's classic symptoms even if they have been identified by contact tracing or had a history of travel to countries with the epidemic and are, therefore, potential carriers of the virus even though currently asymptomatic. Increasingly, studies and modelling efforts by scientists



ED JONES/AFP

A WOMAN WATCHES from a waiting area as a nurse administers a novel coronavirus test at a testing booth outside Yangji Hospital in Seoul on March 17. The hospital has introduced phone booth-style coronavirus testing facilities that avoid medical staff having to touch patients directly.

point to a much greater role played by asymptomatic carriers of the virus in the spread of the epidemic around the world.

Ramanan Laxminarayan of the U.S.-based Centre for Disease Dynamics, Economics & Policy said in a piece he wrote for *The Hindu*: “Testing is the most important thing we could be doing right now.... We need to identify coronavirus-infected patients in a timely manner in order to increase our chance of preventing secondary infections. There is no shame in admitting that we have far more cases than what we have detected so far.... If widespread testing were to commence in India, the number of confirmed cases would likely climb to the thousands very quickly.”

“If the projections from Europe,” he wrote, “are applicable in India... the prevalence rate would be upwards of 20 per cent.” This amounts “to about 200-300 million cases of COVID-19 infections and about four and eight million severe cases of the kind that are flooding hospitals in Italy and Spain at the moment”. He also warned that the infrastructure of the country’s health care system, such as the number of intensive care unit beds and ventilators, was inadequate.

T. Sundararaman, former Director of the National Health Systems Resource Centre, New Delhi, made similar observations in an interview to *HuffPost India* recently. The narrow criteria for testing make it more or less mandatory to test only those who walk in feeling unwell or feverish. “It is a self-fulfilling prophecy. You are actually not being able to detect whether community spread is happening or not. There is no reason why India

will not have community spread.” According to him, instead of the current 61 testing centres, there should at least be 10 times that number; there should be at least one testing centre for each district. “[It] is true that you cannot test every fever. But any fever with respiratory symptoms suggestive of early pneumonia, shortness of breath, should be tested. You should not wait for a contact relationship. You should be offering the test much more widely now,” he said.

So, the illusory small number of COVID-19 cases (and deaths) in India, and the comforting statistic that there were a lower number of cases and deaths in the country in the SARS-CoV-1 and H1N1 epidemics compared with other parts of the world, should not drive the nation into complacency. Historical comparisons are good when the arguments are compelling. In the present case, they are not. SARS-CoV-2, with its much higher contagiousness and infectivity even from asymptomatic carriers, seems to be a different beast compared with other coronaviruses. Moreover, scientists are yet to fully unravel the science of the virus and the disease.

The country, therefore, needs to be prepared for a rapidly mounting number of cases to the tens of thousands and more, which does not seem to be the case from available evidence. As Laxminarayan wrote: “This is how epidemics move and the real numbers should spur us into positive action.” The prognosis for India by these experts holds an important message for the health authorities. One hopes that someone is listening, and it is high time that health measures besides shutdowns and travel restrictions are put in place. □

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‘We cannot be obsessed with hiding numbers’

Interview with **Dr P. Kuganatham**, former Director, Communicable Diseases Hospital, Chennai. BY **R.K. RADHAKRISHNAN**

DURING THE CHOLERA EPIDEMIC IN TAMIL Nadu in 1992-93, Dr P. Kuganatham, then Director of the Communicable Diseases Hospital in Tondiarpet, Chennai, with the backing of officials of Chennai Corporation, made suggestions to the government of Tamil Nadu that seemed to be draconian. Most of these suggestions—cutting down on the length of hospital stays by using a never-before-tested protocol, insisting on increasing the chlorine content in drinking water to incredibly high levels, and making sure that everyone afflicted was isolated and moved to a treatment facility—worked to ensure that the number of deaths from the affliction was kept low. He went on to become one of the most proactive Health Officers of Chennai Corporation and is a sought-after public health expert in India today. Excerpts from an interview he gave *Frontline* on the coronavirus infection and its implications:

What has been India’s record in controlling infectious diseases since many such diseases are endemic to the country?

We have had many epidemic outbreaks in India: small pox in the 1920s and the 1960s, plague and swine flu [Spanish flu] in 1918. [At one time] there used to be cholera outbreaks almost once in five years. More than five lakh people died in the Madras presidency in the swine flu outbreak [in 1918]. The last major epidemic which spread to many parts of the world was the cholera outbreak of 1992-93. The strains of this cholera outbreak were new and named O-139. The first strain was discovered in Chennai by my team, and then we had to develop a new protocol for the management of cases. We treated at least 75,000 cases in the Communicable Diseases Hospital.

In the case of H1N1 [the swine flu pandemic in 2009-10], we identified all the cases. The epicentre was

Mexico. From there it spread to California, Hong Kong, Indonesia, and so on. We decided that all those who had a travel history to these places needed to be tested. We intercepted all passengers from these destinations and took those who had symptoms to the Communicable Diseases Hospital in Tondiarpet. Over a period of time, we treated about 3,500 patients. All the patients were kept under observation during the incubation period of

between 7 and 14 days. The source of infection is from the throat, nostrils. The infection gets into the throat or nostrils and gets into the lungs and multiplies there.

What we thought was this: a patient who has sufficient exposure needs to be admitted in the hospital and given a mouthwash. This is done in a slightly peculiar manner. You raise your head to the roof and keep the salt water or the antiseptic solution in touch with the throat for a minute. The virus is killed because of this action. This is actually like washing the throat frequently to remove the virus, which will be a source of infection to the neighbourhood. Through the period of the epidemic, we managed to ensure that no patient died.

There are also epidemics that occur after a disaster. I have seen such epidemics after the Gujarat earthquake, after the tsunami [in Nagapattinam], and in Odisha [after the supercyclone in 1999]. In all these places, we have had a small outbreak of diseases after the event.

What is the way to contain, mitigate and manage the spread of an epidemic?

The best public health approach to control an epidemic starts with identifying all cases in a given geography. They should then be treated or isolated. There should be no delay in treatment. There is no time to sit around and discuss in an epidemic setting. In the case of H1N1, apart from the throat wash and checks for lung



BY SPECIAL ARRANGEMENT

infection, we made sure that the virus didn't cause inflammation of the tissue. This is critical because the virus lodges itself in the cell and infects it. If this happens, then opportunistic infections will affect the patient. We gave them prophylactic vitamin A, some antibiotics like amoxicillin. With this we managed to isolate the virus. For mucus secretions to be removed, we gave them mucolytes, and bronchodilators for five days.

Along with effective treatment, which is not [to be] delayed for any reason, it is important to undertake a massive awareness drive in society. At a clinical level, all effort should be simultaneously made to identify the organism, and a protocol for management and treatment should be developed. There should be no panic, and there should be no political obsession about hiding the number of cases. If you start hiding them, the cases, which are like an iceberg in the community, will flare up. People will die as a result.

I see the swine flu epidemic of 2009 and this epidemic (COVID-19) in the same way. Both of these are, in some ways, like common cold infection. Even a common cold can sometimes become very virulent because of the mutation of the virus. For example, a swine flu virus is found in wild animals, pigs, birds and human beings. The viruses in these different hosts sometimes get together and mutate and develop as a new virus. This process is termed a novel virus. This is called the reassortment of a virus. H1N1 was called a novel virus. Coronavirus is also being called a novel virus.

'DISEASE OUTBREAKS OFTEN HAPPEN IN THE FOREST'

What is the source of these frequent virus epidemics in the global context?

One thing we forget is that disease outbreaks often happen in the forest. When there is a human invasion into the forest and a disturbance of the ecosystem in the forest, the infection will end up in the places where human beings are settled. This was evident in the plague in Surat in 1996. In Surat, wild rats in the forest moved to the human habitation areas because of some disturbance in the forest. These rats infected domestic rats in the town. This was the beginning of the plague.

When the British ruled India, we had surveillance outposts in major forests. For instance, in the Kysanur forest near Mysore there was a surveillance centre. This is the reason why a vector control centre was set up in Hosur. Unfortunately, all the surveillance centres were later closed by the Indian government.

What have you learnt about the coronavirus and the COVID-19 infection?

Coronavirus is a weak virus. It's a novel virus and its behaviour cannot be quantified. Here, planners have to understand that it affects a larger population when people live in densely populated settings. In spite of infecting a large number of people, the deaths are low. This is exactly what we saw in H1N1: the infection rate was very high but the number of deaths was low.

It's also not necessary that all those infected suffer from the disease. There is a parallel with TB here. In most thickly populated cities in India, almost everyone harbours TB infection in their lungs. But they do not suffer from TB disease. They are infected, but it is not flaring up as a disease. It will flare up only when their immunity comes down.

In any case, the question now is this: Has this novel virus invaded our population significantly? From news reports, we know that this is prevalent in many places mainly because of the travel history of individuals. But this could be stopped if all these people are identified and isolated. For that, we need to insist that people are tested. At least, this should be done for those who have come in contact with a COVID-19 patient, who have a travel history, who are in an immunocompromised state and who have exhibited symptoms.

Testing the whole population is difficult because this can lead to panic and, also, we may not have enough facilities. The private sector should be part of this effort to control the spread of the disease. Restricting testing to a few places is not right. You have to rope in the private sector. Only then the asymptomatic cases can be identified and treated. Otherwise, though these people will not suffer any problem, they will pass on the infection to others.

Unfortunately, our governments are taking a very strange decision of restrictions in testing. If a person wants to get tested today, there is no provision for it. Many are telling people that if they want to get tested, they need to get admitted in the hospital, etc., just to discourage them.

Are private hospitals equipped to treat such patients? In fact, are government hospitals equipped to handle these patients?

Many private hospitals do not have infectious diseases wards. In the past, infectious diseases hospitals were located outside cities. Now, in the Western world, this treatment is highly technical, and they maintain the isolation wards in a general hospital itself but maintain the room in which an infectious patient is kept under negative pressure. There are not many hospitals in the private sector with negative pressure rooms.

How do you view the restrictions imposed in China on its citizens following the outbreak of COVID-19?

Never in the history of public health has any country done what China is doing now. It is difficult to imagine the same happening in India, the U.S. and in most other places. If such a disease had occurred in any of these countries [before it occurred in China], we would have seen devastation similar to that seen along the path of a hurricane.

Without bothering about criticism from outside, they went about their job of isolating, tracking travel history of people, creating awareness in schools, employment of drones, building hospitals in just a few days, and imposing movement restrictions. It worked. With our limited

experience with this pandemic, we can see that this approach has saved lives.

In the event of an epidemic, does Chennai have the adequate capacity to treat everyone who may need treatment?

For a city the size of Chennai, we need about 5,000 beds. We don't have that many beds for infectious diseases. We have general beds which will amount to much more than that number. We have only one Communicable Diseases Hospital, which has 500 beds. All the other hospitals should have isolation wards. If you want to handle such pandemics in the future, there is no way but to set up a 5,000-bed hospital outside the city.

What are the lessons that were learnt from the handling of the cholera epidemic in 1992-93?

When cholera broke out in 1992-93, the Communicable Diseases Hospital had only 300 beds, and we added sheds across the entire campus to handle the additional patients coming in. We created about 1,500 beds in all.

Daily admission was over 1,500 patients. Because of the epidemic, government hospitals refused to take patients. That is the time I was forced to think: should I keep the inpatients for a week as was conventional? If I keep a patient for a week and if I have daily admissions of 1,500, just imagine what will be the bed load. We employed about 700 professionals, including about 150 doctors and 300 nurses. It was a war.

So I was forced to take a decision to cut down hospital stay from one week to 48 hours. This was our research point based on data and the clinical symptoms. As a result of this research we identified a new strain of cholera, and it was named the Madras strain. The treatment we simplified using antibiotics like 300 mg of doxycycline and five pints of ringer's lactate, and the patients were much better in 48 hours. Every authority, including the WHO [World Health Organisation], was astonished at our management. The management was based on our understanding of the bacterium, how it manifests, how it spreads and how it can be controlled.

For a cholera infection, which can be cured and the cure rate was 100 per cent, we had so many facilities. Just imagine the scale of what you require now for a pandemic that is capable of spreading everywhere, and the treatment is highly problematic because a patient's cure rate depends on his or her health status. Fortunately, we haven't yet seen a massive upswing in infections.

What went right? How did those in authority at Chennai Corporation and the Tamil Nadu government react?

The Chennai Corporation gave me the full freedom to function: recruit, bring patients to the hospital in a fleet of over 100 ambulances and implement innovative treatment protocols that we developed for that particular situation. Remember that the cases were coming in from all over: from neighbouring States and even faraway districts.

It was fortunate for this city that Mr R. Poor-

ningam, IAS, was the special officer; he quickly understood the gravity of the situation. The then Chief Minister, Jayalalithaa, too supported our efforts because we treated two Ministers and about half a dozen IAS officers. One of the things I forced the government to act on was to increase the level of chlorine in the drinking water system. This was a big struggle because there was a major difference of opinion on my suggestion to increase the chlorine content. But since I had an army of staff helping me, we mapped the chlorine content in water in public fountains in all the wards of the Corporation. The correlation was hard to miss: wherever the chlorine level was nil, we saw a spike in cholera cases.

There were also many press articles at that time supporting my view or the contrary view. At a meeting with the Chief Secretary, I showed him historical evidence of how cholera was controlled and suggested we do the same here, that the culprit was water. Deaths in cities outside Chennai, such as Madurai, were increasing. The Chief Secretary empowered me to take a decision on the chlorine content in the water supply system.

My instruction was to increase the chlorine content to 10 ppm. The WHO's recommendation is 0.2 ppm. When we checked in some of the tail-end points, we found that even after an increase of 10 ppm at the waterworks points, the tail-end areas had barely 0.2 ppm. This is because a lot of the pipelines were laid many decades ago. In just a week after we increased the chlorine level, the cases in the worst affected areas came down from 1,000 to 50-60.

'HAPHAZARD STATEMENTS'

After so many epidemics, does India have a national approach to such diseases?

There is an Epidemic Task Force in all local bodies. All States have a State Epidemic Task Force. All the experts and administrators discuss and decide on approaches to an epidemic. But what is happening now is haphazard statements from different quarters. They have to develop an agenda for it. They have to plan a strategic road map to handle the situation.

The U.S. has an organisation called the Epidemic Intelligence Services [EIS]. They are the first people to gather information on any disease outbreak anywhere. The same system was copied and started in Delhi in 2012. It is responsible for monitoring the country.

After the Surat plague outbreak here, the U.S. sent massive shipments of PPE [personal protective equipment] to India. At that time, India had not even declared that there was an outbreak of plague. Also, there is a National Institute of Communicable Diseases in New Delhi [now called National Centre for Disease Control]. It too has not been talking. The disease surveillance units across the country should function properly. There are vacancies across States, from what I hear. These units have to monitor even the smallest outbreak of disease. They should conduct epidemiological research on that. They should identify the hotspots and stamp it out as soon as possible. □

Deficient system

India's **ill-prepared public health system** faces its toughest test yet as the number of coronavirus cases continue to increase, putting pressure on the government's limited resources. BY **T.K. RAJALAKSHMI**

ONE OF THE THINGS THAT IS BEING LAUDED in India is that in a population of 1.3 billion, the number of reported coronavirus cases has been very low. The national address of Prime Minister Narendra Modi on March 19 asking people to observe a self-imposed curfew on March 22, to clap and ring bells from their balconies to appreciate the work of doctors and health workers, and to not hoard, do not give an indication of the state of health preparedness across the country.

While the efforts of the government in issuing travel advisories, installing screening mechanisms at airports and advising people to take precautions have been acknowledged, public health experts have cautioned about gross under-reporting of infected cases and emphasised that the total number of tests conducted by the Indian Council of Medical Research (ICMR) based on a small sample was not enough to arrive at the conclusion that community transmission was not occurring.

There also were reports of people diagnosed with COVID-19 interacting and moving freely in the community. The revised strategy of testing issued on March

21 by the ICMR underscores the approach that cases of COVID-19 in India relate only to travel and local transmission from "imported cases to their immediate contacts". The notification says that "community transmission of the disease has not been documented till now. Once community transmission is documented, the above testing strategy will undergo changes to evolve into stage-appropriate testing strategy."

The current testing strategy says that all asymptomatic individuals who have undertaken international travel in the last 14 days should stay in home quarantine for 14 days; that they should be tested only if they become symptomatic (fever, cough, difficulty in breathing) and all family members with a confirmed case should be home-quarantined. All symptomatic contacts of laboratory-confirmed cases, all symptomatic health-care workers, all hospitalised patients with Severe Acute Respiratory Illness fever (fever, cough and breathlessness) as well as asymptomatic high-risk contacts of a confirmed case must be tested between Day 5 and Day 14 of coming into contact with a confirmed case. This marks



A DOCTOR in a protective suit outside an isolation ward for COVID-19 patients at a hospital in Hyderabad on March 15.

a slight shift from its earlier position of not testing all hospitalised patients with severe acute respiratory illnesses and fever.

'TEST, TREAT AND TRACE'

"Countries must isolate, test, treat and trace," says the latest message from the World Health Organisation (WHO), a dictum the Indian government does not seem to be following.

These concerns have arisen against the backdrop of India's poor health care system and abysmally low public health expenditures as a percentage of GDP. The rise in the incidence of COVID-19 cases in the Western economies despite their advanced health systems and services has caused consternation in India regarding the preparedness of its own health services and systems. The overemphasis on self-management, isolation and "physical distancing", as opposed to ensuring more district-level testing facilities and more economic and social support for those who are vulnerable has been criticised. Questions have also been raised about the effectiveness of the Integrated Disease Surveillance Project (IDSP) set up in 2004 in order to detect and respond to epidemic outbreaks.

Yogesh Jain, a public health physician in rural Chhattisgarh who has written on the coronavirus outbreak, told *Frontline* that absence of evidence does not mean evidence of absence. India, he said, was showing fewer cases because of restricted testing. "There isn't a different epidemiology in India and therefore community transmission is already happening. There should be larger testing criteria and the data must be shared with the people. The ICMR says it has sentinel sites from which it has picked up the samples. But even if 10 hospitals are selected and the cases of pneumonia are investigated, one will get an idea. Just because we are one to two weeks behind the European escalation curve doesn't mean it won't happen here," he said. The strategy that the government would act only if there was community transmission was "nonsense", he added. The WHO had indicated indirectly that some countries needed to move faster.

A shortage of testing kits was cited as a reason by an ICMR official for the low rate of testing, but public health experts felt that it should have been addressed much earlier. There are an estimated 168 flu testing sites under the IDSP. In fact, given the frequent outbreak of viral agents, the Department of Health Research set up the Viral Research and Diagnostic Labs under the aegis of the ICMR to identify and diagnose early viral infections of importance. There are around 85 such laboratories functioning, but whether they are testing for COVID-19 is not known. "If there is an air of secrecy, people will come to all kinds of conclusions," said Jain.

China was successful in the lockdown of Wuhan, but to emulate physical distancing in India is not practical given the high population concentration and diversified demography. "Even when people were diagnosed as positive, they didn't care and mingled in the community," said Jain. The Chinese government ensured that everyone in Wuhan was taken care of in their homes so that

they did not have to step out. At least 10 per cent of those diagnosed with COVID-19 would need to be put in an ICU and on ventilator as well, he said. But the shortage of ventilators and fully equipped ICUs was a huge challenge.

In Chhattisgarh, there were 156 ventilators for a population of 32 million, that is, one ventilator for every two lakh people, said Jain. "Even if the prevalence is one per cent, it means a thousand persons will get infected and a hundred will need ventilator support but only one person will get it," he said.

In recent years, global health agencies had shifted focus to non-communicable diseases and lifestyle-related diseases such as cancer, diabetes and chronic obstructive pulmonary disease. The re-emergence of communicable diseases in the form of epidemic viral outbreaks poses a new challenge altogether. According to the Department of Health Research, India had witnessed such outbreaks and faced threats of potential infiltration of Nipah (2001, 2007 and 2018), Avian Influenza H5N1 (2006), Chikungunya (2006), pandemic influenza (2009), Ebola (2013) and Zika (2016).

The government has set many targets for itself, including increasing the number of paramedics and doctors as per the Indian Public Health Standards (IPHS) norms in high-priority districts by 2020 and decreasing the proportion of households facing catastrophic health expenditure by 25 per cent from the current levels by 2025. The government also plans to increase its health expenditure as a proportion of GDP from the present 1.15 per cent to 2.5 per cent by 2025.

The United States and the United Kingdom have been facing shortages of ventilators and other ICU facilities in the context of the COVID-19 outbreak. These are also the countries which have a high level of universal health coverage in terms of essential services. Prime Minister Boris Johnson of the U.K. told the media that the government would not track and trace the contacts of suspected cases and that only those admitted to hospitals would be tested. But as the numbers burgeoned in Europe, especially Italy, he changed his position.

CHALLENGE OF COMMUNICABLE DISEASES

In India, according to the National Health Profile 2019, the average population served by government allopathic doctors was 10,926 persons per doctor. There were around 8.6 lakh auxiliary nurse midwives and some 20 lakh registered nurses. For a population of 1.3 billion, there are only 25,778 government hospitals and 7,13,986 beds. The budget for managing epidemics and natural calamities had never exceeded Rs.100 crore in any year. In fact, the actual expenditure ranged between Rs.50 crore and Rs.60 crore from 2016 onwards. The budget for health sector disaster preparedness and management, including emergency medical relief and emergency medical services was halved in the Budget Estimates (BE) of 2018-19 from what was allocated in 2016-17 (Rs.30 crore in BE 2016-17; Rs 16.85 crore in BE 2018-19).

A spurt is predicted, for which the Indian health care system, a highly privatised one, does not seem to be prepared.

According to Census 2011, only 8.3 per cent of the population is above 60 years, while 64.7 per cent is in the 15-59 age group. The assumption that the virus would attack only the elderly is not true given that in the U.S., nearly 30 per cent of the cases was in the 20-44 age group, though deaths have been in the older age cohorts. The government might be taking solace from the fact that the disease burden for communicable, maternal, neonatal and nutritional diseases dropped from 61 per cent to 33 per cent between 1990 and 2016, and for non-communicable diseases (NCDs) it grew from 30 per cent to 55 per cent. But the epidemiological variations between States ranged from 48 per cent to 75 per cent for NCDs and 14 per cent to 43 per cent for infectious and associated diseases.

But according to the National Health Profile 2019, acute respiratory infections accounted for nearly 69.47 per cent of the total morbidity because of communicable diseases. Mortality because of pneumonia and acute respiratory infections accounted for 57.86 per cent of all mortality because of communicable diseases. The third highest cause of mortality was acute diarrhoea, which accounted for 10.5 per cent. There were 9.2 lakh cases of pneumonia alone in 2018, compared with 7.5 lakh cases the previous year. Similarly, viral hepatitis, viral meningitis, swine flu, acute diarrhoea and acute respiratory infections went up in 2018 over the previous year.

CURFEW AS CURE

Yet, in India, denial that there might be more cases than what has been reported continues to be the position despite public health experts cautioning the government not to be complacent. The government seems to be following the dictum that “prevention is better than cure” at a time when the virus may have already entered the community. The emphasis on prevention and the onus for keeping the contagion at bay has been disproportionately placed solely on people with the understanding that following certain behavioural and sanitation norms, such as washing hands regularly with soap, using alcohol-based sanitisers and avoiding physical contact, can prevent the spread.

In the Indian context, it is next to impossible to quarantine huge sections of the population, especially those who have to commute for wage work. In Wuhan, the Chinese authorities ensured that people received food at their doorstep and were thereby successful in containing the spread by way of physical and social contact. No such effort is on in India.

The repeated exhortation by the Union Health Ministry to citizens to wash their hands with soap and use sanitisers needs to be seen in the context of the overall access to clean water for drinking and bathing and other sanitation needs. Only 43.5 per cent of households in the country according to the National Health Profile 2018, had access to tap water, of which only in 32 per cent the water was from a treated source. Some 33.5 per cent of households relied on hand pumps, while 11 per cent depended on well water, of which 9 per cent used uncovered wells. Some 8.5 per cent depended on tube wells. Only 46.6 per cent of households had access to drinking water within their premises, while 35.8 per cent had it near the premises and 17.6 per cent away from the premises.

There was a wide variation observed between the States as well. While 77.7 per cent of households in Kerala had clean drinking water within the premises, the corresponding figure for Chhattisgarh was only 26.5 per cent. There were 10,379 rural habitations without safe drinking water and with a problem of excess fluoride levels. Some 16,279 habitations had the presence of arsenic in their drinking water supply. Latrine facilities were present only in 46.9 per cent of households, while 53.1 per cent did not have latrines inside the premises. Some 48.9 per cent of households had no drainage; only 42 per cent had bathrooms; 55.8 per cent had kitchens, while 31.5 per cent had no separate kitchen.

Therefore, with the limited guarantee of clean running water, frequent “hand washing” with soap or sanitiser is a luxury in the Indian context. With the scare of COVID-19 going up, the sale of face masks and sanitisers shot up among middle and upper middle-class sections and retailers had begun charging exorbitant amounts from panic-stricken consumers. Fears of a lockdown prompted several people to hoard food and medicines, leading to acute shortages in stores. The prices of vegetables, too, soared.

On March 21, the Ministry of Consumer Affairs, Food and Public Distribution, belatedly realising that some people were exploiting the crisis, issued an order under the Essential Commodities Act, 1950, regulating the price of masks and sanitisers. Retailers, the order said, would not be allowed to charge more than Rs.8 and Rs.10 for the two specified categories of masks and Rs.100 for a 200 ml bottle of sanitiser. This notification will be effective until June 30. Yet, even at the reduced cost, sanitiser is not affordable for many. There has been no commitment from the government to provide these things free for those who cannot afford to buy them.

With each passing day, the number of COVID-19 cases in India is going up. A spurt is predicted in the coming weeks, for which the Indian health care system, a highly privatised one, does not seem to be prepared. The outbreak is an opportunity for the government to take a hard look at public health, reduce its dependence on the private sector and strengthen and reinvest in the public sector pharmaceutical industry in the interests of the people. □

Kerala model

Kerala's social investments in rural health care, universal education, decentralisation of powers and resources and women empowerment are standing it in good stead as it **leads the fight against the coronavirus.**

BY R. KRISHNAKUMAR



BY SPECIAL ARRANGEMENT

“NOT TESTING ALONE. NOT CONTACT TRACING alone. Not quarantine alone. Not physical distancing alone. Do it all. Find, isolate, test and treat every case, to break the chains of transmission.... Do not let this fire burn.”

If this recent statement of World Health Organisation (WHO) Director General Tedros Adhanom Ghebreyesus offers the best prescription for dealing with COVID-19 as of now, a State in India that has attracted everyone's admiration with its quick and effective response to the spread of coronavirus is Kerala.

Right from early February, when three students of Wuhan University in China, then the centre of the outbreak, returned to their homes in the State and were promptly identified, tested and found to be the first known positive cases for coronavirus infection in India, Kerala increased its preparedness, readiness and response to the threat of the pandemic.

KERALA HEALTH MINISTER K.K. Shailaja promotes the use of sanitisers as part of the “Break the Chain” campaign launched by the State government.

It effectively utilised the most valuable resources at its disposal: time, the advance notice it got after the first trickle of people living abroad began to return in the wake of the pandemic threat; the well-known strengths of its refurbished healthcare system; and the out-of-the-blue yet hands-on experience it had gained in the past few years while handling two outbreaks of the deadly Nipah virus (“Managing Nipah”, *Frontline*, June 22, 2018).

With early detection and prompt containment efforts focussing on review of each case, tracing everyone who had contact with the infected person, putting them on observation, setting up emergency quarantine and hospital facilities, taking steps to ensure that people who returned from overseas, including tourists who showed



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BY SPECIAL ARRANGEMENT

TRAINING FOR ambulance drivers is part of a special drive by the Kerala government to meet the needs of the State during the COVID-19 crisis.

symptoms of the disease and their contacts, stayed under quarantine at home, hospitals or hotels, Kerala has offered a vigilant, well-informed response to the spread of COVID-19 and its consequences in the State.

These steps, based on WHO guidelines, may appear commonplace as every other State also soon followed them, but Kerala has demonstrated a remarkable difference once again at the time of a crisis in the way its government went about implementing them, stirring up the official machinery and ensuring the participation of every section of society.

Special isolation facilities and treatment protocols based on the Ebola model that were established following the Nipah outbreak were readied almost as a reflex reaction. A back-to-the-basics approach for infection control was put in place soon after the first positive case was identified. The government made it clear through detailed daily media briefings by Chief Minister Pinarayi Vijayan and Health Minister K.K. Shailaja that the tasks involved, especially in contact tracing, creating awareness about the need for quarantining and in training healthcare and hospital personnel, were more difficult this time and sought the cooperation of the people in surveillance and containment efforts.

The entire State would wait for these daily briefings, remarkable for the competent government response to the emerging crisis, the confidence and clarity with which each day's events were analysed and the convincing manner in which sensitive government decisions were explained and their rationale conveyed to the people at

regular intervals. Equally popular were the social media accounts of the Chief Minister, which proved to be a remarkable compilation of updates on government steps to tackle this dangerous pandemic, the enormity of the tasks involved and advice and appeals to the people.

As a result, within the shortest possible time perhaps, the whole of Kerala was made aware and vigilant about the nature of the virus and its spread, the fact that its infectious period, transmissibility, clinical severity and extent of community spread were yet to be fully understood and about the difficult tasks involved if the State was to survive such a contagion.

The State dealt with the first stage of the crisis, successfully containing a spread of the disease by quarantining the students from Wuhan who had tested positive and providing them hospital care until they recovered fully. But soon, a family of three with a travel history to Italy arrived at the Kochi airport, disregarded official guidelines to report to the authorities about any visit to coronavirus-affected countries, and chose to roam about in their native village and surrounding areas of Pathanamthitta district.

They later tested positive for the virus, after a relative reported sick at a local hospital and told the authorities of their arrival. The government had to force them to stay under quarantine. To its horror, Kerala realised then that it had seen the first small chain of transmission of the virus within its territory, even as the biggest annual religious festival in the State—a congregation of over 30 lakh women devotees spread over 10 days at the Attukal Bhagavathy temple—was taking place in the State capital.

But in its wisdom, the government let the event run its course with all its attendant risks, issuing merely

health advisories on the dangers involved for the participants and cautioning those with symptoms from taking part in the festival. This was perhaps the only flaw in the measures taken by the State ever since the first positive cases were identified.

Patient flow chart: COVID-19 IDUKKI
Patient code: IDK-1

06.03.2020

07.55 A.M. : Arrival at Nedumbassery airport.
 08.30 A.M. : Travel to Casino Hotel Willingdon.
 Lunch and dinner at Casino Hotel, Willingdon.

07.03.2020

08.30 A.M. : Local visit at town in autorikshaw.
 Lunch and dinner at Casino Hotel, Willingdon.

08.03.2020

08.30 A.M. : Breakfast at Casino Hotel, Willingdon.
 09.00 A.M. : Travel to Cheruthuruthy. Lunch at Residency Hotel, Athirapilly.

09.03.2020

07.30 A.M. : Breakfast at River Retreat Hotel, Cheruthuruthy.
 10.00 A.M. : Onwards day with The Masters (Cultural programme)
 Stay at River Retreat Ayurvedic Heritage Resort, Cheruthuruthy.

10.03.2020

07.30 A.M. : Breakfast at River Retreat Hotel, Cheruthuruthy.
 08.00 A.M. : Travel to Munnar.
 01.00 P.M. : Lunch at Edassery Farmyard, Adimaly.
 02.30 P.M. : Check-in at Munnar Tea County.
 09.05 P.M. : Due to fever and throat pain, consultation at TATA Hospital, Munnar.
 Stay at Munnar Tea County.

11.03.2020

08.00 A.M. : Breakfast at Munnar Tea County.
 08.30 A.M. : Patient stay back at Munnar Tea County. (The remaining team members went for site seeing at Munnar.)
 10.00 P.M. : Patient referred to Medical College, Kottayam.

12.03.2020

10.00 A.M. : Cameback to Munnar Tea County.
 Patient team members quarantined at Tea County, Munnar.

13 & 14.03.2020

Patient and team members quarantined at Tea County, Munnar.

15.03.2020

Travel to Nedumbassery.

On March 19, as the number of COVID-19 cases in India crossed 198, in Kerala, 25 people had tested positive for the virus (after the first phase involving the three students from Wuhan who later recovered) and 31,173 persons were under surveillance. Among them, 237 were in isolation in hospitals and the rest were on home quarantine. The State saw an increase in suspected cases, especially after a steady flow of people began from various affected countries. On a single day, on March 19, for example, as many as 6,103 people (7,861 the previous day) were additionally put under surveillance.

The State was surely learning that many of the steps the government had announced may only be successful in the early stages of the outbreak, that the logistics of continuing the containment efforts further would be challenging, and that individual responses to government directives will be a key factor in preventing the situation from turning bad.

There were several reports of people violating home quarantine norms and trying to hide their travel history from the authorities. In a prominent instance, the functioning of the prestigious Sree Chitra Tirunal Institute for Medical Sciences and Technology in Thiruvananthapuram was badly affected when one of its doctors who had recently visited Spain came back on March 1 and attended duty for over 10 days. After this, on disclosure of his travel history, he tested positive for the virus. Several senior doctors and an unknown number of other hospital staff had reportedly interacted with the said doctor and were hence forced to go on home quarantine in order to avoid risk to patients, a large majority of them needing critical care.

In another incident, a patient who was admitted to the Thiruvananthapuram Medical College with injuries sustained in a road accident was provided treatment. Only later did he disclose that he was on home quarantine at Kollam but had violated directions to go on a bike ride when he met with the accident, forcing 16 doctors and nine hospital staff to go on quarantine themselves, affecting hospital work at a critical juncture when resources were stretched to the limit.

However, such instances were the exceptions and do not take the sheen away from the outstanding way the government went about containing COVID-19 and preparing the State for the uncertain period that lay ahead.

A reading of the prominent government initiatives during the month after the first three positive cases were identified would perhaps be instructive.

Kerala was perhaps the first State to announce the immediate closure of schools, including tuition centres and madrasas, cinemas and other establishments until the end of March; promote the importance of physical distancing and personal hygiene; gauge the need for quickly setting up more (but still not enough) testing facilities; deliver mid-day meals to schoolchildren at their homes until schools reopened; introduce quarantine facilities in all prisons in the State; utilise the services of prisoners to help meet the acute shortage of face masks; encourage large-scale production of sanitisers



BY SPECIAL ARRANGEMENT

AN AWARENESS campaign for autorickshaw drivers on physical distancing and personal hygiene.

locally; involve local body members in surveillance and monitoring of those in quarantine; utilise community organisations to set up makeshift sanitiser kiosks at street corners; take steps to improve the quality and availability of broadband Internet to help those working from home; provide a dedicated app, “GoK Direct”, to tackle fake news and false social media campaigns with up-to-the-minute information on government decisions and travel guidelines; launch an interactive web portal to provide all currently available scientific and general information about COVID-19 to the public and health-care personnel; rope in religious and community leaders to curtail large gatherings during prayers, rituals and festivals in places of worship; launch door-to-door monitoring of those kept under home quarantine; provide training to those who come in regular contact with the public, such as ambulance drivers and auto and taxi drivers; undertake the hard task of tracking individual contact patterns and preparing flow charts of the time and places of visit of all those who tested positive for coronavirus and give them wide publicity as a warning to those who could be at risk of infection; launch a popular and effective “Break the Chain” campaign, involving, among others, Ministers and cine artistes on television and social media and elsewhere, to create awareness about physical distancing and frequent hand washing; and take extra care to ensure that people who tested positive were not stigmatised but blame was put squarely on irresponsible behaviour.

Kerala also declared an economic stimulus package to address the hardship in society that has followed the coronavirus outbreak, the first State to do so. On March 19, the Chief Minister announced a Rs.20,000-crore economic package for the purpose, of which Rs.500 crore was exclusively for the health sector (besides other assistance), Rs.2,000 crore to provide loans through Kudumbashree, the vast network of women’s self-help groups, and Rs.1,000 crore to provide jobs through rural employment guarantee programmes.

The government also announced free ration for a month for all families irrespective of the category to which they belonged and made arrangements for paying welfare pensions to all eligible sections two months in advance.

On March 19, in a commendable gesture, the Congress-led Opposition coalition too joined hands with the Left Democratic Front (LDF) government in the fight against COVID-19. At a joint video conference with ward-level members of all the local bodies in the State, Chief Minister Pinarayi Vijayan and Opposition Leader Ramesh Chennithala urged them to sink political differences and unite to work proactively at the local level against the spread of the disease, as the State faced the prospect of community phase transmission of the virus in the coming weeks.

Referring to the experience of many other countries that suggested the possibility of wide transmission in the community, the Opposition Leader too supported the government’s call to local administrations for an extremely vigilant approach to ensure that people followed government guidelines and restrictions.

But as Kerala braces for the next stage with severe strain on the health system as it struggles to keep its grip on the key areas of surveillance, contact tracing, testing and patient care with the involvement of local communities, it is becoming clear that the State is leaning heavily on past social investments to ensure such small steps mattered in the management of the pandemic.

Kerala’s quick mobilisation contrasts sharply with the experience of many other States and is a demonstration that epidemic preparedness does not start on the eve of an outbreak and that the investments in universal education, effective decentralisation of powers and resources, and women’s empowerment, among others, have silently come into play to its advantage in the war against coronavirus.

From the late 1990s, with decentralisation becoming a reality in Kerala, as 25 to 30 per cent of the Plan funds became available for local bodies and planning and resource mobilisation began at the local level, facilities in many grassroots-level hospitals in the State improved dramatically.

In the past decade, Kerala also invested heavily to reorient its chain of nearly 900 rural primary health centres, to train grassroots-level health workers to monitor the health status of rural households, to provide quality treatment services including speciality care facilities at the taluk, district and general hospitals in addition to the medical college hospitals, and to create a patient-friendly environment in all government hospitals (“Reinventing healthcare”, *Frontline*, September 29, 2017).

The wisdom of Kerala’s planners to keep the network of government hospitals as a counterweight against the private sector has come to the aid of the State at this critical juncture too, when it is preparing for what seems to be a long battle to try and contain the viral pandemic that has left entire nations terrified. □

Proactive Odisha

The Odisha government declares coronavirus infection a disaster and prepares its administration to **manage and limit the transmission** of the disease effectively. BY **PRAFULLA DAS**



BISWARAN JAN ROUT

ODISHA CHIEF MINISTER Naveen Patnaik and other political leaders washing their hands at the State Assembly building in view of the coronavirus alert, in Bhubaneswar on March 13.

WITH ITS VAST EXPERIENCE IN SUCCESSFULLY handling natural disasters, the Odisha government is tackling the challenge posed by the novel coronavirus, COVID-19, with utmost caution. It is allowing its cohesive and well-oiled machinery to work without any fuss.

Even before anyone had tested positive for coronavirus infection, the State Cabinet on March 12 declared COVID-19 a “disaster” under the provisions of the Disaster Management Act, 2005.

Keeping the virus’ potential threat to communities in mind, the government approved the COVID-19 Odisha Regulations, 2020, and earmarked Rs.200 crore to augment the Public Health Response Fund.

Chief Minister Naveen Patnaik’s statement in the State Assembly provided the desired seriousness to the administration as well as the general public.

“Only a few times in the history of mankind have human beings as a race faced challenges beyond their comprehension. With advances in science, this phenomenon has become a rarity,” he said, by way of outlining the gigantic challenge.

“The World Health Organisation has declared COVID-19 as a global pandemic. It has urged upon all member-states to take urgent and aggressive action to contain the spread of the pandemic. This extraordinary circumstance calls for an extraordinary response,” he

added. The government was aware that the State's public health infrastructure was not equipped to bear the burden of patients influx in the stage III (community transmission) spread of the virus, but its strength lay in management and limiting the transmission.

What came next was a well-thought-out strategy. The government constituted an Empowered Group of Ministers and a Committee of Secretaries under the chairman-

ship of the Chief Secretary to evaluate the emerging situation on a daily basis.

Recognising the fact that effective communication is vital in fighting a pandemic, the government appointed Subroto Bagchi, co-founder of the information technology consulting company Mindtree, as chief spokesperson on COVID-19.

Bagchi, who heads the Odisha Skill Development

Authority, brought calmness in the dissemination system without letting the seriousness of the situation fizzle out. When people became apprehensive about staying quarantined for 14 days, he quoted the tradition associated with the presiding Hindu deity of Puri, Jagannath, to strike an emotional chord with the people.

"Every year, Lord Jagannath contracts cold, which is triggered by a virus, before the annual rath yatra [the

chariot festival in June/July]. The Lord goes into quarantine for exactly 14 days, the same number of days prescribed for chicken pox and coronavirus cases as well. During the quarantine period, Lord Jagannath takes rest, gets the right kind of medication and takes the right kind of food. He comes back rejuvenated," Bagchi said.

The State governments devised a specific response against the possible spread of the coronavirus from

State of vigil in Maharashtra

IN Maharashtra, going by rumours, people began to suspect that the Uddhav Thackeray government was hushing up the real extent of the contagion. As on March 21, the State reported 62 confirmed cases of infection and there was the declaration that more cases were likely by the end of the month when more than 25,000 Indians from the Gulf countries would disembark in Mumbai.

A Health Department official says, "Why would we hush up numbers? Cases are being monitored. Yes, it is quite possible that there are many cases we don't know of but you cannot call that a hush-up. We are spreading awareness, and doctors and nurses are working on a war footing."

It is a gargantuan task. "Obviously the virus had the element of surprise and we can only react to it. Now we are learning more and that is why you see the medical and physical distancing advisories," the official said.

Mumbai, with a population of more than 20 million is an area of great concern for the country. Schools, gyms, swimming pools and malls have been closed. The Railways cancelled 39 long-distance trains and raised the price of platform tickets by five times in order to deter crowds. The municipality decided that shops selling essential items would remain open while stores selling non-essential goods would be open every alternate day. The Catholic Church is conducting the Sunday mass online. Most of the mosques have shut their doors for community prayer.

The Brihanmumbai Municipal Corporation (BMC) sent teams to housing societies to check if any of its residents had returned from travel abroad or within the country. Cases from high-risk countries were noted and told to go to Kasturba Hospital. Others were told to visit their doctors and opt for voluntary quarantine of two weeks. In Mumbai, Kasturba Hospital, dedicated to infectious diseases, is the only government hospital with an isolation facility. When asked about the facilities in the hospital following the death of a 64-year-old man from Ghatkopar in Mumbai, who tested positive for coronavirus, on March 17, a civic official told the media that the isolation facility was set up according to Central government norms and had invasive and non-invasive ventilators. However, there was no dedicated

ICU for coronavirus patients. While there is no shortage of coronavirus testing kits and the staff are trained, it is inadequate for the vast population of the city.

The BMC has opened another 20-bed isolation unit at HBT Trauma Care Hospital in the northern suburb of Jogeshwari. Nine private hospitals and one railway facility have been instructed to set up isolation wards. Opening new wards will take time because protective clothing has to be obtained, protocols have to be fixed and staff have to be trained. The hospitals have to be ready to receive patients who have been screened at airports and are considered likely cases. Eight new testing facilities will be opened. The BMC is the only civic body in the country to bear the entire expenditure of treating patients in its hospital. It has capped the charges levied by private hospitals for treatment of COVID-19 cases at Rs.4,000 or 50 per cent of the actual fee, whichever is less. In all, 100 beds have been reserved in seven private hospitals for coronavirus cases. The government plans to turn hostels and guesthouses of Rashtriya Chemical Fertilizers, Hindustan Petroleum, Indian Institute of Technology Bombay and so on, into quarantine facilities.

By and large the government advisories have been practical, doable and reliant on the citizens' sense of

social duty. The BMC released a plan according to which shops in various areas would be closed in a phased manner. Medical and grocery shops are exempt from closure.

Parul Gandhi, a small entrepreneur who used to own a glove and mask manufacturing unit in Gujarat, says she and other manufacturers were made to close down their units some years ago. "We used to make gloves and masks but the competition from China was so strong that I had no option but to close it down. I had 50 workers and had to let them go. Our government's taxes and other stipulations killed the business. Most of us became importers, and we all imported from China. Now China is not delivering and so we have a shortage. The manufacturing industry in India has been strangled by cheap Chinese goods. Maybe coronavirus will teach the government to respect its own manufacturers," she said.

Some small-scale industries in the Palghar industrial zone have now responded to the demand for masks. From a daily production of around two lakh three-ply surgical masks, they are now making close to 10 lakh a day by working double shifts.

The patient who died on March 17 had tested positive for coronavirus on March 11. He was treated in the ICU of Hinduja Hospital but was shifted to Kasturba Hospital. He died because of bilateral pneumonia complications that resulted in cardiac arrest. The man had

travelled to Dubai on February 22 and come back on March 5. Three days after his return he developed a fever with a cough and had difficulty in breathing. Tests conducted by his doctors were inconclusive but a throat swab sent to Kasturba Hospital showed up positive. His wife and son are now under treatment at Kasturba Hospital. No one was allowed at his funeral except the municipal staff who wore protective suits and wrapped the body in a plastic sheet before cremation. They were heavily disinfected afterwards. A 59-year-old man, who had returned from the Philippines, also tested positive and is in a critical state and on a ventilator.

Pune district has recorded 22 cases, 12 in the industrial zone of Pimpri-Chinchwad and 10 in Pune. The district authorities decided to send all passengers landing at Pune airport from international destinations to hospital quarantine for 24 hours regardless of their health status. The Divisional Commissioner warned of strict action against those who violated home quarantine norms. Small businesses have already been affected. Tea stalls and street food outlets have stopped functioning. Three crucial sectors that are already showing signs of a downturn are the share market, real estate and the film industry. The share market plunged 2,000 points in the first hour of trading on March 16 after the government announced that India had 110 reported cases (India now has 293 cases). While markets are uncommonly sensitive to any change, the effect of the virus has been taken seriously by the Reserve Bank of India, which has infused Rs.1 lakh crore into the market. This is an effort to mitigate the adverse impact of the virus on the market. With the cancellation of film shootings and theatre screenings, film industry experts estimate the initial losses at around Rs.800 crore.

While the administration's response so far has been satisfactory, given the novel nature of the virus, how does it plan to curtail the spread of the virus in residential slums, where the population lives cheek by jowl and where physical distancing may not work? More than anything, the administration needs to be vigilant about fear-based violence. Railway officials said 18 passengers, who had been stamped at the Mumbai airport with the words "Home Quarantine", were asked to disembark from trains by fellow passengers and officials. It was done in a non-violent manner. Such actions should not turn into vigilantism.

Lyla Bavadam



COMMUTERS on a train in Mumbai travel to work on March 12, ignoring the State government's advisory to maintain physical distance in the wake of the coronavirus outbreak.



BSIWARANJAN ROUT

SUBROTO BAGCHI, the Odisha government's chief spokesperson on COVID-19, addressing a press conference in Bhubaneswar on March 20.

people returning from foreign travel. Declaring that people coming from abroad were the biggest source of infection, the government made it mandatory for such persons to register themselves within 24 hours of arrival with all contact details in the toll-free number 104 or the online portal <https://covid19.odisha.gov.in>. It incentivised the step by offering Rs.15,000 to each person registering their details.

ENCOURAGING QUARANTINE

The incentive was meant to encourage people to undergo 14 days of home quarantine. In less than a week's time, 2,600 people, who had arrived from 104 countries, registered their travel and contact details. This helped the government in tracing the persons, sensitising them about the need for home isolation, and keeping a watch on their health. Foreign returnees were in home isolation in all the 30 districts of the State.

Those who volunteered to be in home quarantine include Gita Mehta, well-known writer and Patnaik's sister; Dibyasingha Deb, Puri's titular king; and Vineel Krishna, an Indian Administrative Service officer. This sent out the right kind of message.

The government threatened legal action against those who failed to register. "The registration is mandatory for the sake of public health safety. There is no choice. If anyone violates the direction, relevant portions of the CrPC [Code of Criminal Procedure] and the IPC [Indian Penal Code] will be taken recourse to," Chief Secretary Asit Tripathy said.

Of the 60-odd suspected persons who had undergone tests, a student who came from Italy tested positive for coronavirus infection in Bhubaneswar on March 15. The government immediately intervened to enforce physical distancing. It advised people to keep interactions to the most essential levels while taking all precautions.

All educational institutions were directed to stay

closed until March 31 and examinations were postponed. The government cancelled non-essential official gatherings such as seminars, workshops and conferences. Cinema halls, swimming pools and gyms were ordered to be closed until March 31. It subsequently extended the period of all regulations in force until April 15, resulting in panic buying of essential items. The government then ordered all shops selling essential commodities and medicines to remain open. The State Election Commission has postponed the panchayat byelections, which were to be held in 20 districts on March 24.

The government asked all religious institutions and tourist spots to restrict the number of visitors. Within days, the flow of visitors, which used to be in lakhs at the Jagannath temple in Puri, the Sun temple at Konark and the Lingaraj temple in Bhubaneswar, came down to hundreds. Subsequently, the government stopped entry of devotees into the Jagannath temple and all temples, mosques and churches in the State.

The Puri district administration even used force to evacuate tourists from hotels and to prohibit entry of tourists into Konark and Puri. Religious events, where large congregations are common, and social functions, including marriages, were regulated.

In order to keep elderly people indoors, the government released food entitlement for three months under the National Food Security Act, including delivery at the doorstep without the requirement of biometric verification. The government also started the process of disbursing three months' pension to the aged and persons with disabilities.

Although some of the steps taken by the government appeared to be small, they had a huge impact as far as social distancing is concerned. Vegetable markets were closed in the evening hours and the sale of subsidised cooked food at Aahaar centres was prolonged. These measures helped disperse the crowd.

Some district administrations even imposed Section 144 of the CrPC to stop mass gathering for religious and cultural events. However, the government came up with operational guidelines under COVID-19 Odisha Regulations, 2020, to smoothen the response.

While the government was taking measures to combat COVID-19, Bagchi and his team spread awareness among the public about the need to wash hands, cover the mouth with masks and keep the surroundings clean.

A three-day awareness programme was undertaken where local leaders were encouraged to urge villagers to take precautions against the spread of the coronavirus. Patnaik appealed to Odias to stop spitting paan, a widespread practice in the State.

The government has chalked out a six-month action plan. Keeping the possible burden on public health infrastructure in mind, it released Rs.5 lakh to every panchayat to convert panchayat buildings into isolation wards. At many blocks, schools were declared quarantine facilities. Three hotels in Bhubaneswar city were declared as pay-and-use quarantine facilities for tourists and guests. □

Economic burden

As the global economy heads towards an unprecedented collapse in demand, **India under Narendra Modi sticks to fiscal fundamentalism** when even diehard right-wing governments are trying to boost fiscal spending. BY **V. SRIDHAR**

EVEN AS THE CORONAVIRUS PANDEMIC unleashes an unprecedented global assault on lives and livelihoods, driving the world towards a downturn which, in terms of scale, could well be reminiscent of the Great Depression, India appears to be the odd one out in its handling of the crisis. The leadership of every major economy, including the ones that have been singing paeans to globalisation, are undertaking some kind of government intervention and expansionist fiscal policy. Countries as far apart as the United States, the United Kingdom, Italy, Germany, Japan, Singapore and Australia and also the European Union have announced either significant fiscal expansion or spending drives as a countercyclical measure. India, under Prime Minister Narendra Modi, remains steadfast in its stoic resistance to any such move.

To be sure, there is a great deal of uncertainty about the virus and what impact it will have on the economies of

the world. Nobody knows yet what the impact will be on output, jobs, lives and public health, but all agree that the world's productive capacity is going to suffer a major dislocation as supply chains break down, spending priorities shift for people and governments, and people around the world cope with some form of lockdown. Recent estimates by J.P. Morgan reveal that China's gross domestic product (GDP) is likely to contract by a whopping 40 per cent in the first quarter of the year, while the U.S. economy is likely to shrink by 14 per cent in the second quarter. The European economy is expected to contract by almost 25 per cent. As the pandemic's epicentre shifts westward from China, with Italy, Spain, Germany, the U.S. and the U.K. being the new flash-points, the global economy is entering a zone that will make the global financial crisis of a decade ago appear as a minor blip. The only certainty in the short term is that exports from most major economies will be severely hit



K.V. SRINIVASAN

BUSINESSES CLOSED in T. Nagar, Chennai's shopping district, following a State government order aimed at preventing the spread of COVID-19. A March 20 photograph.

by a combination of collapsing demand, broken supply chains and a significant reordering of national priorities dictated by a renewed emphasis on health care.

DEMAND COLLAPSE

The Indian economy, already in a prolonged slowdown, is likely to suffer a more serious shock for two reasons. First, although the Modi regime is in deep denial, despite evidence of a severe slump in demand—preferring to describe it in the words of its policy wonks as a “cyclical” problem—the economy is likely to suffer a severe compression as Indians prepare for their version of physical distancing and isolation and possibly worse as the virus takes hold. For instance, it is already obvious that work-from-home will have an impact on an entire ecosystem that was clustered around organised enterprises. Many such businesses cannot survive for long and may well shut shop forever, as had happened after demonetisation in 2016 or the implementation of the goods and services tax (GST) the following year. Many small and informal businesses will not be able to climb back into the ecosystem after a sudden and forced exit. The closure or the significant scaling down of a range of establishments providing services is likely to further lower demand.

But it will be a mistake to view the problem as one affecting only small or informally run businesses. For instance, the Indian Railways cancelled 155 pairs of trains in the week starting March 16. It carried 55 per cent fewer passengers than it did a week earlier, and earnings fell by almost 50 per cent during this period. The Indian automobile industry, already in its longest-ever slowdown, has lost hope of recovery. A component supplier to Tata Motors, with operations at Jamshedpur and Pune, told *Frontline* that the lockdown brought his operations to a “complete halt”. “I was expecting a recovery in about six months, now I dare not predict when it will happen.”

A large part of the Indian organised industry, while appearing to exhibit characteristics of large enterprises in terms of their productive capacity, actually exhibit characteristics of small-scale informal enterprises in terms of the way they engage and pay labour. Thus, a large proportion of the labour force in the auto industry is engaged as casual workers with little or no benefits and no security of tenure. As the crisis spreads and deepens, more workers are likely to lose jobs. The most immediately vulnerable are those working in informal occupations. A lockdown is like a death sentence to people who work as domestic help or the hundreds of services that form the livelihoods of millions in urban localities—hairdressers, rickshaw-pullers, “watchmen”, drivers whether part of the gig economy or otherwise and those engaged as delivery agents for companies such as Amazon. Every conceivable livelihood of this kind now hangs by a thread. Narendra Modi’s appeal to every Indian to stay indoors, accompanied by his exhortation to private employers to continue to pay their workers, is not going to make an iota of difference to the lives of these people.

The second significant aspect of the crisis is the extensive dislocation of the economy’s supply chains. Industries that are dependent on imports, or those that are export-based, such as garments, will feel a severe compression in demand. This is likely to unleash a chain reaction; garment units, for instance, are going to see the collapse of their entire supply chains as spinning and dyeing units shut shop. Industries, such as machine tools, which depend on a countrywide network of suppliers of parts and inputs are likely to suffer a major dislocation that will make it difficult for them to jump-start at short notice as and when there are signs of a demand recovery.

DISTANCING, NOT ABANDONMENT

Physical distancing need not mean abandonment. It is not possible to enforce a lockdown of any kind without providing people with a humane solution. Since such a lockdown is a purely temporary measure, just two aspects need to be taken care of for the most vulnerable: a measure of income support and the assurance of basic supplies of essentials. Both these are perfectly possible. The Modi government already has extensive information about the bank accounts of citizens; surely the practical aspects of putting some money into these ought not to involve any great logistical problem. If the Centre had engaged with the State Chief Ministers instead of the engaging in a high-profile interaction with SAARC representatives, it would have been able to establish a working protocol for cooperative best practices to achieve these two objectives.

THE KERALA EXAMPLE

Indeed, if Modi had paid attention to Kerala Chief Minister Pinarayi Vijayan’s announcement made just prior to his own speech on March 19, he would have noticed a completely different approach. The Kerala government announced a Rs.20,000-crore package, which ensures not only income support but also health, food and material supplies to its citizens during this emergency. Even a relatively poor State like Odisha has announced measures that have an income-support dimension and are backed by the delivery of essential services to those most affected by a lockdown.

Across the world it is clear that fiscal measures have been the weapon of choice for governments, even those led by diehard right-wing regimes. Some nations, like the U.K., added quantitative easing to the package. The unwillingness to countenance a fiscal package that has a significant component aimed at the most vulnerable is not only irresponsible but also sure to leave the economy in a state from which it cannot recover even when things improve. Modi only announced a task force headed by Finance Minister Nirmala Sitharaman that will oversee a relief package.

There have been indications that small enterprises may be allowed deferred payment of their loans, or that the NPA (non-performing assets) classification norms may be relaxed significantly. There is also speculation that direct cash credits may be used as a means of provid-



PTI

PRIME MINISTER Narendra Modi. His address to the nation on March 19 had nothing on what the government proposed to do to handle the crisis.

ing income support. The last mentioned is a tricky one, especially in an emergency, going by the experience of thousands of poor people who have been unable to authenticate their identities through the Aadhaar system. Moreover, the experience with the PM-Kisan scheme has been patchy, with many beneficiaries not getting the promised amount that is due to them as relief. In an emergency such as the ongoing one, it would have made better sense for the Modi regime to have involved the States in the actual delivery of services and support because they are better positioned to do it.

The kind of measures that the regime appears to be willing to implement can hardly be effective. For instance, extension of loan repayments is not going to enable a small unit to continue operations if it is not even operational. In the situation of collapsing demand, neither lower interest payments, engineered through monetary policy, nor a relaxation of terms of loan payments, facilitated by a relaxation of banking regulations, is going to keep the small unit afloat. A demand collapse of the kind that is likely to happen very soon requires income-generating measures. For instance, the Mahatma Gandhi National Rural Employment Guarantee scheme can provide a demand boost, even in a time such as now when no work is actually possible. Similarly, health care expenditures undertaken, especially now, through the deployment of paramedics and medical professionals would achieve a similar purpose. All it requires is a little imagination, one that pays attention to the nature of livelihoods, and a little empathy to figure out what works best in the circumstances for those affected most. Of course, this method is not foolproof and mistakes may well be made in striking the right priorities, but nobody would blame a government that is trying for not trying even more in such a situation.

THE CASE OF CHINA

There is no hint that the regime has learnt anything from the way China has handled the impact of COVID-19. Despite being the first economy to take a massive hit, China not only kept the effects confined mostly to a single province, but also sharply escalated investments in infra-

structure to engineer a revival of demand. It has relied fundamentally on fiscal measures, issuing local government bonds to the tune of \$394 billion, to back this strategy. The emphasis is clearly on reviving domestic demand in a situation where the external environment is unlikely to improve in the immediate term.

Meanwhile, the Indian emphasis on Make in India, ostensibly to produce in India for the global market, remains hopelessly riddled with contradictions. The Modi regime's utter inability to even concede a collapse of local demand, let alone put in place measures to revive it, makes sure that India is at a dead end.

MODI'S ADDRESS: THE SILENCES

Modi's televised address made a touching appeal to Indians to prepare to face the health crisis boldly and with fortitude. But the most significant aspect of his speech lay in what he did not say. Nowhere in his speech did he reveal what his government had done in the several weeks since it became evident that India was not going to escape the wrath of the virus. Why, for instance, has the Indian government not established a transparent testing protocol that would check for evidence of community transmission of the disease so that the disease can be countered at an earlier rather than later stage? Those defending the regime were quick to argue that this would be too costly. A back-of-the-envelope calculation reveals that at a cost of Rs.2,000 a test, one crore Indians could be tested for a total of Rs.20,000 crore—possibly much less if bulk orders are taken into account. Compare the reluctance to spend on this to the alacrity with which the government appears to be considering a plea from private airlines for a “relief” package of Rs.12,000 crore.

The biggest danger now staring at India is of the country going into Stage III of the pandemic, when community transmission of the virus takes root. At that point, access to higher levels of treatment—involving the availability of hospital beds, ventilators and ICU facilities—becomes crucial.

The Modi regime's handling of the epidemic suggests that it has bet too high on its luck. If India gets to that stage, the costs for the economy and its people could become significantly higher. In such an eventuality, India would undergo not only a severe implosion of demand, but also a dislocation of production and supply networks and chains so extreme as to be impossible to recover from.

If past record is anything to go by, it is likely that the task force will provide special relief packages of the kind it has offered in the last several months at considerable cost to the exchequer. Tax breaks to the rich have been substantial. The telecom industry czars are already queuing up; the ones from the airline industry may be next; and many more sectarian interests, all playing the COVID card, will queue up for relief. If anything, the Modi regime's response to the epidemic has confirmed that the callous disregard for ordinary Indians that it displayed during demonetisation and GST implementation is exactly what we are going to see now. □

The Chinese way

China has pooled all its resources to fight the coronavirus and is not only helping other countries with medical supplies and expert teams but also **sharing its frontline medical experiences** with the world in a transparent way. BY BOFENG HU



REUTERS

ARMY MEDICAL PERSONNEL arrive with supplies in a transport aircraft of the People's Liberation Army (PLA) Air Force at the Wuhan Tianhe International Airport on February 13.

THE WORLD HEALTH ORGANISATION (WHO) officially declared the coronavirus disease a global pandemic, sparking broad criticism of the so-called China's original sin. Some voices mention that Beijing should have revealed more information about the virus in the initial stages, disclosed the exact origin of the disease, etc. It seemed that the Chinese government had a skeleton in its closet. Biochemical weapon, artificial virus—anti-Chinese conspiracy theories went viral. So, let us see what China has done for battling the epidemic.

While the coronavirus has caused more than 110,000 infections across 114 countries and regions, with a global

death toll of more than 8,000, China implemented stringent prevention and control measures at great cost, which the WHO has praised highly: Almost 60 days' and nights' battle against the virus, 340 medical assistance teams, more than 42,000 health-care workers who have been separated from their families since the Chinese Spring Festival. Among them, 46 have died on duty and 1,716 infected. Besides, the Chinese government locked down the virus epicentre, Wuhan, where 10 million people live, on January 23. Across Hubei, as many as 60 million people faced some sort of outbound restriction. Without their sacrifice, it would have been impossible for

close to 80 per cent of the over 80,000 infected patients on the Chinese mainland to recover. Looking at their sacrifice, any allegation based on conspiracy theories is unfair.

ECHOES OF THE GREAT PLAGUE

It reminds me of the Great Plague, also known as the Black Death, which happened in Eyam village in England, located 35 miles (one mile is 1.6 kilometres) south-east of Manchester. The plague arrived at Eyam in the summer of 1665. As the disease began to spread around the village, panic set in and some people initially suggested that they should flee. It was then that a courageous rector named William Mompesson stepped in and persuaded the villagers not to leave the village, as doing so would put the neighbouring towns and villages at risk. It must have been a painful decision to take, but at length the villagers agreed and decided to quarantine themselves even though it would mean death for many of them.

Eyam's decision was important, as it meant that fewer people died of the plague, which did not spread across the rest of England. In the end, just 35 out of 350 villagers were left in the village; 259 people gave their lives to save others. Today, there are plaques, signs and memorials all around the village, and on the last Sunday of every August, known as Plague Sunday, a commemorative service is held at Eyam. This is exactly what is happening in China, in Wuhan and Hubei. If Eyam is to be remembered always for the heroic sacrifice, why not Wuhan and Hubei? If 259 villagers could be called martyrs and awarded flowers, why not for the Chinese people?

China has passed the peak of the virus outbreak, with new cases trickling down and the overall epidemic situation improving. China's experience, even Eyam's, shows that in order to battle a highly infectious disease, the first and foremost task is to stop it from spreading. As everyone knows, the outbreak of the virus coincided with the Chinese Spring Festival holiday, when hundreds of millions move from one place to another by air or by high-speed train. However, the holiday passenger volume of 2020 was slashed by half and for those who needed to travel, seats were spaced out to minimise contact.

The second aspect, mass mobilisation, is indispensable. Medical resources poured into Wuhan and other cities in Hubei, the hardest hit by the virus. A day after the Wuhan lockdown, 450 military health workers arrived to help local doctors. During the early stages of the outbreak, they faced a dire shortage of supplies. Therefore, factories that previously made garments, plastics, and even tofu, shifted rapidly to mask production even though the transformation may come at a cost. According to the Chinese Ministry of Industry and Information Technology, China's output of protective clothing surged to 500,000 pieces a day from fewer than 20,000 pieces at the beginning of the outbreak. The daily output of N95-rated medical masks rose from 200,000 to 1.6 million while the production of regular masks reached 100

million.

The third aspect, policy adjustment, is flexible and efficient. By the end of January, all provincial-level regions in China had activated top-level emergency response to the epidemic, cancelling mass events, suspending long-distance buses, and closing tourist spots. China even postponed annual sessions of the national legislative and political advisory bodies, a key event in the Chinese political calendar. However, when the situation began to improve, provinces took differentiated measures to resume economic activities. According to a national guideline, regions with relatively low risk focussed on preventing imported cases and comprehensively restoring the order of production and life. Medium-risk regions promoted work and production resumption in an orderly manner while high-risk regions



REUTERS

COMMUNITY WORKERS in protective suits disinfect a residential compound in Wuhan on March 6.

such as Wuhan continued to be fully committed to epidemic prevention and control.

The fourth aspect, the role of the tech sector, helped the battle with the epidemic. The Chinese government called for the acceleration of research for new-type testing kits, antibody medicines, vaccines, diagnosis and treatment plans. According to sources in the Chinese media, a vaccine is being developed and convalescent plasma therapy has also been experimented. My colleague in China shared with me several videos that showed robots spraying disinfectants, drones carrying out surveillance and announcing precaution measures by using rap in communities. Beyond robots and drones,



INSIDE A SUPERMARKET in Wuhan, China, on February 10.

China also upgraded its facial recognition system to scan crowds and identify individuals suffering from fever or abnormally high body temperature. In Chengdu, a southwestern city of China, the police force has been armed with a high-tech smart helmet which looks like the one in the American mystery film *Surrogates*. It can automatically measure a person's temperature when they enter a five-metre range. The helmet will ring an alarm if anyone has a fever. Hangzhou, an eastern city in nearby Shanghai, is the first Chinese city to adopt QR codes for medical service. People download an app, which is connected with the user's electronic health cards and social security cards, making everything easy, from registration to medicine-taking. Residents can show the QR codes at community or expressway checkpoints to prove their health condition and this no-contact check leads to reduced virus-transmission risk. Although some of these new technologies triggered concerns of privacy in Chinese social media, they are indeed efficient and extremely necessary during a health crisis.

China spent two months showing the world the most effective ways to prevent the spread of the epidemic: wearing masks, washing your hands and eliminating mass gathering. Not only that; on January 12, China shared the genome sequence of the new virus with the WHO, after identifying the pathogen on January 7. So far, China has shared multiple files on epidemic control as well as diagnosis and treatment plans with over 100 countries and more than 10 international and regional organisations. Zhong Nanshan, head of China's National Health Commission high-level expert group, also shares China's solutions, discusses the clinical characteristics and treatment difficulties of critically ill patients, and addresses his concerns in tackling the virus with his foreign counterparts. Doesn't it show solidarity and cooperation between China and other countries?

At the beginning of this article, I talked about some criticism and conspiracy theories, such as the necessity of disclosing the exact origin of the disease by the Chinese government. I do not intend to deny that virus traceabil-

ity is important. And China is indeed going to find it out. But, at the same time, we need to take immediate steps and precautions to battle with the fatal virus, such as researching a vaccine under a global cooperation programme. Even if we do not know which gorilla was the exact source of the contagion of the HIV virus, we still can protect ourselves from getting infected.

LACK OF MUTUAL TRUST

"Today humanity faces an acute crisis not only due to the coronavirus, but also due to the lack of trust between humans," said Yuval Noah Harari, a philosopher and author of *Sapiens: A Brief History of Humankind*. "To defeat an epidemic, people need to trust scientific experts, citizens need to trust public authorities, and countries need to trust each other." He added: "In this moment of crisis, the crucial struggle takes place within humanity itself. If this epidemic results in greater disunity and mistrust among humans, it will be the virus's greatest victory." I could feel his regret, caused by fake, racist and extremely nationalistic news and conspiracy theories that have flooded social media. It reflects a big gap which shows the lack of mutual trust.

For example, a viral video allegedly shows a Chinese woman enjoying the infamous "bat soup" which has been blamed for the spread of the virus, but the fact is that the video was actually taken years ago and outside China. However, crazy and irresponsible posts such as these get shared many thousands of times. I understand that it is probably because of the exacerbation of the public health situation and its anxieties. But policymakers and opinion shapers, whether public or corporate, must learn to screen and provide real information. Otherwise, the crisis will only increase manifold.

I think the first cholera pandemic (1817-1824) which began in and attacked the city of Calcutta (now Kolkata) and spread throughout Southeast Asia and West Asia, eastern Africa and the Mediterranean coast is still imprinted in Indian memory. It reached as far as China. When we look back on the history of battling this pandemic, the most critical inspiration is working together and finding out scientific methods and not conspiracy theories.

The virus, identified as COVID-19 by the WHO, is the enemy of all human beings, and the Chinese government has set a good example in shouldering the responsibility to control the virus, making strategic decisions and helping other countries by not only dispatching medical supplies and medical teams but also sharing China's frontline medical experiences with the world in an open and transparent way. Though China still needs to be vigilant for imported infections, its experience shows that the disease can and will be contained. Do not let anyone else persuade you with their so-called survivor bias. China deserves well of the world. □

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Lessons from Italy

For a variety of reasons, Italy failed to contain the initial surge of the pandemic. **Its advanced health care network is its only solace**; the focus is now on management rather than prevention. BY DR SAI PRASATH J.



ALESSANDRA TARANTINO/AP

“EUROPE IS NOW THE EPICENTRE”: WORLD Health Organisation (WHO) Director General Dr Tedros Adhanom Ghebreyesus declared in Geneva on March 13, as confirmed cases of novel coronavirus (COVID-19) infection rose in Italy and the virus spread to all European Union (E.U.) countries.

On March 20, Italy reported 5,900-odd fresh cases and 627 deaths, the highest daily tally of mortality reported from anywhere in the world. The total number of cases in Italy had crossed 40,000 and deaths 4,000, overtaking the death toll in China. The authorities were caught unawares. Ironically, just as the Olympic torch was being lit in Athens, there was a blaze of COVID-19 in Italy.

As the centre of gravity of the unprecedented pan-

A PATIENT IN A BIOCONTAINMENT UNIT is carried on a stretcher from an ambulance which arrived at the Columbus Covid 2 Hospital in Rome, on March 17.

demic shifts decisively westward, it is pertinent to ask: Why Italy?

Europe, after the tumult of two World Wars, had embarked on the road to recovery through mutual co-operation, exemplified by the Maastricht Treaty in 1993, which established it as a union of constituent nations, a borderless region to facilitate trade and the free movement of people. The union, reinforced by the post-War emphasis on welfare, led to the western side of the continent establishing some of the most advanced health care systems, which resulted in the high life expectancy

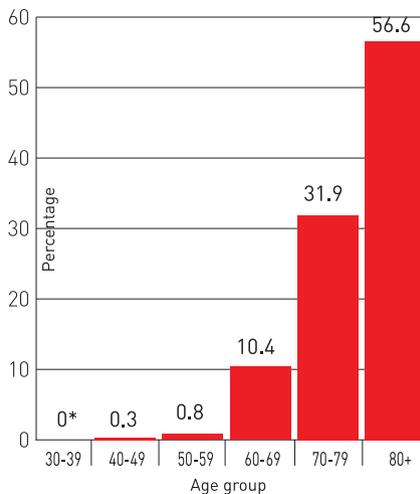
rates seen now. Indeed, death rates exceeded birth rates, putting the population in a state of decline where the net replacement rate was less than one. Thus, Europe aged, even as it became relatively wealthy.

Italy's famed Colosseum and other attractions drew millions of tourists each year, making the country the fifth most popular tourist destination. An open border meant that the incoming tourist could travel anywhere in Europe. Perhaps these factors, that is, an ageing population, a high rate of internal migration, and a constant flow of tourists proved to be its undoing when the pandemic came knocking at its door.

In the movie *Contagion* (2011), a health care thriller rediscovered after the COVID-19 spread, an epidemiological surveillance officer explains the term R_0 , “the reproduction number”, which in public health jargon shows how fast a disease spreads in the community. In epidemiology, the R_0 of an infection can be thought of as the expected number of cases directly generated by one case in a population where all individuals are susceptible to infection. The R_0 for COVID-19 has been estimated to range from 1.5 to 3.5 and to effectively stop the pandemic, we need to reduce this to less than 1. This is what is meant by “flattening the curve”, a term that has gone viral in social media, which possibly explains why the benefits of quarantine and physical distancing have gained social acceptance so quickly. What makes COVID-19 different from flu is the fact that humans lack antibodies to fight it, which is why it is termed “novel”. By implication, this means the lack of effective treatment and hence a higher mortality rate. As the case count increased from a few hundreds to several thousands, China's apparently draconian lockdown worked to ebb the spread of the disease. The measures, which appear to have struck a wrong chord with Europeans, have had fatal consequences.

Such is the field of public health that when things are good, people hardly notice. Clean water, good hygiene, good health care, are all taken for granted until the system collapses. On February 20, the first case emerged in Italy. This was a healthy young male who was initially not a coronavirus suspect. His only significant history was that he was at a dinner with a few Chinese tourists two weeks earlier. The health care

Coronavirus mortality rate by age in Italy



Source: Istituto Superiore di Sanità.
Note: *Youngest to die was 39 years old.

system was oblivious to coronavirus; it only came to light because a few diligent doctors notified COVID-19. An outbreak, which was initially thought of as an isolated event, was already spreading in every European nation. Particularly alarming was the development of several clusters throughout the continent. Significantly, it is the relatively rich northern Italian region of Lombardy which bore the brunt of the disease. Dr Giacomo Gracelli, head of intensive care medicine, in Milan, described this as a “big surprise”.

Lombardy, the industrial capital of Italy and the fashion capital of Europe, has had close connections with China. Several thousand Chinese work in factories there. Significantly, direct flights connected Milan with Wuhan, the original source of the outbreak. All the factors had led to the failure of identification of the “index case” or the “case zero”, which would have been the first imported case in Europe. Importantly, contact tracing from Patient #1 did not work in Italy. The country, along with Spain (the second most affected country in Europe) is popular with retirement planners. Its beaches and villas have attracted several post-retirement settlements. Thus, a rapidly multiplying cluster of infections, which affected a predominantly older population, put a severe strain on one of the most developed health care systems in the world.

Eighty per cent of COVID-19 patients were asymptomatic, thereby reducing the total positive tests in comparison to the prevalence of the disease. However, 40 per cent of those diagnosed positive also required hospitalisation, 12 per cent required intensive care, a few among them the most critical equipment. Perhaps no other disease that we know in modern medicine has required such a high level of ventilator utilisation. What started as a small number escalated rapidly to several thousands.

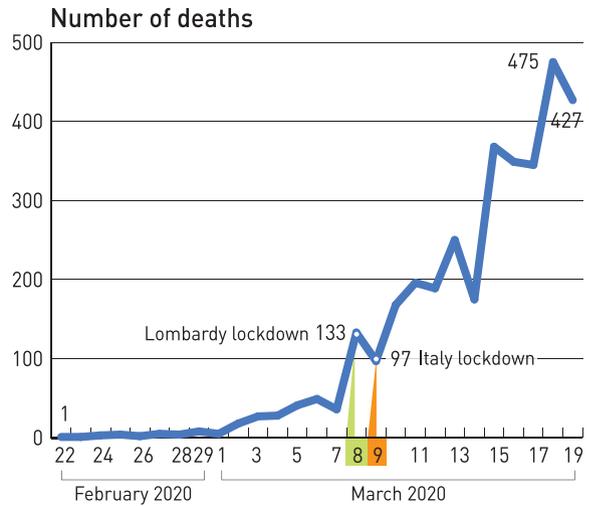
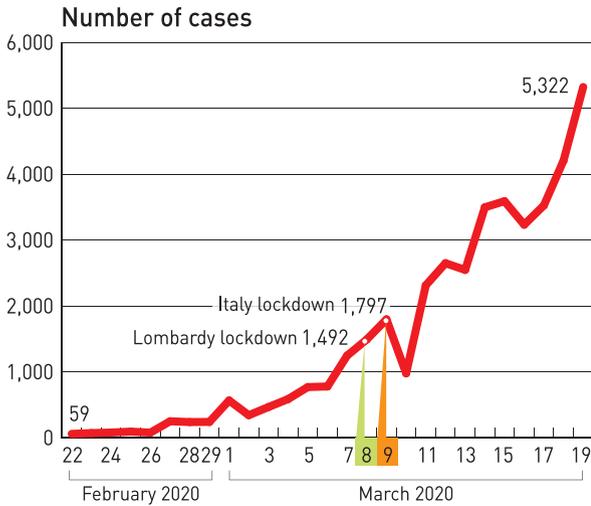
On March 8, the Lombardy provincial government ordered a lockdown as the number of cases rose to 8,000. The order did not go down well with the people and at least 10,000 people escaped to the south. This led to the spread of the disease to other regions of the country, which forced the government to order a total lockdown on March 9. Hospitals were scrambling to make beds for patients. The ICU util-

Reproduction number (R_0) of various infections

Past outbreaks	Reproduction number (R_0)	Infectious duration, (D) days
Swine flu 2009	1.2 to 1.6	3
1918 flu	2 to 20	4
SARS	3	9
Measles	>10	>8
Chickenpox	>7	>7
Mumps	>10	>12
COVID-19	1.5 to 3.5	14
Seasonal flu	1.2	3-6

Source: Plos one open access science journal
Note: (R_0) Reproduction number: expected number of cases directly generated by one case in a population.

Reported Coronavirus cases and deaths



Source: Government News Bulletin Italy.

isation of COVID-19 patients was particularly high and health care was a scarce resource. Had not some office bearers of medical organisations organised regional hospitals, the situation would have been far worse. The ICUs were split to treat exclusive coronavirus patients and for other medical conditions. Soon many hospitals had to convert every ICU into a COVID-19 ICU, which severely impaired the response to other medical and surgical conditions. Elective surgical operations were stopped; trauma cases were attended to with a lower standard of care; heart disease patients were left with no beds in ICUs; and the problems compounded. Maurizio Cecconi, president-elect of intensivists (those specialised in work in ICUs) forum, warned other countries: “Do not underestimate. It is not flu. Do not lose time.”

A significant feature of the outbreak in its early days was the high infection rate among health care personnel, which had a significant impact on the system’s ability to treat the surge of cases. In the first week of March, about 10 per cent of the samples that tested positive turned out to be from health care professionals. This was attributed to the incorrect usage of personal protective equipment, particularly because of the shortage of such equipment. The workers who tested positive had to go into quarantine, creating a further shortage of manpower. Retired doctors and university students were drafted, possibly resulting in lowering the standard of care. The number of nurses trained to operate ventilators was also low. This was a critical bottleneck in Italy.

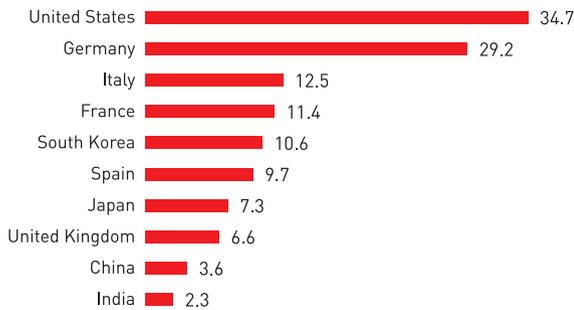
The administration drew up a plan: given up on containment and focus on management and treatment. In order to reduce infections among health care workers, six-hour shifts were allocated when the workers could not eat, drink water or use the restroom and had to wear head-to-toe protective equipment. Lombardy had 700 ICU beds when the epidemic broke out. A massive scaling up became necessary to increase the capacity to 1,200 beds. But almost all the beds have been occupied by coronavirus patients.

Perhaps the most significant aspect of this epidemic in Italy was the response from the people. They were not used to restrictions. They could not follow the stringent discipline enforced in China. Nearly 44,000 people have been booked across the country for defying prohibition orders. Epidemiologists warn that the epidemic has not yet attained its peak in Italy. Since the incubation period of the virus is up to 14 days, it is expected that cases would continue to pile up until at least March 23. The logic of this assessment is based on the 14-day interval from the lockdown initiated on March 9. Experts have argued that even if the lockdown was only partially effective, it would have helped in bringing about a quicker flattening of the peak. The high rate of mortality has also been attributed to the drug Ibuprofen, an over-the-counter pain reliever as well as an antipyretic whose availability has been duly curtailed since then. Ibuprofen lowered the subjects’ immune response, which hampered their recovery.

An unprecedented positive feature of the crisis is how Italian doctors have managed to contribute a wealth of information, disseminating scientific knowledge through clinical papers, even as they have been handling the biggest medical crisis of their lives. Doctors have reported that supportive care and mechanical ventilation have benefited patients. Younger patients reportedly responded better to CPAP (continuous positive airway pressure), a method of non-invasive ventilation.

A few cases of anecdotal evidence of success have been attributed to chloroquine and azithromycin combinations. China had been using a Lopinavir/Ritonavir combination, a protease inhibitor used in human immunovirus infection with varying levels of success. The most significant finding released recently was the usage of Favipravir, an antiviral approved in Japan for flu, being successful with significant remissions. However, all the drugs have not been put through rigorous trial and their use has been observed only anecdotally. It might take several months before a permanent cure is approved. Other therapies such as serum from recovered

Critical care beds per 1,00,000 persons



* Most recent U.S. and E.U. data from 2009 and 2012 respectively. Asian data is from 2017.

Source: National Center for Biotechnology Information, Intensive Care Medicine (journal), Critical Care Medicine (journal)

patients have also shown good results but they proved to be costly and associated with many side-effects. Italian experts have called other European countries to use the advantage of time—a luxury Italy did not have—apart from epidemiological surveillance, contact tracing, isolation, physical distancing, quarantine, and, if possible, lockdown. The critical part is training the personnel to ensure that they do not contract the infection.

Italy, being one of the countries with the oldest populations in the world with a high rate of diabetes (5.3 per cent of the population) and hypertension (35-45 per cent), coincidentally contributed to more deaths. Older people are not expected to survive mechanical ventilation owing to these comorbidities. The average utilisation of a ventilator was at least a week in Italy, and a conscious decision was made to use life-saving machines on those whose chances of survival were better, generally between the old and the young.

The mortality rate among the older population has been high. Italy has reported only two deaths below the age of 40. This broadly compares with the data released from China. Malnutrition and immuno compromised states do increase coronavirus mortality. The youngest person to die was a 21-year-old man who was suffering from leukaemia.

One glimmer of hope in this crisis is the relative sparing of children so much so that the United Kingdom tried to “#KeeptheSchoolsOpen” to generate herd immunity, which eventually proved futile because this only helped the faster spread of the infection to the elderly. However, the lower instance of hospitalisation in children needs to be taken lightly as the disease is still evolving and its response in conditions of malnutrition in developing countries is unknown.

So far, there has been no evidence of reinfection. Patients are being discharged once two swabs return negative. Italy has been testing only symptomatic people since March 10 as the testing had overwhelmed the capacity at laboratories.

The WHO has recommended the idea of “Test, test, test”. South Korea is the best example of flattening the curve approach to COVID-19 with tests as high as 5,200 per 10 lakh population, eventually reducing transmission

and nearing containment. Italy has done 2,100, the United States 74 and India 5 per 10 lakh population. The tests have been done using a method called RT-PCR, which is costly to implement in a country with a large population like India. The low test rate has been a cause of concern with India reportedly having only 150,000 test kits for a population of 140 crore. Scarce resources need to be directed at target populations, striking a fine balance between testing and over-testing. It is also imperative to increase capacity significantly as the general population is anxious and a sense of unrest could soon take hold.

Several vaccine candidates have been under development and the first clinical trials in the U.S. have begun. However, they are at least 18 months away from mass administration. Candidates with established clinical safety could get faster approvals depending on the prevailing pandemic proportions.

The European response has been quite different from China's, characterised by varied, sometimes even bizarre, response strategies. The governments were not prepared and failed to contain the initial surge, which resulted in a chain reaction. Europe's advanced health care network is its only solace as is the fact that the focus is on management rather than prevention.

Italy is not a backward nation. It is not a poor country. It also has a long history of welfare capitalism. If a health care crisis can affect such a nation, it shows a general lack of preparedness to fight epidemics. It is ironical to see how a country figuring among the highest ICU beds per capita could run out of the resource. It is imperative that governments around the world realise that public health departments are important and the governments dole out enough recapitalisation measures. It is also ironical how 10 years of progress in financial markets could be wiped out in four weeks just because we did not plan for an outbreak.

The era of public health began with John Snow mapping the points of contaminated water supply in London 150 years ago. Population health, health care modelling, outbreak modelling and epidemiological intelligence services need to be ramped up and such resources need to be made available in rich and poor countries.

With a predominantly young population, India may appear deceptively to be at an advantage. However, India cannot afford to be complacent. Vigilant screening and isolation of suspected cases needs to be done. The country is still in stage II (local transmission), during which training to health care professionals, vigorous contact tracing and improved testing capacity should be the immediate priority. Ramping up ICU beds and arranging for ventilators for urgent use requires to be a key priority. The best way India can manage this epidemic is by stopping its spread in a densely populated country with high levels of air pollution and a high prevalence of respiratory diseases. Recall that tuberculosis kills 60,000 Indians every year. □

Dr Sai Prasath J. is a Chennai-based medical practitioner.

Corona in Trumpland

Donald Trump's buffoonery in the face of the pandemic is not an individual failing but a symptom of a country where the state has been emptied out and lacks the capacity to act decisively in a time of crisis. BY VIJAY PRASHAD



JONATHAN ERNST/REUTERS

PRESIDENT TRUMP with Vice President Mike Pence and industry executives at the news conference in the Rose Garden of the White House on March 13 when he declared the coronavirus pandemic a national emergency.

UNITED STATES PRESIDENT DONALD TRUMP was convinced that the coronavirus was just a common flu. On March 4, he told the television host Sean Hannity that the coronavirus was not even as lethal as the flu, which could kill between 27,000 and 77,000 people a year. A week later, Dr Anthony Fauci of the National Institutes of Health told the U.S. Congress that “the mortality of COVID-19 is multiple times what the seasonal flu is”. The death rate for the flu is 0.1 per cent, while the World Health Organisation (WHO) says that the estimated death rate for coronavirus is at 3.4 per cent. This small incident reveals how callous Trump was from the very first about the coronavirus and the threat it posed to the people of the world, and to the people of the U.S.

Not only was Trump publicly callous about the threat from this coronavirus, but his administration had cut funding for the Infectious Diseases Rapid Response Reserve Fund and for the Centres for Disease Control and Prevention (CDC). The CDC lost 15 per cent of its budget, which amounts to \$1.2 billion, while the Reserve Fund lost \$35 million. The federal Public Health Emergency Preparedness programme lost a third of its budget

between 2002 and 2019, now down to \$617 million; this has meant a loss of trained workers who can manage a pandemic at the community level. These cuts come after a decade of austerity for public health services in the U.S. and the haemorrhaging of workers in the social services and public health sectors. The infrastructure that would deal with a pandemic had been sliced down to the bone, or indeed, even into the bone.

The cuts to the sections of the U.S. government that are meant to prepare for pandemics came alongside the attrition of U.S. health care in general. In 2019, 30 major U.S. hospitals filed for bankruptcy, with others barely alive as health care costs have soared and as government assistance has been reduced. The Polsinelli TrBK Health Care Services Distress Index shows the spike in bankruptcies over the past few years. Health care policy experts consider this process the “gentrification” of hospitals—meaning that hospitals and health care centres that used to serve the urban and rural poor have been “consolidated”, which means they have closed down, with care now turned over to mega-hospitals in wealthier areas that are hard to access (they are physic-

ally distant from the urban and rural poor, and they have higher barriers for medical insurance, with many of them not wanting to accept government assistance programmes).

With rising costs in the health care system and declining government support, there has been a consolidation of hospitals in the hands of a few private equity consortiums led by Bain Capital, KKR, and Joel Freedman. Their interest is money, not health care. The “efficiencies” that they have brought to U.S. health care have included cutting the surge capacity of hospitals: everything is managed for maximum usage, maximum beds used, maximum machines used; when an emergency breaks out, these hospitals are just not equipped with enough beds or staff to tackle the surge.

Beneath Trump’s cavalier attitude lies a much more dangerous reality: a health system that does not have the capacity to deal with a pandemic.

The Harvard Global Health Institute has compiled important data on the coronavirus and what it might do. If the trends from Italy are matched in the U.S., then there will be between 10 and 34 million hospital visits in the U.S. There are insufficient beds for people, particularly for the estimated 200,000 people—at a minimum—who would need to be in intensive care units; there are only about 45,000 intensive care beds in the U.S., which would be quickly overrun. The U.S. has 2.8 hospital beds per 1,000 people, which is far fewer than China (4.3 beds per 1,000) and South Korea (12.3 beds per 1,000). In Wuhan, the Chinese government built two hospitals in 10 days; there is no such activity at present in the U.S. Hope vests in the U.S. military saving the day.

PEOPLE WILL STRUGGLE TO PAY BILLS

Trump has begun to throw money at the problem: \$8.3 billion in the first instalment and then \$50 billion. This is important, but the U.S. will not be able to hastily construct capacity; if hospitals can be built, that is one thing, but staff cannot be trained in such a short time. The austerity policy allowed private equity firms to make money on hospitals, but it was not able to retain trained workers who are most needed in the time of an emergency. Trump’s money will go towards buying equipment, but even here there are limitations as the global supply chain has seized up and production is not going to be restarted easily. But none of this money will go to the people who, without work, will struggle to pay their bills.

Last year, a Federal Reserve survey pointed out that 40 per cent of people in the U.S. do not have more than \$400 in their bank accounts; this means that they might run out of money during the period of social isolation at home. Senator Mitt Romney suggested that the Trump administration send everyone a cheque for \$1,000; this would go far towards allaying the potential bankruptcy and starvation of a considerable section of the population. The Trump administration has proposed giving every U.S. citizen \$1,000 to tide over in this time of uncertainty; the proposal was not met with a favourable response, although as the enforced coronavirus unem-

ployment increases, there will be political pressure for some kind of emergency payment.

First cities began to urge people not to gather in large numbers, and then States went into full-blown quarantine. Within a few days in mid March, the entire country waited for the storm to come. What happened in Italy was a cruel shock. No longer was it possible to think of the coronavirus as a “Chinese” episode, nor was it possible to simply blame China; this was, as the WHO put it, a global pandemic, and as the Chinese Foreign Ministry suggested, it was hard to know exactly where the pandemic began. Doubt and shock prevailed as people rushed to shops to buy supplies, including hand sanitisers and toilet paper (both of these ran out first).

Schools had to close, but this came at a cost; 70 per cent of New York City’s public-school students rely upon the meals served at school to help them stave off hunger, which meant that when the schools stopped, they would not get three meals a day. Shops closed, at another cost: despite a reasonable Bill passed by the U.S. legislature, most workers neither had paid sick leave nor were they being given paid coronavirus leave. Unlike Spain, the U.S. government did not quickly nationalise hospitals temporarily; unlike France and Italy, the U.S. did not halt mortgage and rent payments. The self-isolation comes at great personal cost to the U.S. working class.

Trump made a series of appearances after he had been in close proximity to people who had contracted the coronavirus, and each time he made comments that were not true. He said that anyone who wanted a test for COVID-19 could get one, which is not true; he said that the tests would be free, which is also not true. These slips, each one trying to show the government as humane, occasioned a lack of faith in the state and therefore great panic in society. One of the outcomes of this long-term austerity project in the West, which has included an ideology of belittling the state, has been that the institutions that are necessary to battle a pandemic are insufficient; it has also meant, in this period, that the achievements of the Chinese and South Korean states have been mocked as being somehow the work of an authoritarian government. There is simply no room to understand that in those societies, the state has not been whittled down and retains the capacity to act decisively in a time of crisis. This is not the case in the U.S. Trump’s buffoonery is not, therefore, an individual failing; it is a symptom of a country where the state has been emptied out.

Little wonder that people rushed to stores to buy what they could, including guns and ammunition. No effective government official informed the public about what was going on, what to expect and how the social isolation would be managed by the state. People were told to fend for themselves: wash your hands and hide in your homes. There was no credible preparation, no credible statements. As I write these lines, most people are under a lockdown that might last at least two weeks. Classes are being taught online, workers bite their nails as their jobs vanish and the elderly fear the flutter of the angel of death. □

Surge in Iran

Iran, its **health care system crippled by U.S. sanctions**, appeals for a global effort to curtail the spike in coronavirus infection as the death toll and confirmed cases in the country keep mounting. **BY JOHN CHERIAN**



MOHAMMAD GHADAWALI/AP

PATIENTS infected with the new coronavirus, at a hospital in Tehran, on March 8.

IRAN IS AMONG THE COUNTRIES WORST HIT by the coronavirus pandemic. As of March 19, the country reported 1,248 deaths and 18,407 confirmed COVID-19 cases. Iran currently has the third highest recorded infection rate after China and Italy, closely followed by Spain with 18,077 confirmed cases and 833 deaths. Unlike in most of the other 160 countries, the coronavirus spike in Iran has hit top levels of the government. Among those who tested positive for the virus are Vice President Masoumeh Ebtekar and Deputy Health Minister Iraj Harirchi. Masoumeh Ebtekar is President Hassan Rouhani's deputy for women's affairs and the highest-ranking woman in the government. More than nine other top officials, including members of parliament, senior clerics and military officers, have succumbed to the epidemic.

Iran's Supreme Leader, Ayatollah Ali Khamenei, was forced to issue an edict in the second week of March prohibiting his countrymen from undertaking unnecessary travel. He warned that more than a million Iranians

were at risk from the virus. In the third week of March, the government ordered temporary release of 85,000 prisoners in order to curtail spread of the virus in prisons. To mark the Persian New Year, Nowruz, on March 20, Khamenei pardoned 10,000 prisoners, many of them political detainees. But the government found it difficult to keep people from travelling and crowds from visiting the bazaars in view of Nowruz.

However, medical experts believe that many more Iranian lives could have been saved if easy access to life-saving drugs and good hospital care had been available. The draconian sanctions imposed on the country by the United States have severely hampered the government's ability to tackle the epidemic effectively.

President Hassan Rouhani, in a letter to a number of world leaders, emphasised that a united global effort was needed to combat the pandemic. "No country can manage this huge dangerous crisis alone, let alone if it has many difficulties accessing international financial mar-

kets” He urged the international community to come to the aid of Iran at this critical juncture as the death toll from the disease was rising at an alarming rate. “There is no doubt that this is a global crisis. Tehran and Qom are not far away from Paris, London or New York, and any policy that weakens the economic structure and medical system, and limits financial resources for crisis management, will have direct effects on the fight against the epidemic in other countries.... It is time for the international community to stand up to the illegal and inhumane bullying and not let the unjust U.S. sanctions against Iran affect the fight against the deadly virus,” he stated in the letter.

The U.S. sanctions and policy of “maximum pressure” have, in the past two years, had a disruptive effect on Iran’s economy and health care system. International banks decline to do business with Iran even on loans relating to the purchase of essential medicines and medical devices. The Donald Trump administration has objected, on flimsy grounds, to the despatch of humanitarian aid to Iran. Even as the pandemic was raging, the Trump administration imposed additional sanctions on Iran in mid March as part of its “maximum pressure campaign” against the country. Influential lobbying groups close to the Trump administration have been working overtime to put pressure on pharmaceutical firms to end all business dealings with Iran, including those relating to the supply of life-saving drugs.

Tyler Cullis, a U.S. lawyer specialising in sanctions law, told *The Intercept*, a web journal, that these “outside groups” had sought to “impose reputational costs on companies that engage in lawful and legitimate trade with Iran, including humanitarian trade”.

IRAN SEEKS EMERGENCY FUNDING

Iran has requested a \$5-billion loan from the International Monetary Fund (IMF) as “emergency funding” to combat the pandemic. The IMF rejected a similar request made by the Venezuelan government on the pretext that the government in Caracas lacked international legitimacy. Venezuela, too, like Iran, faces unilateral U.S. sanctions, and the cash-strapped Nicolas Maduro government is waging an uphill battle against the pandemic with the help of Cuba and China.

The Iranian government has said that since the reimposition of U.S. sanctions in 2018, the country has lost \$200 billion in foreign exchange income and investment. China has stepped in by sending medical staff and tonnes of medical supplies. China and Russia have called upon the U.S. to lift the sanctions on Iran. The Chinese Foreign Ministry said that sanctions were hampering Iran’s efforts to counter the virus and the delivery of humanitarian aid. There is a shortage of testing kits and other medical equipment in the country. Iran until recently had one of the best public health systems in the region.

The Russian Foreign Ministry stated that the sanctions were “anti-human” and that they were “a powerful obstacle to the effective fight against the infection”. On paper, humanitarian aid is exempted from U.S. sanctions

but the fact is that companies and banks have stopped interacting with Iran, fearing secondary U.S. sanctions.

“Unlawful U.S. sanctions drained Iran’s economic resources, impairing its ability to fight COVID-19,” Iran’s Foreign Minister Javad Zarif tweeted. “They literally kill innocents”. Zarif praised the European Union (E.U.) for despatching humanitarian aid to combat the pandemic. However, he wanted the E.U. to do more and totally sidestep the unilateral U.S. sanctions.

U.S. policy-makers, however, seem to be betting that the virus would cause enough death and sow confusion in the Iranian leadership that would impact decision-making. The American media are already full of stories about alleged infighting in the Iranian government regarding the handling of the pandemic. General Kenneth McKenzie, head of the U.S. Central Command responsible for West Asia, said that because the virus affected the upper echelons of the Iranian leadership, they would find “it a lot harder” to make decisions.

Ali Shamkhani, secretary of Iran’s Supreme National Council, admitted that the virus had had “a strategic impact” as it had complemented the U.S. strategy of further isolating Iran. Neighbouring countries have all shut their borders with Iran.

By mid March, Iranian authorities had tested more than 14 million citizens for the coronavirus. The country has a population of 83 million. Health Minister Saeed Namaki said that the screening process helped in the reduction of hospital referrals. Iran has taken stringent measures to contain the virus. The government has ordered the shutting down of important shrines in Qom, Mashad and Tehran that are visited by tens of thousands of pilgrims every day. In all, 234 Indian pilgrims who were in Iran have tested positive for the virus.

Ayatollah Khamenei issued an order in the second week of March for the country’s armed forces to be deployed to combat the virus. Major General Mohammad Bagheri, the chief of staff of Iran’s armed forces, said that volunteers attached to the armed forces would check every household to identify infected people and set up field hospitals to treat them.

Many leading Iranian clerics have criticised the order on the closure of mosques. Demonstrations broke out in Mashad and Qom. They want the pilgrimage sites to be opened despite the rapid spread of the virus. Millions of people from the region visit the holy Shia sites in Iran and Iraq annually. Qom is suspected to have been the epicentre of the virus in Iran. The first two coronavirus deaths were reported in the third week of February. The Fatimeh Masumah shrine in Qom is considered a place of healing by the Shia faithful. Pilgrims who visited the shrine from Azerbaijan, India, Pakistan and other countries in the region have come down with the virus.

Deputy Health Minister Harirchi, who had tested positive and is in quarantine, issued an emotional appeal to all Iranians to take care of themselves. “This is a democratic virus, and it does not distinguish between the poor and the rich, statesman and ordinary citizen. It may affect a number of people,” he cautioned. □



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Bat connection

Basic research into the **epidemiology of coronavirus** needs to be taken up on a war footing. BY P.K. RAJAGOPALAN

WHY ARE BATS (CHIROPTERA) A PREFERRED host for so many zoonotic diseases? Some of their characteristics (food choices, colonial or solitary nature, population structure, ability to fly, seasonal migration and daily movement patterns, torpor and hibernation, life span, roosting behaviours, ability to echolocate, virus susceptibility, and so on) make them exquisitely suitable. Recent observations of outbreaks and epidemics of newly recognised human and livestock diseases caused by viruses transmitted by various megachiropteran and microchiropteran bats have drawn attention anew to these remarkable mammals. According to literature, 66 viruses have been isolated from bats.

Bats are abundant, diverse, and geographically widespread. These mammals provide us with resources, but their importance is minimised and many of their populations and species are at risk, even threatened or endangered. Whereas other mammals, such as rodents and

carnivores, may possess traits in common with bats, such as the ability to hibernate, no group of mammals shares the full suite of attributes that make bats unique.

Bats evolved early and have changed relatively little in comparison with mammals of other taxa. Although the fossil record of bat evolution is incomplete, a recent analysis of 17 nuclear genes dated the origin of chiropterans to the Eocene period (52 to 50 million years ago), coincident with a significant rise in global temperature. The correspondingly ancient origins deduced for certain zoonotic viruses maintained in bats suggest a long history of co-speciation. Viruses that evolved with bats may have used for replication cellular receptors and biochemical pathways which are conserved in mammals that evolved later and which underwent radiation in later geological periods and, therefore, these conserved cellular receptors and pathways could enhance the capacity for transmission of bat-associated viruses to other mammals.

We do not know enough about bat biology and we are doing too little in terms of bat conservation. There remain a multitude of questions regarding the role of bats in disease emergence. Of the more than 4,600 recognised species of mammals, 925 (about 20 per cent) are bats. Bats are unique among mammals in their ability to fly. Bats fly daily in pursuit of food, and bats of many species fly long distances during seasonal migrations. For example, bats of the *Myotis* spp. may travel 200 to 400 miles (one mile is 1.6 kilometres) from their winter hibernation sites. Mexican free-tailed bats (*Tadarida brasiliensis mexicana*) migrate at least 800 miles between their summer caves in Texas and New Mexico and their overwintering sites in Mexico (they are otherwise very widely distributed).

RABIES AND BATS

In France, rabies virus infections have been associated with the migratory routes of Nathusius' pipistrelle (*Pipistrellus nathusii*) bats. Silver-haired bats (*Lasiurus noctivagans*) seasonally range from Alaska, across Canada, and south to Texas. Rabies virus variants associated with silver-haired bats and the Eastern Pipistrellus (*Pipistrellus subflavus*) have been identified from numerous locations throughout the geographic range of these bats and the same variants have been identified as the cause of the majority of cases of indigenously acquired human rabies in the United States and Canada.

Different patterns of migration within the same species of bat, as occurs with relatively solitary species such as the silver-haired bat and colonial cave-dwelling spe-

cies such as Mexican free-tailed bats may permit exchange of novel viruses or virus variants between migrating and non-migrating subpopulations of bats of other species. A Mexican free-tailed bat infected with a rabies virus variant normally associated with hoary bats (*Lasiurus cinereus*) suggests interspecies transmission.

In the field, rabid bats of one species have been observed to be aggressive toward bats of other species. Moreover, Shankar *et al.*, in a study of the phylogenies of divergence of rabies viruses from bats and terrestrial animals in Colorado, found that bats of different species had the same genotypic variants, indicating active interspecies transmission of the rabies virus. They concluded that, at least in Colorado, animal rabies occurs principally in bats and that identification of bat-associated variants of rabies viruses in domestic cats, grey foxes (*Urocyon cinereoargenteus*), and striped skunks (*Mephitis mephitis*) demonstrates the importance of rabies virus spillover from bats to domestic and terrestrial wild vertebrates. Among Microchiroptera, members from two families, Rhinolophidae and Vespertilionidae, are important because some dangerous viruses (Kyasanur forest disease, or KFD, from *Rhinolophus rouxi*, Corona from *Rhinolophus sinicus* and Ebola from *Miniopterus inflatus*) have been isolated from them.

Ever since the implication of the horseshoe bat, *Rhinolophus rouxi*, in the epidemiology of KFD—the virus was isolated from these bats and their tick ectoparasite, called *Ornithodoros*, by this writer in 1969 [Ind.J.Med.Res.Res, 57(5)]—one would have thought that interest in the role of bats would have been stimulated. A few articles on the role of bats have also been published since (“Tracking arboviruses”, *Frontline*, August 4, 2017; “Viral challenge”, *Frontline*, March 1, 2019; *J.Com.Dis*, 51(4), 2019). It is really unfortunate that present-day researchers in India are not looking at bats while investigating the recurrence of KFD in January 2019 and the sporadic occurrence of KFD cases in different pockets all along the Western Ghats region. Of course, Ebola has not yet become a problem in India, but it can invade India anytime, just as coronavirus has done now. The Zika virus almost came to India, but we escaped. I think we forgot Zika afterwards, but will rush into action only when it comes back. Are we prepared?

It is pertinent to talk about the coronavirus natural cycle here. Not much is known about the epidemiology. Proactive measures might ensure that the disease does not take a toll as it did in China, Italy, Iran, and Spain. At the time of writing this, India has about 100+ cases and has had only two deaths. We do not know what the scientific community is doing, except making statements about a potential vaccine which would be ready in a couple of years. But what about basic studies on the epidemic itself? Earlier, I had written about the lead given by Ugandan scientists regarding the Zika virus (“Zika control, the Ugandan way”, *Frontline*, November 25, 2016). That was about four years ago. Now we have another inspiring story from the investigators of the Chinese coronavirus epidemic. Their example is inspir-



HEALTH OFFICIALS inspect bats to be confiscated and culled in the wake of the coronavirus outbreak at a live animal market in Solo, Indonesia, on March 14. (Right) The confiscated bats, after sedation, being burnt.



ing and worth emulating (“How China’s ‘Bat Woman’ Hunted Down Viruses from SARS to the New Coronavirus”, Jane Qiu, *Scientific American*, March 11, 2020) and I quote below:

INSPIRING EXAMPLE

“Beijing—the mysterious patient samples arrived at Wuhan Institute of Virology at 7 p.m. on December 30, 2019. Moments later, Shi Zhengli’s cell phone rang. It was her boss, the institute’s director. The Wuhan Center for Disease Control and Prevention had detected a novel coronavirus in two hospital patients with atypical pneumonia, and it wanted Shi’s renowned laboratory to investigate. If the finding was confirmed, the new pathogen could pose a serious public health threat—because it belonged to the same family of bat-borne viruses as the one that caused severe acute respiratory syndrome (SARS), a disease that plagued 8,100 people and killed nearly 800 of them between 2002 and 2003. ‘Drop whatever you are doing and deal with it now,’ she recalls the director saying.

“Shi—a virologist who is often called China’s ‘bat woman’ by her colleagues because of her virus-hunting expeditions in bat caves over the past 16 years—walked out of a conference in Shanghai and hopped on the next train back to Wuhan. ‘I wondered if [the municipal health authority] got it wrong,’ she says. ‘I had never expected this kind of thing to happen in Wuhan, in central China.’ Her studies had shown that the southern, subtropical areas of Guangdong, Guangxi and Yunnan have the greatest risk of coronaviruses jumping to humans from animals—particularly bats, a known reservoir for many viruses....

“While Shi’s team at the Chinese Academy of Sciences institute raced to uncover the identity and origin of the contagion, the mysterious disease spread like wildfire.... The epidemic is one of the worst to afflict the world in recent decades. Scientists had warned that the rate of emergence of new infectious diseases is accelerating—especially in developing countries where high densities of people and animals increasingly mingle and move about....

“To Shi, her first virus-discovery expedition felt like a vacation. On a breezy, sunny spring day in 2004, she joined an international team of researchers to collect samples from bat colonies in caves near Nanning, the capital of Guangxi. Her inaugural cave was typical of the region: large, rich in limestone columns and—being a popular tourist destination—easily accessible. ‘It was spellbinding,’ Shi recalls, with milky-white stalactites hanging from the ceiling like icicles, glistening with moisture.

“But the holiday like atmosphere soon dissipated. Many bats—including several insect-eating species of horseshoe bats that are abundant in southern Asia—roost in deep, narrow caves on steep terrain. Often guided by tips from local villagers, Shi and her colleagues had to hike for hours to potential sites and inch through tight rock crevasses on their stomach. And the flying

mammals can be elusive. In one frustrating week, the team explored more than 30 caves and saw only a dozen bats.

“These expeditions were part of the effort to catch the culprit in the SARS outbreak, the first major epidemic of the 21st century.... Before SARS, the world had little inkling of coronaviruses—named because, seen under a microscope, their spiky surface resembles a crown—says Linfa Wang, who directs the emerging infectious diseases programme at Singapore’s Duke-NUS Medical School. Coronaviruses were mostly known for causing common colds. ‘The SARS outbreak was a game changer,’ says Wang, whose work on bat-borne coronaviruses got a swift mention in the 2011 Hollywood blockbuster *Contagion*. It was the first time a deadly coronavirus with pandemic potential emerged. This discovery helped to jump-start a global search for animal viruses that could find their way into humans....

“In those first virus-hunting months in 2004, whenever Shi’s team located a bat cave, it would put a net at the opening before dusk—and then wait for the nocturnal creatures to venture out to feed for the night. Once the bats were trapped, the researchers took blood and saliva samples, as well as fecal swabs, often working into the small hours. After catching up on some sleep, they would return to the cave in the morning to collect urine and fecal pellets.

“But sample after sample turned up no trace of genetic material from coronaviruses. It was a heavy blow. ‘Eight months of hard work seemed to have gone down the drain,’ Shi says. ‘We thought coronaviruses probably did not like Chinese bats.’ The team was about to give up when a research group in a neighbouring lab handed it a diagnostic kit for testing antibodies produced by people with SARS.

“There was no guarantee the test would work for bat antibodies, but Shi gave it a go anyway. ‘What did we have to lose?’ she says. The results exceeded her expectations. Samples from three horseshoe bat species contained antibodies against the SARS virus. ‘It was a turning point for the project,’ Shi says. The researchers learned that the presence of the coronavirus in bats was ephemeral and seasonal—but an antibody reaction could last from weeks to years....

“Shi’s team used the antibody test to narrow down locations and bat species to pursue in the quest for these genomic clues. After roaming mountainous terrain in the majority of China’s dozens of provinces, the researchers turned their attention to one spot: Shitou Cave on the outskirts of Kunming, the capital of Yunnan—where they conducted intense sampling during different seasons throughout five consecutive years....

“The team discovered hundreds of bat-borne coronaviruses with incredible genetic diversity.”

When will we have someone like Shi Zhengli to inspire and enthuse our scientists? They should go and look for the source of the virus in bats in the wilderness of India. This is basic. □

Losing trust

The Bharatiya Janata Party is about to recapture power in Madhya Pradesh as an elected government falls, once again, to political machinations. BY ANANDO BHAKTO

MADHYA PRADESH Chief Minister Kamal Nath submitted his resignation to Governor Lalji Tandon around 1 p.m. on March 20, an hour before the trust vote was scheduled to be held in the Assembly. His resignation put the seal on the way things started shaping up when Jyotiraditya Scindia wrote to interim Congress president Sonia Gandhi (letter dated March 9) tendering his resignation from the party. At a press conference in Bhopal around noon, Kamal Nath announced his decision to resign and accused the Bharatiya Janata Party (BJP) of “murdering democracy”.

The fate of the Kamal Nath government was perceived to be hanging in the balance with Jyotiraditya Scindia’s resignation followed by his formal induction into the BJP. (Sonia Gandhi expelled him soon after he tweeted his resignation letter stating that he was unable to “serve the people of his State and country” as a member of the Congress.) Within hours of these developments on March 10, 22 Congress Members of the Legislative Assembly, who were kept in seclusion in Bengaluru, sent their resignations to the Governor, turning the Kamal Nath government into a minority one. (The Congress had 114 seats in the 230-seat Assembly, while the BJP had 107.)

Congress leaders had kept up a brave face at media appearances as long as they could, but on March 20 the signs of imminent defeat were clear and senior leader Digvijaya Singh was reported to have said that the government would lose the trust

vote. Jyotiraditya Scindia greeted the news of Kamal Nath’s resignation, saying it was a “victory for the people”.

TRUST VOTE

There was no trust vote, after all. In the days leading up to Kamal Nath’s resignation, however, there was much political activity around the trust vote. Assembly Speaker N.P. Prajapati said he was unable to go ahead with the vote unless he met the rebel legislators in person and confirmed that they had not resigned under duress. Governor Lalji Tandon, in a late night correspondence on March 14, asked Kamal Nath to



CHIEF MINISTER Kamal Nath at the press conference where he announced his decision to resign, in Bhopal on March 20.

prove his government’s majority in the Assembly. By this time, the strength of the Congress government had reduced from 114 to 108 because the Speaker had accepted the resignations of six of the 22 MLAs. On March 16, Kamal Nath, amid claims that his government was safe, wrote to the Governor asserting that a floor test “will be undemocratic since MLAs are being held captive in Bengaluru”.

The BJP filed a petition in the Supreme Court demanding a floor test at the earliest. The Congress argued in court that “the floor test can happen only when all the elected lawmakers are present in the Assembly”. It also said that a trust vote could be held only after byelections to the constituencies falling vacant were held. Prajapati, on his part, adjourned the Assembly’s budget session, scheduled to commence on March 16, until March 26, citing the COVID-19 outbreak.

The Supreme Court, however, ordered the floor test on March 20, stating that it could appoint an observer who would visit the defectors in Bengaluru and arrange for their interaction with the Madhya Pradesh Speaker through a video conference.

CONGRESS EFFORTS TO AVERT CRISIS

The Congress had deployed its trusted troubleshooter in Karnataka, D.K. Shivakumar, to try and defuse the crisis. On March 18, Digvijaya Singh and Shivakumar tried to meet the 22 MLAs who were holing up in

Chaos at the top



A.M. FARUQUI

AT A PUBLIC meeting in Bhopal in February 2019, Rahul Gandhi, then the Congress president, flanked by Jyotiraditya Scindia and Kamal Nath.

JYOTIRADITYA Scindia's parting of ways with the Congress is symptomatic of much that is wrong with the grand old party at the national level. That Scindia did not get along with the Kamal Nath dispensation was no secret. The Congress leadership turned out singularly inadequate in handling the situation.

Party insiders blame Rahul Gandhi's penchant for back-seat driving for the chaos that marks the party's functioning. A senior Congress leader who has been close to Sonia Gandhi said: "Rahul wants to control everything from behind, without coming forward and taking full responsibility. He likes to wield control and does not even listen to Soniaji." Senior leaders say that this tug of war between mother and son is proving detrimental to the party.

It is well known that Scindia was close to Rahul Gandhi. But once Rahul Gandhi resigned after the Congress' Lok Sabha debacle in 2019, Scindia found himself alienated in the party. Sidelined by the Kamal Nath dispensation in his home State, the ambitious young leader not unexpectedly looked for greener pastures beyond the Congress.

There have been rumblings from other Congress leaders else-

where in the country—Milind Deora, Sanjay Nirupam, Sachin Pilot. After the crisis in Madhya Pradesh, Sanjay Nirupam said it was time for Rahul Gandhi to come forward and take full control of the party with a completely new team.

In Rajasthan, there are problems between Chief Minister Ashok Gehlot and Deputy Chief Minister Sachin Pilot, though things have not reached a breaking point there.

P.L. Punia, a senior Congress leader, said: "There is no doubt that the crisis in Madhya Pradesh is a failure of leadership at all levels, both at the State and at the national level. It is unfortunate that a State which we won displacing the BJP after 15 years of its misrule, we could not hold for even 15 months."

But he felt that it was primarily for the State leadership to take corrective measures in time. "I think the top leadership can advise, direct and order, which it did, at least three times in the last few months, but eventually it is for the State leadership to take action. If they refuse to do so, what can the top leadership do?"

But other senior leaders point to the confusion at the top. "Soniaji is president, but Rahul Gandhi is running the show from behind. He

does not listen to her, he does not reach out to senior leaders in times of crisis, and neither does he have a team that can manage conflict among senior leaders. There is complete chaos at the top. Priyankaji also has stopped interfering between them, she busies herself with Uttar Pradesh, in which Rahul does not interfere at all. That is the situation and nobody can do anything about it," a senior leader said.

Asked why Rahul Gandhi does not take full control of the party, another leader said: "Having taken a moral high ground once, perhaps he finds it difficult to backtrack." The dilemma, meanwhile, is costing the party dear. With elections due in Bihar soon, this state of things has Congress workers worried. Lack of cohesion and planning at the top has already cost the Congress dear in the Delhi election.

DELHI DISASTER

The party appointed as its campaign in-charge in Delhi Kirti Azad, who lost his deposit in the 2019 Lok Sabha election from Dhanbad in Jharkhand and had been out of Delhi's political scene for a long time. His wife was a candidate and could muster only 2.6 per cent of the votes.

The party's failure at all levels was reflected in its tally of zero for the second consecutive time. Its vote percentage plummeted from 9.7 per cent in 2015 to an all-time low of 4.25 per cent in 2020. In 63 of the 66 seats that the Congress contested, its candidates lost their deposits.

A top leader said: "There is no honest conversation happening at the top level now. The top leadership should sit with State leaders and have open and honest talks. Instead, we see sycophants sing paeans at these meetings, and nothing substantial comes out." This lack of honest conversation leads to wrong decisions being taken, further damaging the party.

Purnima S. Tripathi



PTI

FORMER CHIEF MINISTER Shivraj Singh Chouhan (fourth from left, second row) celebrates with his colleagues in the BJP after Kamal Nath's resignation on March 20.

Bengaluru, but they were not allowed to meet the latter. Addressing the media shortly afterwards, Singh claimed the MLAs were being kept hostage. “BJP MLA Arvind Bhadoriya and an MP are holding them captive. Why can't I meet my MLAs, my voters [for the Rajya Sabha election], my own party people? What is the BJP doing in between?” he said.

Meanwhile, there was much speculation about what was going on behind the curtains. There was a view that some of the 22 defecting MLAs had resigned to court support for Scindia and were taken by surprise when their leader decided to join the BJP. These MLAs were said to be in two minds now about following in Scindia's footsteps. Congress insiders even claimed that the BJP had moved a couple of them to Assam in order to isolate them further. The story, if true, would reflect the fragile trust between the BJP and its new allies in Madhya Pradesh.

The latest version of “Operation Lotus”, a sobriquet the BJP's machinations to topple elected government have earned for the party, began early in March, though the first attempt ended in failure. A senior State leader of the BJP was said to have flown out eight MLAs of the Congress and its allies to a hotel

in Gurugram. But the Congress was able to thwart the plan. (According to Congress sources, four of the eight were Congress MLAs, one was an independent, and the rest were from the Bahujan Samaj Party and the Samajwadi Party.)

Kamal Nath was quick to claim that his government was immune to attempts at engineering defections. “We have full faith in all our MLAs, we have no doubt about their integrity and honesty. The truth of this black money earned from corruption and scams has been revealed and all BJP's conspiracies will fall flat on their face,” he said. Yet, internal squabbles were reportedly already at their peak in the State Congress, even if Scindia appeared to be on the same page with Kamal Nath. “This is 100 per cent an attempt to poach [MLAs]. We are united and our government is stable. We have counted the numbers and there is no threat to the government,” Scindia said as he joined Kamal Nath in lambasting the BJP's attempt to usurp power in the State.

A LOST ELECTION AND A BUNGALOW

It is not clear exactly what changed so quickly for Scindia to desert, a week later, the party which he had

served for 18 years and which his father, Madhavrao, belonged to. But for over a year there had been sporadic manifestations of his frustration at being sidelined. According to one reading of the development, the final estrangement was triggered by the last-minute denial of a Rajya Sabha berth. The Congress in Madhya Pradesh was hopeful of winning two of the three Rajya Sabha seats for which elections were scheduled. One seat was reportedly reserved for Deepak Saxena, who vacated his Chhindwara legislative seat for Kamal Nath after he became Chief Minister in December 2018. Scindia was apparently sure of securing the other. Digvijaya Singh's emergence as a strong contender for it is said to have eventually prompted his exit.

However, *Frontline* has learnt from reliable sources that the BJP started making overtures to Scindia soon after the Congress' comprehensive defeat in the May 2019 general election. Scindia lost more than his family bastion of Guna, a constituency that had in the past elected him for four consecutive terms, in that election. (He lost it to former aide Krishna Pal Singh Yadav by over 1,25,000 votes.) He also lost the 27, Safdarjung Road bungalow in Lutyens' Delhi, which was earlier allotted



JYOTIRADITYA SCINDIA with Home Minister Amit Shah in New Delhi on March 12, a day after joining the BJP.

to Madhavrao Scindia before it came to him as an MP and had been his home for decades. In July 2019, the Union government declined his request to be allowed to retain the bungalow, to which he is believed to be “emotionally attached”. Sources from the Scindia camp and the Digvijaya Singh-Kamal Nath camp separately confirmed to this reporter that former Finance Minister Arun Jaitley reached out to Scindia sometime between May and July 2019. The rewards offered were a Cabinet berth for Scindia, plum postings for MLAs loyal to him in Madhya Pradesh, and the bungalow.

More than two rounds of parleys were reportedly held between Scindia and Jaitley regarding his future role and position within the BJP before Jaitley’s death interrupted the process. Yet there were signs that all was not well. Scindia’s support for the Modi government’s move to revoke Article 370 in Kashmir now seems to be a piece of deliberate political posturing. “I support the move on #JammuAndKashmir & #Ladakh and its full integration into union of India. Would have been better if constitutional process had been

followed. No questions could have been raised then. Nevertheless, this is in our country’s interest and I support this,” he said in a tweet.

CONFLICTING AMBITIONS

Meanwhile, the rift between Scindia and Kamal Nath kept widening. The Kamal Nath camp says an over-ambitious Scindia had been eyeing the post of All India Congress Committee president. The Scindia camp says that though Jyotiraditya contributed significantly to the Congress’ victory in the December 2018 election, Digvijaya Singh called the shots in bureaucratic postings and in the nomination of party functionaries. Pankaj Chaturvedi, a Scindia loyalist who was also the State spokesperson of the Congress, said: “I was in the Congress party along with Scindiaji and I have resigned from the Congress party along with Scindiaji. As per our assessment, as many as 10,000 office-bearers of the Congress across the State have tendered resignation to support Scindiaji’s decision to join the BJP. The Kamal Nath government has lost its majority and a floor test will prove that as well. This is a government dictated

by a bundle of arrogance. It has been blind to the free run of mafias in the State though it claims to be working to end their impunity. This government’s only objective is to make as much money as possible as it knew from the beginning that its days were numbered.”

Some other Congress leaders and functionaries close to Scindia tried to justify his claim that he was unable to serve the country and the State while being in the Congress. In his letter to Sonia Gandhi, Scindia wrote: “While my aim and purpose remain the same as it has always been from the very beginning, to serve the people of my State and country, I believe I am unable to do this anymore with this party.” A Scindia aide told this reporter: “We won on a loan waiver promise to the farmers. But we failed to do so within 10 days. It has been over a year since we assumed power, but we have reneged on our manifesto agendas.” Leaders loyal to Kamal Nath were dismissive. A senior Madhya Pradesh Congress Committee functionary, who requested not to be named, said Scindia had made up his mind to join the BJP as early as November 2019. He claimed that the BJP’s central leadership was only delaying the move to time it with Rahul Gandhi’s resumption of his role as Congress president, whenever that happened, in order to score a point against his leadership abilities. “We have incontrovertible reports that he [Scindia] had alerted his MLAs about a possible defection. We know it for a fact he had told them ‘to make the maximum out of their office’ as they might have to remit it next year [2020],” said the Kamal Nath aide. This person further claimed that Scindia was offered the post of PCC president but he showed little interest. “His ambitions were bigger; he did not want to be the Deputy Chief Minister or the PCC president. He was offered both [posts] but he insisted that his aide Tulsi Silawat be made Kamal Nath’s deputy. This was turned down by Kamal Nath as there were people senior to Silawat in rank and experience and it was next to impossible to sideline them.” □

Hindutva apartheid

After the violence, it is **economic and social boycott** that faces Muslims who are trying to pick up the fallen pieces of their lives. BY **ZIYA US SALAM**

MOHAMMED GULFAM, A 54-year-old bike mechanic, was the last shopkeeper in his lane who continued working when a 2,000-strong mob chanting “Jai Shri Ram” and carrying iron rods, batons and stones rushed towards Bhagirathi Vihar in North East Delhi on February 24. Most others had downed their shutters by mid afternoon. Gulfam was repairing a motorcycle he had promised to deliver that evening.

A man with a distinctly Muslim appearance and salt-and-pepper beard, Gulfam ran for his life when he saw the mob advancing towards his lane. There was no time to safe-keep the two bikes or anything else in his shop. He left the bikes behind, including his own parked inside the shop and that of his customer outside. Even as a lathi struck him on his ankle and another on his right heel, tearing the flesh, he continued running, with the mob closely behind. Finally, as he crossed over to the Muslim-dominated Mustafabad, the mob retreated, screaming, “*Hindustan mein rehna hai to Jai Shri Ram kehna hoga*” (If you need to stay in India you will have to say Jai Shri Ram).

Once safe from the attackers, Gulfam tried to contact his family in Shiv Vihar on a mobile phone borrowed from a man who had given him shelter. His mobile had fallen from his kurta pocket as he ran. Worse news awaited him.

His house, too, had been attacked by a mob. Although his wife, daughter and son escaped with their lives, the mob looted his house. Gulfam’s wife had got a few suits



MOHAMMED RASHID with his wife outside his burned down house in Ashok Nagar in North East Delhi.

stitched for their daughter’s wedding scheduled for end-May. There was some jewellery too. All were looted. The mob did not spare even the kitchen stove, tubelights and fans in his rented accommodation.

It took Gulfam another 10 days to recover even partially from the shock. On March 7, he went back to his shop to resume his business. The owner of the shop premises, a Hindu Jat, refused to let him in. Gulfam was not allowed to even take a picture of

his bike the rioters had burned. Interestingly, the bike he was painstakingly repairing earlier had been left untouched. It belonged to a Hindu customer. The attackers had chosen their targets methodically.

“I have worked in the locality for close to 14 years. I have had customers from both religions. Today, however, the owner of the shop says, ‘*Tum kahin bhi jao. Meri dukaan chhoro. Mujhe musalman ko nahin deni apni dukaan*’ (go wherever you

Targeted harassment

Muslims are made to suffer and are being blamed for the violence that had been unleashed in a targeted manner.

BY ZIYA US SALAM

MORE than three weeks after the targeted violence in North East Delhi, graffiti on a wall in Khajuri Khas, one of the affected areas, speaks volumes about the residents' plight. It reads: "Revolution loading...who do you call when the police murders". While it conveys the helplessness of the common man in the face of organised violence, it also speaks eloquently of loss of faith in the institution meant to safeguard lives. Indeed, throughout the period of pogrom, allegations flew in thick and fast of policemen acting in collusion with attackers. Nothing has changed since. The proof comes from the lanes of Khajuri Extension, Chand Bagh, Mustafabad, Shiv Vihar, Jafrabad and Kardampuri, where the residents face what the noted human rights activist S.R. Darapuri calls "a double jeopardy. First they were attacked and killed. Now the survivors face arrest." The locals allege: "There is not a lane in Muslim-dominated areas from where nobody has been arrested."

Their faith in the local police shaken, men in North East Delhi take turns to guard their lanes every night. After the last prayer of the day until early morning, they stay awake, calling out to each other just in case the man next door dozes off. With their houses looted and burned, 19 mosques either reduced to ashes or damaged, and dozens killed, what are they seeking to protect? They are guarding against policemen, not rioters. Every night descends with a pall of fear and foreboding. Residents allege that policemen swoop down without warrants on Muslim men in the 18-25 age group and arrest them.

The arrests started as soon as the violence abated and came to a halt only around March 15. While most

of those arrested were released within a few hours, some are still in detention and their families have little clue about what is happening to them. Residents of Shiv Vihar and Mustafabad believe that close to 3,000 men were picked up by policemen. Shabbir Ahmed, a resident of Shiv Vihar, said: "It could be anybody. It could be a man talking to another on the streetside or simply a man parking his bike outside a shop. A policeman, usually in civilian clothes, would point a pistol at the man and ask him to accompany him. The men are taken sometimes to the local thana. Often they are sent to a faraway station. Why they are picked up, nobody knows. Their families are not informed."

Sajid Ali, a resident of Mustafabad, who is in food catering, said: "Four or five boys have been picked up from every lane. They [police] just ask the name and put the boys under detention. Charges are fabricated to implicate the innocent."

Dilshad Ali, father of Shadab Alam, who was picked up from the Samrat Medical Store where he worked, said the same thing. On the afternoon of February 24, Alam returned from a Tablighi Jamaat congregation in Qasabpura and then went to the medical store. Violence was raging in some parts of the city at the time. Ali said: "The chemist showed the police CCTV footage of Alam being at work at the pharmacy. But he was still arrested, though the arrest was shown from a different location."

Altaf Hussain, a resident of Mustafabad who was helping out with the relief exercise, said: "Until March 12, dozens, even hundreds, of boys were picked up. The modus operandi was similar. Police would catch boys in the 18-25 age group.

Usually the boys were picked up from the roadside or even their shops. A policeman would just take a boy aside, ask his name, then ask him to sit in the jeep. Most of the boys returned after some five or seven hours and they did not complain of violence at the station. Some, however, were sent to another police station far away, even as far as Sunlight Colony which is some 24 kilometres away. In the initial days, the police picked up boys who had been involved in some stray cases of chain snatching or picking pockets in the past. Later, they started picking up boys at random. The police claimed that the boys were detained on the basis of videographic evidence. Like, if the boys were seen in a video of the days of violence, police picked them up."

That is how Usman Saifi, who stood guard at Nehru Vihar's Ram temple in a Muslim-dominated area in Mustafabad, was picked up though the video showed residents on a vigil to protect the temple. Saifi was aware that there could be repercussions of the attacks on mosques in the vicinity and decided to patrol the lane to protect the temple. He stood, along with others, both Hindus and Muslims, at the beginning of the lane to ward off attackers. On the night of March 8, a Sunday, the police arrested Saifi for rioting and took him to Dayalpur police station. The temple's guard put in a word in Saifi's defence but the police were not convinced. Then the local Shri Ram Dharmik Samiti stepped in and wrote to the magistrate appealing for his release. "In our area, Hindus and Muslims have maintained unity," the samiti said, hailing Saifi's role in protecting the temple. "Kindly release this person on bail. *Aapki ati kripa hogi* [it would be extremely kind of you]," the letter read. But even this did not secure Saifi's release. Their only consolation was that Saifi was not alone. There were hundreds, if not thousands, of Muslim men in a similar situation. Among them were people whose homes had been

burnt down. They were arrested when they returned home after spending a few days at a relief camp in Eidgah. In one case, a man was picked up because a video of his house being set on fire went viral, and the man himself was accused of doing it.

The noted activist and author Harsh Mander, who helped with relief work, said: "People are living in fear. The arrests are all part of intimidation tactics. The idea is that the victims should not seek justice as equal citizens of the country. Make sure no FIRs [first information reports] are filed naming any culprits. That's why no guilty person will be nabbed."

Comparing the situation to the 2002 Gujarat carnage, Harsh Mander said: "I would like to say we should go to the National Human Rights Commission and other similar bodies. But there are hardly any institutions left for redress today. When the 2002 violence happened we had the media and various rights-protection bodies that were ready to support. This time who do we turn to?"

Darapuri, however, felt that legal redress might provide the answer. Not mincing words in indicting the police, Darapuri, himself a retired policeman, said: "What the police are doing today amounts to persecution of the Muslim community. Those who suffered in the violence are being targeted. The victims are being booked in false cases. It is double injustice. We know about the role of the police during the riots. The police acted as colluders to support the rioters. The police destroyed the Farooqia Masjid. First they demolished the CCTV cameras, then burned the mosque. The local Hindus issued a statement asking why they should be blamed. It was the policemen who had done it! The way forward is these arrests should be through courts. The court should be asked to restrict the police

from arbitrary arrests. I know of the case of Khalid Saifi, a human rights activist. He was called by the police to the Khureji anti-CAA [Citizenship (Amendment) Act] protest site and arrested. Later, we saw his photographs with both his legs heavily bandaged. With such actions of the police, it is the Muslims who suffer. Earlier the violence took place in connivance with the police. Then, too, the police used weapons not to control the rioters but against Muslims seeking to defend themselves. Now the police are doing what the rioters did. They are persecuting the innocent under the garb of police action. The boys are picked up and sent to other stations. Then one by one, they are booked under various provisions. It is done at the time of terrorism cases, too."

Do these arbitrary arrests not open up the possibility of disaffected young people taking to violence in the future?

Darapuri said: "Not everybody is rational. Some young people cannot bear injustice. They can go for retaliation. When you push a community to the wall, what do you expect? Having said this, we should look closely at the role of Delhi Police. The police are the power arm of the state. In the case of Delhi, the police force reports directly to the Union Home Minister. Amit Shah said at the time of the violence that he was monitoring the situation from the control room. It was both monitored and directed. The same thing had happened in Gujarat. The gentleman was sitting in the police control room when the pogrom was going on. It is tragic, but if we want justice we have to fight at various levels. We have to go to the courts."

To begin with, hundreds of boys have to be released. "There can be no peace without justice," he said.

wish. Leave my shop. I do not want to rent out my shop to a Muslim.)"

Gulfam's landlord in Shiv Vihar too similarly asked the family to vacate his house immediately. Sitting at the residence of a man helping out with relief measures in Mustafabad, Gulfam asks, "Tell me, where do I go? I cannot go home to Shiv Vihar to the house I called home for six years because the landlord does not want a Muslim tenant. Same for the shop."

OMINOUS FUTURE

It is social and economic boycott that stares Muslims in the face after the organised violence in North East Delhi which left 53 killed, 450 injured, thousands displaced, and several houses and shops gutted. Those who made bold to go back home discovered that, except in a few cases, their neighbours either gave them the cold shoulder or actually asked them to move out, not ready to risk another attack by a mob.

"When a Muslim's house is set on fire, the adjacent houses of Hindus too are affected," a man told 20-year-old Junaid, who runs a grocery in Shiv Vihar along with pursuing History honours from Delhi University. "The mob looted my shop and house. At the shop, they took away all the expensive chocolates and colas. They left only the local biscuits and rusks. Now I have been opening the shop for four days. But there are no customers. People do not want to buy from me," says Junaid, hoping that one day when chocolates and colas come back to the shop, so will the customers. It will not be an easy task, however, for him. "Little boys and girls who used to come for a Re.1-toffee are all gone. And the shopkeeper next door advises me to wind up, saying, 'Why are you wasting your time here? Go somewhere else.'"

RUNNING FOR THEIR LIVES

Rukhsar ran for her life from Bhagirathi Vihar when violence struck. A widow, she had set up a small bangle-colouring unit in her house. More than a week later, after a couple of sessions with counsellors in Eidgah, she went back home only to return in the evening. "As I entered

my house, I realised there was nothing left. The door, the windows, the clothes, the bangles, all were gone. I just sat there. A little later, a few boys came and said, 'Mil gayee azaadi? Leave before you are burned alive.' I fled."

For Rukhsar it is a double whammy as she owns the house she has been forced to leave. In her late twenties, Yasmin Sheikh was a regular at the protest against the Citizenship (Amendment) Act (CAA) in Mustafabad. She had given up her job at a clothes showroom to devote herself to the 24-hour protest. Every evening, along with a couple of hundred other women, she raised slogans against the CAA, sang songs like "Hum dekhenge" before going home close to midnight, having concluded the sessions with the national anthem. Occasionally, with other protesters, Yasmin Sheikh raised slogans of freedom from hunger, inequality, and so on.

Tall, fair complexioned, with kohl-lined eyes, she was easily recognisable in a crowd of hijab-clad women. That proved to be her undoing. On the day the mob attacked any Muslim they could lay their hands on, Yasmin Sheikh was specially targeted. As the men attacked her two-storeyed house in Shri Ram Pur, Yasmin Sheikh ran towards the roof with her mother. This was followed by obscene comments and actions. Moving from one roof to another in the congested colony, Yasmin Sheikh finally got down close to a mosque.

A week later, she went back to the house along with a couple of social activists. As she went about clearing the wreckage that had hit her house, a man whom she identifies as "probably a property agent" came up to her. "Leave the premises for now. Nothing will happen if you do. If you stay, the men will come back at night with the azaadi rant. Go away. After some time, you can sell the house. I will help you," he said. Not ready to confront men ready to strip to harass a woman, she went back to a relative's house in Welcome, some five kilometres away.

Worse fate awaited Imanuddin, the sole breadwinner of a family of



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JUNAID, whose shop and home were looted.

eight in Shiv Vihar. The day the bloodthirsty mob attacked his colony, he shut the door of his house from inside and stood against it to guard against anyone breaking in. "I locked the door and stood holding my children tightly against my chest." His wife supported his father, a Parkinson's disease patient, and his mother.

Like many others, Imanuddin's family ran away using the roof and found refuge in Chaman Park. Three days later, the family shifted to the Eidgah relief camp only to vacate it soon as his father frequently lost bladder control. "It inconvenienced others. So I brought my father back home to Shiv Vihar. But we are all scared. No neighbour comes to offer even a glass of water or say a word of sympathy. Our lane had only a handful of Muslim families. Most were Hindus. Today, we are the only Muslim family back. Nobody talks to us. After sunset I cannot even go out. We spend the night taking turns to guard against any attack. I have lived here for 15 years. It has never been so bad. People who used to meet and greet me every day bolt their doors on seeing me now."

Social and economic boycott of Muslims is the new reality of North East Delhi. Already a Twitter and Facebook campaign calling for an economic boycott of Muslims is under way.

"Many Hindus had put up saffron flags around the time of the violence. I thought it was to guard themselves from an attack by Muslims. Now I realise it was a subtle way of telling the attackers

that the houses without a saffron flag belonged to Muslims and could be attacked, looted or burnt," says Mohammed Rashid, whose house was burnt down in Ashok Nagar.

Gurbax Singh, a social activist who helped rescue many women from Chand Bagh, says, "This is all a concerted attack on the community. An attempt to humiliate them. First they attacked the businesses to weaken them economically. Then they attacked their places of worship, planted saffron flags. It was an open provocation to the community."

A day later, at the People's Tribunal on Delhi Carnage-Anatomy, Arson, Relief and Road Ahead, the jury reiterated this. "The East Delhi riots were found similar to the 1984 anti-Sikh riots, as the minorities have been systematically attacked in a planned manner like in the past. And the state was complicit," it said.

A speaker added, "It was an attack on the identity of Muslims, an attack on their struggle to be treated as equal citizens of the country. When you attack the business of a community and also its places of worship, you send out a signal that it is not wanted here. In this case, it is worse because social and economic boycott have followed the violence."

Indeed, even an innocuous *press-wali* (a woman in the business of ironing clothes) in Gokulpuri deemed it wise to hang a small placard of a Hindu goddess by her table, to ward off the Hindutva mob. "I do not accept clothes from Muslim families. I do not hate them. They have suffered a lot. But if Hindu strongmen see me ironing a burqa or their kurta-pyjama, they will force me to shut my business. I hope you understand."

Displaced Muslims live in fear in North East Delhi. As do poor Hindus. It is the rule of the thugs and their socio-economic boycott of Muslims that prevails in the area. The writ is: do not purchase any goods from Muslims or do any business with them; do not rent out to them your house or shop; do not mingle with them. Clearly, it is Hindutva apartheid that is ruling in the pogrom-hit capital. □

The aftermath

Lives and livelihoods in North East Delhi remain shattered as riot survivors struggle to reconstruct burnt homes and rebuild shops and other businesses. BY T.K. RAJALAKSHMI



MOIUDDIN, whose house was blasted with a gas cylinder. The daily wage earner and his family have been staying at the Idgah Relief Camp.

MORE than three weeks have lapsed since riots engulfed parts of North East Delhi from February 23 to February 25, claiming 54 lives and leaving hundreds scarred. Homes, shops, shrines and schools were torched with gas cylinders and other inflammable materials, causing colossal economic and social damage. The irony is that even a month after the riots, the rebuilding of homes and establishments is yet to seriously begin. Not much attention is being paid to the deep social divisions that have opened up after the violence.

Frontline visited some of the worst-affected areas in the second week of March, only to find that people displaced by the riots were still staying either in government camps or with relatives, while some had packed up and left for their villages. Restoring confidence among riot survivors does not seem to be a priority for either the State or the Central government. Efforts to facilitate the rebuilding of homes and rehabilitation of riot victims are tardy. Both the State and the Central governments seem reluctant to offer generous compensation packages, and people say little assistance is forthcoming to help them rebuild their homes and lives.

GENERAL NEGLECT

Charred homes and shops remain a visible testament to the recent violence. *Frontline* spoke to people in the camps and in the lanes and bylanes of Khajuri Khas Extension, Brijpuri, Shiv Vihar and Karawal Nagar, some of the worst affected

T.K. RAJALAKSHMI

neighbourhoods, only to hear stories of disappointment, hopelessness and despair. People in these generally impoverished areas queued up for relief, both riot survivors and those not affected by the riots. Even a soap costing Rs.10 or a small packet of biscuits was received with gratitude. Precautions of social distancing to ward off COVID-19 infection made little sense.

The riot-affected areas are inhabited mostly by people working in the unorganised sector, self-employed people and daily wage workers: loaders; tailors; bakers; grocers; confectionery owners; painters; carpenters; scrap dealers; welders; rickshaw pullers; auto drivers; barbers; embroidery workers; wedding band musicians; electricians; petty shopkeepers who sold mobiles, electrical and electronic equipment, hosiery and garments; petty salesmen; mechanics and people working in auto service centres. The slightly better off among them, not more than a dozen in all, were owners of two-wheeler showrooms, auto service centres, footwear stores or medical shops. *Frontline* met two practitioners of Ayurveda, too, one in Shiv Vihar and the other in Khajuri Extension, whose shops had been looted and burnt.

Congested roads, narrow lanes, dwellings and establishments heaped together cheek by jowl, garbage mounds and open drains told a tale of neglect of the government in Delhi's underbelly, which contributes substantially to the economy. A Jan Swasthya Abhiyan team that had set up medical camps for riot victims found there was no primary health care centre or a mohalla clinic in densely populated Mustafabad. Volunteers and doctors of the team found themselves attending to the general population for common ailments.

Victims spoke to *Frontline* of losses ranging from Rs.1 lakh to Rs.15 lakh, of homes that had to be built from scratch, vehicles that had been burnt, and production units such as bakeries that had been destroyed. People who had to flee their homes suddenly in the night could

not collect the money they had at home. Some showed burnt remnants of cash in their torched homes. Some 125 motorcycles were recovered from a drain that cut across the entire area.

In Brijpuri, a footwear store and an auto showroom were ransacked and burnt. Haji Ajmeri, the owner of the four-and-a-half-floor high Faizal Footwear, the biggest footwear showroom in the area, was in deep shock. He refused to leave his shop and slept there amid the charred interiors. "We had all the brands. I have lost close to Rs.1.75 crore worth of goods in the shop and the godown, which was on the top floors," he told *Frontline*. Mohammad Zaid who ran some coaching centres in the Hindu-dominated areas of Brijpuri and Yamuna Vihar said that people were advising him to relocate. "There is a fear of economic and social boycott now," he said.

AFRAID TO RETURN

Most of the Hindus and Muslims in Shiv Vihar, the worst affected in the riots, had migrated from parts of Uttar Pradesh. Most of those who fled their homes in this neighbourhood in the intervening night of February 23 and 24 sought shelter in the nearby Muslim-dominated Mustafabad, where Haji Yunus of the Aam Aadmi Party defeated Jagdish Pradhan, the sitting MLA of the Bharatiya Janata Party, with a decisive margin. Mustafabad stands out as a densely populated Muslim-dominated area surrounded by the "mixed localities" of Bhagirath Vihar, Shiv Vihar and Karawal Nagar, where Hindus are numerically stronger. A few lanes in Shiv Vihar that were home to Muslims were targeted in the riots, and so were Muslim homes and shops in "mixed community" lanes. Survivors spoke of the "dangai" [rioters] wreaking havoc on the "Pachees Foota" (25-foot road), the Naala Road (road along the drain) and the lanes connecting these roads as the main areas of attack.

Phases 6 and 7 of Shiv Vihar were the worst affected. Witnesses told *Frontline* that the rioters gathered near a cremation ground at the



AT THE IDGAH RELIEF CAMP in Mustafabad.

Naala and targeted Muslim homes one by one. In lanes number 20 and 21, almost all the Muslim dwellings were attacked. Lanes 13, 14 and 23 were also attacked. Shops owned by Hindus but rented out to Muslims, displaying Muslim names, were looted and burnt. The tenants were unsure of receiving any compensation. At a people's tribunal organised by Anhad, Aman Biradari and others in Delhi, a saree shop seller named Naimuddin from Maujpur said he had suffered a loss of up to Rs.17 lakh. "It all happened because of Kapil Mishra," he said.

'EVERYBODY KNOWS'

"The rioters came from Karawal Nagar, Dayalpur, Gangapur and Johripur. Some may have come from beyond Loni [in Uttar Pradesh], which is 15 to 20 minutes from here by road," said a young man in Shiv Vihar. He and his friends mentioned Jagdish Pradhan, former BJP MLA from Mustafabad, and Nand Kishore Gujjar, sitting MLA from Loni, as the instigators.

Two shops owned by Hindus were burnt, one belonging to a restaurant owner and the other a grocery next to the Medina Masjid. The

restaurant owner, Ram Prakash, said he had lost goods worth Rs.14 lakh. A doctor, Amar Pal Singh, said his clinic, owned by a Muslim, was burnt. "I hope I will get some compensation," he said. Some better-off businessmen in Shiv Vihar, such as Mohammad Arif, suffered bigger losses. His year-old four-floor ready-made garment showroom was ransacked and burnt. He has received only Rs.25,000 as compensation. He claimed he had incurred losses running into Rs.15 to 20 lakh. "It started from lane number 20. My son was in the shop. He told me the shutter was being broken. I told him to escape from the side entrance," he said. "They came from across the drain."

According to several eyewitnesses, the rioters came from the side of the drain next to the cremation ground. They were stopped by Muslim men, and on February 24 also by paramilitary soldiers. But the peace was short-lived, and many people fled because they had no protection. On February 25, there was no one to stop the rioters. At 1 a.m. the "force" arrived and escorted those who had stayed back to Chaman Park. "Even though it is less than a kilometre from here, it felt like five kilometres that day," said Arif.

For four to five days, those who fled from Shiv Vihar stayed with

people who were from their community but whom they had not known before. Help in the form of rations and clothes were brought by several groups and individuals who reached out to riot victims, supplementing the efforts of the Delhi government. A Delhi solidarity and rehabilitation committee was formed, which included prominent individuals like Wajahat Habibullah, Brinda Karat and Harsh Mander, with the Delhi unit of the Communist Party of India (Marxist) as a nodal office for coordinating relief. Displaced families were resettled in a camp in Mustafabad with the joint efforts of the Delhi government and the Waqf Board. These were the families of people who did not have relatives in the city and who were mainly from the lower middle and working-class sections.

Asif, whose pedal rickshaw was burnt in lane number 17 in Shiv Vihar, is afraid to return. Father to three young motherless daughters (the eldest, Arsala, is 12), Asif fears for his family's safety. "We did not see who the rioters were. We left at 9:30 p.m. on February 25 and hid at Medina Masjid. It was only in the morning that we were taken to Chaman Park, and now we are here," he said. Asif came to Delhi, which he has made his home, from Gujarat eight years ago. Like many others in Shiv Vihar, he stayed on rent. His landlord was also a Muslim.

ECONOMIC HAVOC

Moiuddin's two-roomed dwelling in Shiv Vihar was blasted with a gas cylinder. He said his was the smallest dwelling in Shiv Vihar and he would require over Rs.2 lakh to rebuild it and restart his provision shop. He said that he was fearful that the police would pick him up, as they had been randomly arresting people from the area. "I went back to start rebuilding my house when some people in civil dress came, showed me a video, asked me to identify some people. They took my photograph too. I am afraid of even stepping out alone to answer nature's call," he said. His fears were not unfounded. Farah, a young woman

with four children, said her husband, Dilshad, had been picked up by the police and she did not know his whereabouts.

In the same camp was a 30-year-old daily wager, Imran, from lane number 14. He had a bandage on his head. "Forty nine stitches," he said, pointing to the bandage. He showed a photograph of his scalp with deep cuts, which had been stitched up. He was attacked by a mob as he returned home on February 24. He was among the few who survived. "I don't feel safe. I have two children, a wife and an old mother," he said. All the Muslim families in that lane had packed up and left. Imran said he earned around Rs.300-350 a day but he did not have work on all days of the month. With the riots, things had become even more uncertain.

Thirty-three-year-old Jamaluddin of House No. 508 in lane number 10 was the co-owner of a home-based bakery unit. He and his three brothers were in their village for a wedding when his Hindu neighbour, Billu, phoned him to say that his house-cum-factory unit had been broken into. Jamaluddin rushed back on his Bullet motorcycle and reached Shiv Vihar on the evening of February 27. He was close to his home when he was attacked and killed. The 10-year-old baking unit was looted and machine parts were stolen. The family was yet to come to terms with the tragedy. While Billu aggressively asserted that "outsiders" were involved, Jamaluddin's Muslim neighbours disagreed: "Local residents were involved. How would outsiders identify the Muslim homes?" Jamaluddin's younger brother, Kamaluddin, told *Frontline* that they were all daily wagers earlier and had set up the bakery unit 10 years ago. Muslim homes were easily identifiable as many had name plates or tiles with Quranic inscriptions on them. Some even wrote "Jai Shri Ram" on their doors to avoid getting attacked.

There were close to 30 bakery manufacturing units in Shiv Vihar, which supplied to shops and individual retailers. All those directly and indirectly dependent on these

units have suffered loss of livelihood. Most of the Hindus in the area belonged to the Pal community (herders) and were engaged in class four government jobs. The rioters, it was believed, came from nearby Karawal Nagar and Johripur and Loni and Bulandshahr in Uttar Pradesh. The majority were teenagers and men in their early twenties. Hindu establishments and homes at the Shiv Vihar Tiraaha (a junction of three roads) were also burnt. This place was known as the “border”, demarcating Muslim-dominated Mustafabad from Shiv Vihar and Karawal Nagar, both dominated by Hindus. The roughly 8-km stretch affected by riots had several temples and mosques. No damage to any temple in Muslim residential areas was reported.

The riots caused widespread economic havoc. In lane number 19, 12 Muslim homes needed to be rebuilt entirely. On an average, losses run up to Rs.14 lakh for every house that was looted and burnt. The government, however, announced a compensation of only Rs.5 lakh for completely damaged houses. Tenants who had suffered damage would get Rs.1 lakh, while landlords would get Rs.4 lakh. The amount is pathetically inadequate, especially when victims have also lost all earnings.

Government-appointed and independent surveyors are trying to estimate the damage. Irfan, a shop-owner in Khajuri Khas Extension, said: “We cannot leave the site of damage as the enumerators come here asking for details. Everyone notes down something or the other, but funds for reconstruction are not being released. What is there to verify? It’s all there, visible to the open eye.”

For damage to commercial properties, the compensation is Rs.5 lakh. For all families who suffered damage to household goods, an immediate relief of Rs.25,000 was announced. But many riot survivors told *Frontline* that they had not received even that. The only building where reconstruction work had started on a war footing was Arun Modern School in Brijpuri, owned by a former Con-

gress legislator. The compensation to families that lost an adult to the riots was Rs.10 lakh, which many felt was inadequate. Most adults who were killed were young men in their twenties and thirties and were breadwinners for their families.

Irfan’s Hindu acquaintances, Mukesh and Ishwar Chand, argued that for “every action, there would be a reaction”. Ishwar Chand, who claimed to have witnessed everything, said that “stoning began from lane numbers 4 and 5” and windows of Hindu establishments, including Mohan Nursing Home in nearby Yamuna Vihar, were broken. “Why didn’t you intervene when our shops were being burnt,” asked Irfan, to which Ishwar Chand had no answer. Other eyewitnesses said that Muslims tried to prevent the rioters from entering the lanes and stones were thrown in self-defence. No shop owned by a Hindu suffered any damage in this area, barring one Balaji Sweets. In lane number 5, Mohammad Ilyas’ five-floor house from where he operated a boutique was burnt.

ARSON AND LOOT

Hurma, a student at Maulana Azad Medical College, said her father sold readymade garments and the family had a godown in their house. On February 24, the family fled Shiv Vihar, leaving everything behind. “We have been in the camp for 22 days now,” said Hurma’s mother, Naseem, unsure of what lay ahead.

“I have lived in Old Delhi all my life, near the Sheesh Mahal,” said Hasmuda, a woman in her seventies. “I shifted to Shiv Vihar 15 years ago. I regret it now. We sold everything to settle here. We have to go back, but the people look at us with anger. I am not blaming anyone as I have to live and die among them only. My Hindu neighbours call me Amma, but none have bothered to inquire about my whereabouts,” she said with a smile.

Shabnam, a tenant from lane number 21, was determined not to return. “They burnt my husband’s auto-rickshaw worth Rs.5 lakh. They looted everything but did not touch the house as it belonged to a Hindu,”

she said. Shabnam, her husband, Ikramuddin, and their little son fled with four other families to house No. 339, but the rioters burnt it. Several bikes were set on fire. No compensation has been announced for these, though some compensation has been declared for damaged rickshaws.

Nasiruddin had taken a loan to buy a house in Shiv Vihar. He showed burnt notes of Rs.500, cash that had been kept at home. Some families in lane number 18 said their livestock had been stolen.

Similar incidents of damage and loot took place on the 33-foot road in Karawal Nagar, formerly represented by the BJP’s Kapil Mishra. The Gokulpuri market of tyres, vehicle repair shops and tarpaulin was gutted along with a dozen tractors that were parked for repair. The losses run into crores of rupees. In Garhimendu village near Bhajanpura, 25 to 30 homes were looted and burnt.

In Khajuri Khas area, nearly 200 shops and homes were burnt. The rioters knew whom to target. Lane numbers 4, 5 and 29 were targeted as they had Muslim homes. A shop with the board “Maharashtra Band”, owned by Md Sharif, was looted—the instruments and outfits of the wedding band players were taken away—and burnt. Two others selling the same things were burnt and looted. Sharif said that they had brought down the shutters of the shops on February 24. “We sought refuge in Bihari Masjid and in Chandu Nagar in the safety of our community members,” he said.

GHETTOS AND GATES

The violence ripped apart social and economic relationships between the two communities. Muslims who had lived for more than three decades in mixed localities were afraid of returning as they were aware that some of their Hindu neighbours were complicit in the riots. Some Hindus had also sheltered their Muslim neighbours and helped them to escape, but such instances were few. In all the areas revisited by *Frontline*, residents were installing iron gates at the entrance of every lane, reflecting the new fears. □

Dog-whistle politics

The Yogi Adityanath government in Uttar Pradesh has resorted to **naming and shaming activists** in the State in order to further its plan to delegitimise dissent. BY **DIVYA TRIVEDI** AND **VENKITESH RAMAKRISHNAN**

IN a blatant display of oppressive state propaganda, the Yogi Adityanath-led Bharatiya Janata Party (BJP) government in Uttar Pradesh has put up 100 posters at busy intersections in the capital Lucknow which contain the photographs and addresses of 60 people who were served recovery notices for allegedly indulging in violence during the anti-Citizenship (Amendment) Act (CAA) protests. They include civil society activists and members of the Muslim community; many of them had nothing to do with the protests, which the government cites as the provocation for its extralegal move. In fact, the protests came up spontaneously in different parts of the country, including Uttar Pradesh, in December last year in the wake of the CAA. In the police excesses that followed, the State witnessed the detention of 1,640 persons, including minors, and the registration of 450 cases, 27 of these under the Gangster Act.

Rajeev Yadav of Rihai Manch, which has collated data on police excesses, stated that at least 23 people had been killed in these incidents. Samajwadi Party (S.P.) president and former Uttar Pradesh Chief Minister Akhilesh Yadav also asserted that almost all the deaths were from police bullets and that by putting up these posters, the Uttar Pradesh administration and the police had demonised the very victims of violence.

The posters played a role in defining the “enemy of the State” as a



NAND KUMAR/PTI

CHIEF MINISTER Yogi Adityanath. His government has passed an ordinance that sanctions claim of damages from protesters.

“Muslim” or anyone who opposed the government’s policies. It further sought to implant this “enemy of the State” impression in the minds of the public which would pass them daily on the streets, on their way to work or school. This fulfilled the dual purpose of strengthening the mobilisation of hatred against the “enemy” by the many Hindutva-oriented outfits of the Sangh Parivar on the one hand and the setting up of a public mechanism to intimidate those opposing the CAA on the other. The chain impact of all this, argued many activists of the Sangh Parivar, would also influence many with anti-CAA positions to withdraw their support to the protesters for fear of getting penalised and humiliated like them.

EXTRALEGAL MOVE

The blatant extralegal nature of this government operation was highlighted at various levels from Day One. Several legal experts, politi-

cians and former bureaucrats pointed out that there was no law or rule in Indian criminal procedures or State laws supporting this kind of action. The momentum of this debate resulted in the *suo motu* cognisance of the matter by the Allahabad High Court.

On March 8, Chief Justice Govind Mathur and Justice Ramesh Sinha convened a special hearing and ordered the Yogi Adityanath government to take the posters down. But the State government persisted with its plans and refused to comply with the court order. It not only appealed against the High Court dictum in the Supreme Court but also issued an ordinance invoking the Gangster Act against those who were portrayed in the posters.

Sources in the State bureaucracy revealed that several plans were frenetically being advanced to overcome the High Court order immediately after it came out. The Gangster Act was finally identified as the most potent instrument. However, doubts still persist in the bureaucracy whether this move would stand up to legal scrutiny. Indications are that the Chief Minister has personally directed the Legal and Home departments to continue efforts to rustle up a proper legal defence for its adventurist exercise.

Even as these efforts are on, the ordeal of those named and shamed in the posters continues. By prominently exhibiting the details of these individuals, the government has not only painted them as criminals but

also exposed them to danger. Hindutva vigilantes and desperadoes among them could well take the government exercise as a signal to take the law into their own hands and “punish” those seen in the posters. On one poster, under Hazratganj thana, those showcased include activist Sadaf Jafar, retired Indian Police Service officer S.R. Darapuri, Shia cleric Maulana Saif Abbas, human rights defender Mohammed Shoaib, theatre personality Deepak Kabir and several ordinary Muslim men. The State claims Rs.64, 37, 637 collectively as damages from 28 of them.

In Muzaffarnagar, notices were sent to 53 Muslims for a recovery of Rs.23.41 lakh. “When a person is social or political, they find the courage to fight injustice. But these are ordinary non-political people and are easily scared,” Usman Ahmad of the Rashtriya Lok Dal told *Frontline*. Apparently, on December 20, 2019, a day of Jumma, or Friday, prayer, the Muslims of Meenakshi Chowk, a predominantly Muslim neighbourhood, had gathered for prayers. It was only after BJP Member of Parliament Sanjeev Balyan visited the local police station and demanded action that the police targeted the area and blamed its people for rioting.

“Actually, the administration is wary of pursuing the cases as they know they are without any substance and they were asking people to sign notes stating they were not involved in the violence,” said an activist, on condition of anonymity.

In Lucknow, 15 boys were picked up from Parivartan Chowk, which is close to a protest site, while they were sleeping at night. They were brutally beaten up in police custody. They were daily-wage labourers working in eateries around the area. Some of them, who hailed from Assam and West Bengal, were branded as Bangladeshis by the administration, thereby justifying their arrest. It is to be noted that Bangladeshi Muslims were being designated as “enemies of the state” under the right-wing regime.

By generalising false claims



A BILLBOARD installed by the authorities displaying pictures, names and addresses of people accused of vandalism during protests in December against the CAA, in Lucknow on March 9.

about the entire Muslim community—that its members destroyed public property, were troublemakers or anti-nationals—the Yogi Adityanath government is trying to exploit pre-existing biases against the minority and further entrench the hatred against them. This trope is not very different from what was done in Germany under Hitler.

GENERALISING FALSE CLAIMS

In fact, posters were the Nazis’ favourite mode of hate propaganda. Posters across Germany depicted Adolf Hitler as an angelic hero and Jews as ugly and reprehensible, which became a precursor to the Final Solution. In a similar pattern, in India, too, the Hindu Rashtra is glorified, and its leaders like Prime Minister Narendra Modi and Yogi Adityanath are provided cult status while Muslims and their supporters are systematically demonised. These posters are part of the propaganda that extends from rewriting school textbooks to producing films that promoted stereotypes.

Narrating her ordeal once she was arrested, Sadaf Jafar said she felt like a Jew in Hitler’s Germany. She was picked up while making a video of the police turning a blind eye to Sangh Parivar rioters. Thereafter, she was slapped, abused with communal slurs and kicked in the abdomen by a policeman. “It almost felt as if they wanted to kick the womb that begets Muslim children,” she told *Frontline*. The doctors at the hospital made communal remarks, ignored her bruises and sent her back to custody after alleging that she was doing *natak* (drama) of feigning illness so she could lie down in the comfort of a hospital.

Sadaf Jafar is known in her family circle as someone who will, no matter the time or place, pick up accident victims and transport them to hospital for treatment. She said it did not matter to the current dispensation whether she was a practising Muslim or not, it simply connected her with her immediate identity of being a Muslim. “I am everything that Yogi and his kind detest. I am a

Muslim, a woman, a firm believer in the Constitution and the rule of law and ask uncomfortable questions to the government. They simply cannot tolerate this combination,” she said. She was released on bail after nearly 20 days as the police could not bring anything against her in a court. She said she would challenge the allegations against her in every legal avenue available and not get intimidated by the scare tactics.

S.R. Darapuri, also named in the posters, was picked up by the Uttar Pradesh police on December 20 while he was still under house arrest after he posted on Facebook a photograph of himself holding a placard “Save Citizenship” outside his house.

“At 11 in the morning, the police called me down and took me to a thana. But the arrest was shown from some other place at 7 in the evening. My detention was totally illegal. They said they had arrested 39 people and I was the 40th. They did not give me food or a blanket, and didn’t let me call a lawyer or record my statement. The magistrate also did not listen to me and sent me to 14 days’ judicial custody. Apart from Mohammed Shoaib, who is an advocate, and I, everybody else there

was badly beaten. The Muslims were beaten twice. Many of them were picked up randomly from shops, restaurants, streets and homes. The RSS [Rashtriya Swayamsewak Sangh] cadre, who were the actual rioters, were all released once somebody called from the BJP office. I saw first-hand the shocking communalisation of the police that has taken place,” he told *Frontline*. Under the Yogi Adityanath government there was an open communal and autocratic culture that had come to the fore, he added. He was being targeted for raising his voice against fake encounters in the State, which ran into thousands, he said.

“They have nothing [to prove] against me. I have not given a call for any protest. There is nothing on my social media handles wherein I have instigated agitators. In fact, my post condemned the violence of December 19. I was not named in the FIR [first information report] or first statement of the complainant. My name was added subsequently. It is a well-planned operation to terrorise and dishonour me and to shut my mouth as a human rights activist. I am an eyesore for some policemen. I am the vice president of the PUCL

[People’s Union for Civil Liberties] in Uttar Pradesh, which had filed a PIL [public interest litigation] petition in the Supreme Court in 2018 asking for an SIT [special investigation team] to be constituted to probe the encounters,” he said.

POLICE PERSECUTION

Police persecution in Uttar Pradesh has become an ongoing and permanent ritual in the past few months as people, especially Muslims, are randomly picked up on a daily basis. For instance, the police detained two people who had come to deliver food to the women sitting on the Ghanta Ghar protest site in Lucknow and took the car in which they came. When the women asked the police what their fault was, they were told to stop videorecording the detention.

Countering these posters, the Congress and the S.P. also put up posters of BJP legislators and Ministers charged with grievous offences, amongst them rape accused Kuldeep Sengar, Chief Minister Yogi Adityanath, Keshav Prasad Maurya, Radha Mohan Das Agarwal, Muzaffarnagar riots-accused Sangeet Som, Sanjeev Balyan, Umesh Malik, Suresh Rana and Sadhvi Pragya. They asked when a recovery would be made from these people. Congress workers Ashwani Yadav and Sudhanshu Bajpai were arrested for this and reportedly beaten up in custody.

Justifying the harsh measure, the Chief Minister said in the State Assembly that these individuals were more dangerous than the corona virus, which was causing a pandemic across the globe. Talking to *Frontline*, Sadaf Jafar asked whether by making such statements the Chief Minister intended to throw them to the wolves.

“We are sitting on a ticking time bomb,” she said. By mentioning their addresses all over the city, the state had exposed their family members to the risk of being attacked. Questioning the justification for such an act, Sadaf Jafar asked whether the Mumbai terror attack convict Ajmal Kasab’s parents, too, had been killed for his crime.

To the activists, given the polit-



A PROTEST against the CAA and the NRC near the Ghantaghar in Lucknow on January 20.

ical climate of the country and the spate of mob lynchings which has gone on with impunity ever since the BJP came to power, the risk of being lynched is very real. Student activists Umar Khalid and Kanhaiya Kumar barely managed to escape murderous attacks on them after a section of the television media branded them enemies of the state. In such cases, the regime need not send an assassin, but all the recipients of the media message become potential assassins, doing the bidding of the state. These were not empty polemics but that which enraged the masses against a community and specific individuals and in the end justified whatever befell them, including arrests, murders and lynchings. The hate propaganda was turning India into an aggressive polity with violence as the norm in a way that the authorities could never be held responsible for them, they said.

According to the procedure in law, a crime has to be proven before any punitive measures can be taken. “We are not convicted yet, only accused. First prove our crime, otherwise how is it that you are penalising us?” Sadaf Jafar asked.

On March 8, a Sunday, a bench of the Allahabad High Court comprising Chief Justice Govind Mathur and Justice Ramesh Sinha convened a

special hearing and took *suo motu* cognisance of the posters and ordered the Yogi Adityanath government to take them down. It said that the state action was an “unwarranted interference in privacy of people” and violated Article 21 of the Constitution. The Uttar Pradesh government challenged this order in the Supreme Court. On March 12, a vacation bench of the Supreme Court comprising Justices U.U. Lalit and Aniruddha Bose told the State government that action should be taken against the rioters but as of now there was no law that backed such state action. They did not stay the High Court order but referred the matter to a larger Supreme Court bench.

THE ORDINANCE ROUTE

The very next day, the Uttar Pradesh Cabinet approved the Uttar Pradesh Recovery of Damage to Public Properties Ordinance, 2020, which sanctioned such state action. Section 19(2) of the ordinance states: “As soon as the order of recovery for damage has been passed the property of the respondent to be attached, the authorities shall be directed to publish the name, address along with photograph with a warning for public at large not to purchase property attached.” According to the ordin-

ance, a claims tribunal will be set up and its decision will be final, which cannot be challenged in any court.

However, the ordinance itself was challenged through a PIL petition in the Allahabad High Court. According to Darapuri, the ordinance cannot be applied to their case with retrospective effect and they would challenge it in a court of law. Meanwhile, given the pending hearing in the Supreme Court, the Allahabad High Court extended the time given to the Uttar Pradesh government to file a compliance report on April 10.

It is an illegal process in its entirety, said Rajeev Yadav. So far, with the exception of a cheque for Rs.5 lakh that community members had handed over to the authorities in Bulandshahr, no recovery of any property across the State had been initiated, he told *Frontline*. “Compensation is a state responsibility, they cannot pass it on to individuals. This defies common sense and will not hold when challenged in a court of law. They want to crush the protests against the CAA at any cost,” he said.

Despite repressive measures, the CAA protests across Uttar Pradesh showed no signs of dissipating. The government needed effective ways to curb them and influence the attitudes of people towards the CAA and it hoped the posters would help build consensus around delegitimising dissent.

In *Mein Kampf*, Hitler wrote that to achieve its purpose, propaganda must “be limited to a very few points and must harp on these in slogans until the last member of the public understands what you want him to understand by your slogan. As soon as you sacrifice this slogan and try to be many-sided, the effect will piddle away.” The Sangh Parivar has already penetrated most of the Indian media, commands the digital media space, controls and spreads disinformation via social media platforms and effectively uses mass media such as WhatsApp and TikTok. The posters are one more medium that simplifies its task in the propaganda machinery. □



WILDLIFE

BREATHTAKING BOTSWANA

A 700-kilometre drive through protected wildlife areas of the landlocked country in southern Africa provides a window to the varied range of animals there, perhaps like nowhere else in Africa.

Text by A.J.T. JOHNSINGH and S. MURALI. Photographs by A.J.T. JOHNSINGH

THE red hot ball of the setting sun was sliding behind an umbrella thorn tree. It was August 31, 2019. We, 12 wildlife enthusiasts from India, were standing in line at the immigration office in Kazangula, Zimbabwe, waiting to get our visa to enter Botswana as we had planned to spend 15 days visiting different wildlife areas in the country. Earlier in the day, we made a short visit to the Victoria Falls National Park in Zimbabwe and, while a female bushbuck (*Tragelaphua scriptus*) resting amidst the bushes watched us, paid homage to the statue of the explorer and missionary Dr David Livingstone. Later, while waiting for some of our colleagues to return from the helicopter ride they had taken to see the falls and the surrounding landscape from the air, we observed three warthogs (*Phacochoerus africanus*) feeding on tender grass and rooting for tubers on bended knees near the helipad. It is Africa's only pig species and is active during the day. After we got the visa, we were allowed to enter Botswana only after we had stepped on a disinfectant mat, which is a precaution the government of Botswana takes to control the spread of foot-and-mouth disease to cattle. After mining and wildlife tourism, beef export contributes significantly to the country's economy.

Our night halt was in Kwalape Safari Lodge in Kasane. The lodge is close to the Chobe National Park and is surrounded by an electric fence to keep animals away. In the morning, we observed that the most common visitor to the camp was a southern yellow-billed hornbill (*Tokus leucomelas*), which was totally habituated to visitors. Our plan was to visit to the Chobe National Park (11,700 sq. km), the Moremi Game Reserve (5,000 sq. km) and the Kalahari Game Reserve (52,800 sq. km).

Botswana is a landlocked country in southern Africa covering an area of 5,82,000 sq. km. It has an estimated population of 1.5 million people and a cattle population of 1.7 million, and its protected areas cover about 18 per cent of its land. These protected areas are part of the 5,20,000 sq. km Kavango Zambezi Transfrontier Conservation Area, which includes protected areas of neighbouring Angola, Namibia, Zambia and Zimbabwe.

The Botswana government has adopted a low-volume, high-paying tourism policy, which restricts the number of beds and campsites in national parks and game reserves. Tourist groups can stay only in the camping sites, and the management is strict about entry and exit timings.

Around 10 a.m. on September 1, we entered the Chobe National Park via the Sedudu gate, its main entrance, which is just 3 km from Kasane town. The animal that immediately caught our attention was an adult South African giraffe (Cape giraffe, or *Giraffa camelopardalis*), which was towering over the shrub vegetation around it. The neatly pruned woolly caper bushes (*Capparis tomentosa*) nearby point to the fact that giraffes have a liking for the species. Adult giraffes seldom browse below the two-metre mark, and their mouths, lips and tongues are highly specialised to feed on a variety of browse, be it spiny or thornless. They are fond of feeding



A BIRD'S-EYE VIEW of the magnificent Victoria Falls, which is on the border between Zambia and Zimbabwe.

MIKE JOHNSINGH



A YOUNG MALE LEOPARD, glowing in the golden light of the setting sun.

on the young fruits of the sausage tree (*Kigelia africana*), which may be at a height of 6 m. Bats are attracted to this species, which has attractive green foliage and blood-red flowers that bloom at night on long rope-like stalks, for its nectar. It has been introduced in many places in India.

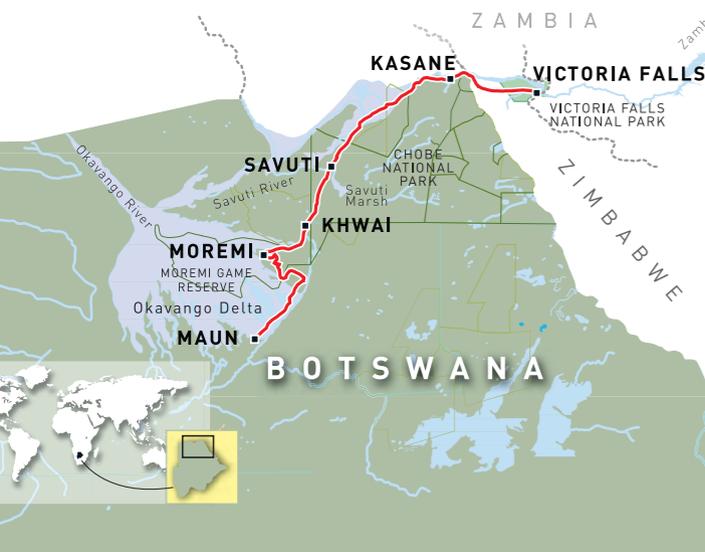
In 2016, the giraffe population in Africa was estimated at 31,500, of which Botswana had about 13,000. After local extinctions in many places, the South African giraffe has been reintroduced in many places and is surviving. Yet, the International Union for Conservation of Nature (IUCN) has moved the species from a status of “Least Concern” to “Vulnerable” in its Red List of Threatened Species report.

A study in Tanzania found that when there is a decline of primary prey—black wildebeest (*Connochaetes gnou*) and plains zebra (*Equus quagga*)—for lions (*Panthera leo*), giraffe calves become exceedingly vulnerable to lion predation. In Chobe and the Moremi Game Re-

serve, we saw 25 giraffes but only two calves with their mothers.

Our drive to the Chobe riverfront was along a road that runs parallel to the river. It was slow going as the road was sandy and several elephants (*Loxodonta africana*), including some magnificent bulls, crossed the road to go to the river. They paid little attention to our vehicles. The Chobe National Park is reported to have about 50,000 elephants, and the Great Elephant Census, which was completed on August 31, 2016, reported that Botswana had about 1,30,000 elephants. Satellite data show the distribution of elephants in and around Botswana: in 2005-10, a good number of elephants were found outside Botswana in Angola, Zambia and Namibia, and in 2011-14, most of them had taken refuge in Botswana where they are fairly well protected.

But in a country dominated by arid landscapes that are frequently battered by drought, there is not enough room for all the elephants, and their impact on the habitat is enormous. Everywhere we went, we saw the skeletons of dead trees debarked and killed by elephants. Human-elephant conflict—crop raiding and the killing of people—is a serious problem that is on the rise. Poor people living in elephant landscapes rightly demand that elephant numbers be controlled. This has forced the government to allow the sport hunting of bulls. It has planned for the hunting of about 200 bulls in the first year, which will fetch the government about Rs.60 crore. Besides the trophy fee, hunters will also pay a significant amount of money as guide fees and for their stay in resorts, which could be for as long as three weeks. Selling the meat for human consumption and as pet food and the sale of skins will also bring in a reasonable amount of money. The killing of the bulls will not reduce the ele-



ONE OF THE TWO SIGHTINGS we had of a giraffe with its young.



FIVE CUBS PLAYING
with a massive lion, maybe
their father, at Savuti.



A CAPE BUFFALO BULL,
a formidable but favoured
prey of the lion.

phant population as the bull population is in the thousands, but the money can be used for the welfare of the people living there. Botswana takes poaching seriously; its soldiers patrol the territory, but they have to cover long distances, and poachers are greatly incentivised as the money involved in wildlife trafficking is enormous.

Botswana lions are known to kill calves and young elephants, yet we saw 28 calves and a total of 160 elephants. Interestingly, while elephants often walked past the tented camps or fed or drank water near them, they did not raid them, which is a common occurrence in India. It is difficult to explain, but one likely reason may be the cleanliness of the camps: over the years elephants may have learnt that there is very little for them to eat in the camps. We had seven sightings of lions in Savuti, which is in the heart of the Chobe National Park, and saw 20 lions, including cubs. One remarkable sighting was of a female with two small cubs and a kill of kudu (*Tragelaphus strepsiceros*) lying nearby. The sun was quite warm, and the lion was resting in the scanty shade. Baker, our driver and guide, told us that the lioness had to travel 5 km to get water, which lactating lionesses need in plenty. It appears that even Savuti lions are able to go without water for a certain period of time, but the climax of this capability is achieved by the Kalahari lions.

One evening, when the forest was bathed in the golden light of the setting sun, we saw five cubs playing with a massive lion, maybe the father. When one cub approached another lion lying some 15 m away and started playing with it, the “father” lion aggressively rushed towards the other male, which made it run away. One morning, in a marshy area, we saw a large male feeding on the carcass of a Cape buffalo (*Syncerus cafer*). Two lionesses and three cubs were waiting patiently to feed on the kill, which the lion left only after eating his fill. The cubs went next, followed by the lionesses.

One major difference in the social organisation of most African and Gir (in Gujarat) lions is that male coalitions of the latter join the prides only when there is a large kill or the females are in oestrus. African male lions are part of prides. This difference is due to the average weight of the prey lions kill. In Gir, the most commonly killed prey is cheetah, whose average weight is around 40 kg and, therefore, will not provide enough meat for a female group consistently accompanied by males. In Africa, the average weight of the prey is around 150 kg.

It is often said that the difference between an African and a Gir lion is the presence of a belly fold in the Gir lion. Other than the British zoologist Reginald Innes Pocock (1863-1947), no one had talked about the possibility of



AFRICAN WILD DOGS in the Moremi Game Reserve. The species is one of the four pack-hunting canids of the world.



A PLAINS ZEBRA and a group of elephants.

MIKE JOHNSINGH



TREES DEBARKED AND KILLED by elephants. Their impact on the habitat is enormous.



THE ACACIA TREE, on which the sociable weaver builds its nest, faces a great threat from elephants.

African lions having the belly fold. We were pleasantly surprised to see a fine male lion in Savuti with a clear belly fold.

The African wild dog (*Lycyon pictus*) is one of the four pack-hunting canids of the world, the other three being the Asiatic wild dog, or dhole (*Cuon alpinus*); the wolf (*Canis lupus*); and the South American bush dog (*Speothos venaticus*). According to the IUCN, the status of the African wild dog is endangered as it has disappeared from 25 of the 39 countries where it occurred in the past, and its present population is confined to eastern and southern Africa. It is said that the population estimation of 3,000 to 5,500 dogs is unreliable. The largest subpopulations might well be below 250 adult animals. The African wild dog population, like that of the dhole, fluctuates because of diseases such as rabies, mange and canine distemper, which are largely contracted from free-ranging dogs.

We were lucky to see the dogs both in Savuti and Moremi, and in both the places one or two individuals of the pack had been radio-equipped so that their ranging patterns could be studied. In Savuti, the pack was resting in the shade; in Moremi, it was on the hunt and was not easy to follow as cantering dogs can reach speeds of close to 10 km/hr. This is one of the species in Africa on which extensive research has been carried out. The ecological role of the wild dog is to weed out unfit animals from prey populations. Since the dogs occur in a group, they boldly trot through the savannah where there are lions and leopards (*Panthera pardus*), the way dholes saunter through the forests where there are tigers (*Panthera tigris*) and leopards. We had four sightings of leopards: one in Savuti and the rest in the Moremi Game Reserve. One young leopard was with a kill of a small animal under a large bush, and the other two, seen in different places, were comfortably stretched out on branches up in trees,



TSESSBE ANTELOPES, which weigh between 125 kg and 140 kg, are suitable prey for the lion.



A ROAN ANTELOPE (MALE), a rare sighting.



A GREATER KUDU eating flowers of the *Capparis* species.

basking in the soft light of the evening sun. Leopards are beautiful animals, and they look even more gorgeous in the golden light of the evening sun. The presence of climbable trees is important for their survival in a habitat where there are a good number of lions. Wild dogs also harass them, forcing them to go up trees.

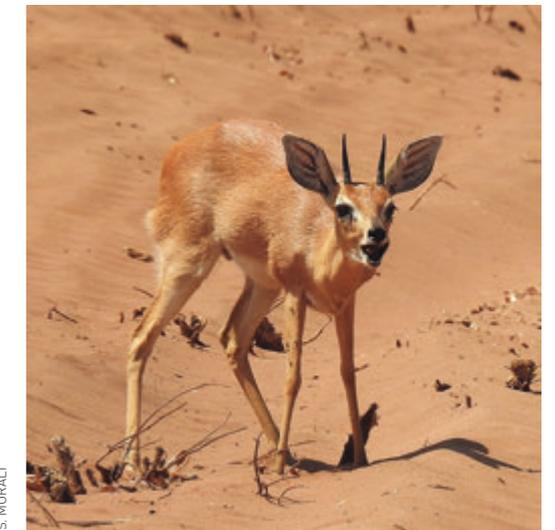
During the drive, we saw nine species of antelopes (Botswana has 22 species). The most graceful among them is the impala (*Aepyceros melampus*), which is commonly seen in Chobe and in the drier and more forested tracts of the Okavango Delta. It weighs around 40 kg. Although it can survive without drinking water, the impala prefers to live near water and is largely absent from the Kalahari, where its place has been taken by the springbok (*Antidorcas marsupialis*). Their small size makes them ideal prey for the cheetah (*Acinonyx*

jubatus). The tsessebe antelope (*Damaliscus lunatus*), which weighs between 125 kg and 140 kg, is suitable prey for the lion. We saw more of this antelope in the initial part of our drive from Savuti to Khwai, in the acacia woodlands. Another beautiful antelope we saw, more along the Khwai river than elsewhere, was the red lechwe (*Kobus leche*), which weighs between 80 kg and 100 kg. It needs dry land on which to rest but is otherwise adapted to life in the seasonal floodplains that border lakes and rivers.

But for the white necklace on the upper part of the neck and white ring on the rump, the sudden sighting of a female common waterbuck (*Kobus ellipsiprymus*) in its grassland habitat, with its large ears, may make wildlife enthusiasts from India think they had seen a female sambar deer. Waterbucks need to drink regularly, so they



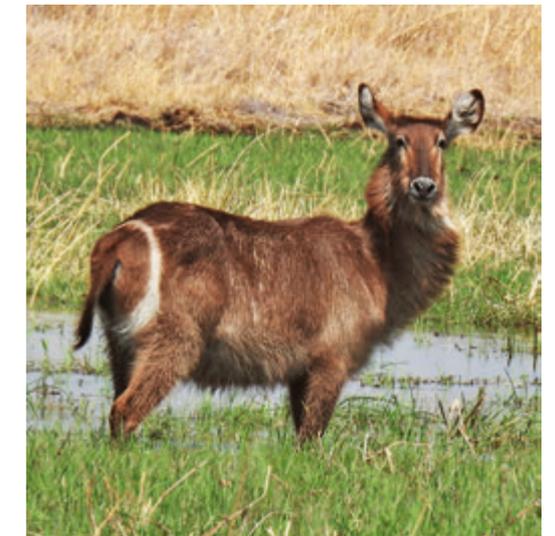
THE IMPALA, the most graceful of Botswana's 22 antelope species.



THE STEENBOK, one of the smallest antelopes in Africa, weighing in at 10 kg.



THE WILDEBEEST is found throughout the country and is a favoured prey of the lion. (Right) The female waterbuck looks like a female sambar except that the latter has no white ring on its rump.



usually do not stray far from water and graze on short, nutritious grasses. We saw more of this antelope, which can attain a maximum weight of 270 kg, along the Khwai river and near the Okavango Delta. We saw the steenbok (*Raphicerus campestris*), one of the smaller antelopes of Africa, which weighs around 10 kg, in several places that are dry.

In Botswana in the middle of the 20th century, the blue wildebeest (*Connochaetes taurinus*) was the most numerous large herbivore, forming herds estimated at a quarter of a million individuals. Although it is still found throughout Botswana, its numbers have fallen drastically. We saw eight of these antelopes while travelling from Savuti to the Khwai camp. Since adults weigh more than 200 kg, it is a favoured prey of lions. We saw many kudus in Savuti and, closer to the Moremi Game Reserve,

three of the very rare roan antelopes (*Hippotragus equinus*). The male sable antelope (*H. niger*) with its jet black body, white face, underbelly and rump, and long curved horns is a strong contender for the title of Africa's most beautiful antelope. While travelling from Chobe to Savuti in the gathering darkness, we had a fleeting glimpse of a male sable before it turned and ran away from the road on seeing our vehicle.

Along with the elephant, the lion and the Nile crocodile (*Crocodylus niloticus*), the hippopotamus (*Hippopotamus amphibious*) stands out as one of the most dangerous animals of Africa. It spends most of the day submerged in water but emerges at night to graze on the shore. Being strongly territorial, the dominant male of the group, usually around 10 in number, will defend its territory to the death. We saw a total of 50 of them in



AN ADULT AFRICAN elephant and a black-backed jackal at an artificial waterhole in Savuti.



THE SUPPORT STAFF (from left), Teenage, Baker (driver and guide), GG and Gottyma, the cook.

Chobe, Khwai and the Okavango Delta. We saw nearly 20 plains zebras. It weighs around 320 kg and is an ideal prey for the lion. It often mixes with the wildebeest, and together they often form large herds. We saw about 40 buffaloes, mostly in Moremi near the Okavango Delta as they are heavily dependent on water. Like the gaur (*Bos gaurus*) of Asia, large herds of buffaloes are fairly peaceful, but solitary old bulls can be very nervous and aggressive. The buffalo, which weighs around 700 kg, is one of the lion's favourite prey animals.

We also saw some chacma baboons (*Papio ursinus*) and vervet monkeys (*Cercopithecus aethiops*), and although they are capable of stealing from the tents, we did not suffer any loss at the hands of these monkeys. Several times, we saw honey badgers (*Mellivora capensis*), also known as ratel, which weigh around 12 kg, coming close to our camps at night. It has been reported that it has lost

its fear of people and started scavenging from safari camps.

We saw about 50 species of birds, prominent among them being the southern carmine bee-eater (*Merops nubicoides*), the go-away bird (*Corytherixoides concolor*), the helmeted guinea fowl (*Numida meleagris*) and the marabou stork (*Leptoptilos crumeniferus*), which is closely related to Asia's critically endangered greater adjutant (*L. dubius*) and the southern ground hornbill (*Bucorvus leadbeateri*). Among the above five species, the ground hornbills are in the IUCN's category of "Vulnerable to Extinction".

We had all the above wildlife sightings during our 700-km drive from the Victoria Falls to Maun in Botswana, which also includes the drives within wildlife areas. Surveys indicate that Botswana, of all African countries, provides tourists with an overall top-quality

safari experience, and as a result, in 2016, 2.6 to 2.7 million tourists visited the country. We could sense discipline in the country in its efforts to manage wildlife.

We saw an abundance of the inedible and strong-smelling wild sage (*Pechnel-Loeschea leubnitziae*) in the Okavango Delta and Savuti. It can reduce the habitat quality for ungulates the same way the *Lantana camara* does in India. We hope that the dedicated people of and the Government of Botswana will be able to save their precious wildlife and its habitat for posterity. □

A.J.T. Johnsingh is with the Nature Conservation Foundation, WWF-India and the Corbett Foundation. S. Murali is a retired professor of Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu. The authors thank Madhavi Sethupathi for reading through the article and Mervin Johnsingh for editing the pictures.

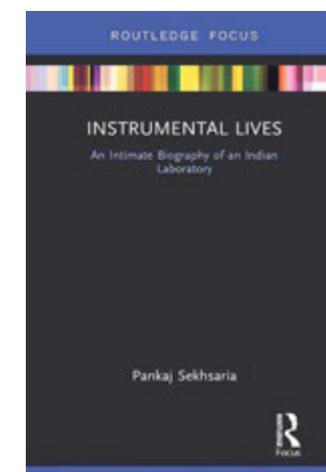
State of labs in India

The book gives an insight into the state of laboratories in India and scientific research and innovation done in them. BY LAWRENCE SURENDRA

THE reference in Economic Survey 2020 to the integration of “Assemble in India for the World” with the now-forgotten “Make in India” slogan is a good starting point to review this work on the state of scientific research, innovation and laboratories in India. Pankaj Sekhsaria’s seminal research work, published as *Instrumental Lives*, is an opportunity to understand what is happening in Indian laboratories. Going beyond the government’s rhetoric and policy statements is key to knowing the state of scientific research in the country.

“Make in India”, unveiled in September 2014, has been almost laughed out of circulation by international economists, who, in an era of international production networks, found the slogan strange. Now, in 2020, we have “Assemble in India for the World”. Against the background of China’s achievements as a factory of the world, is it one more slogan by the Narendra Modi government to mask the sequential failures in this area?

Finance Minister Nirmala Sitharaman, in her recent Budget speech, identified “two cross-cutting developments”: “a) proliferation of technologies and b) India having



Instrumental Lives
An Intimate Biography of an Indian Laboratory

By Pankaj Sekhsaria
Routledge, 2019

Pages: 148
Price: Rs.695

the world’s highest number of people in the productive ages, 15-65”, adding that “this combination is special to contemporary India”. It was embellished with the following statement: “The efforts we have made in the last five years and the energy, enthusiasm and the innovation of our youth are the ignition required to push forward.”

What would be the basic requirements to acquire the skills and augment the human capital that can reap the benefits of “Assemble in India for the World”? Also, can public policy be divorced from education, skilling and research in educational institutions and laboratories? This has to be viewed in the context of the reduction in allocation for education in the Budget and the open-

ing of the sector to foreign direct investment.

When every policy step is in the direction of dismantling public education, questions do arise, especially about the relationship between the state and the market. The author does address these questions in his research. It is a unique work on a laboratory that is now defunct.

Interestingly, from a public policy perspective, the research for this book started in 2010 and traversed the Science, Technology and Innovation Policy of 2013, the “Make in India” slogan and the “Technology Vision 2035 (TV 2035)” document released in 2016.

MILESTONES

We know from the subtitle that the book relates to a laboratory, basically two

laboratories, one working on scanning tunnelling microscopes (STMs) and the other on scanning force microscopy (SFM), at the physics department of Savitribai Phule University, Pune. These were, possibly, “the indigenous and in-house creation of among the earliest, if not the first STMs and atomic force microscopes (AFMs) in India”.

The book is the outcome of a study by the author on one of the laboratories as part of his six-year doctoral research spanning five nanoscience laboratories; except for one in the footnote, there is no mention of the other four laboratories.

In the second chapter, titled “1986-2014: Making of the STM”, Sekhsaria makes a brief historical account of Dr C.V. Dharmadhikari’s foray into constructing an STM and foregrounding the global context that includes the award of the Nobel Prize in Physics in 1986 for the successful development of the STM (which was invented in 1981). It is the development of such instruments that spawned the now-expanding field of nanoscience. By an extraordinary coincidence, it was also in 1986 that Dharmadhikari’s STM journey began, not because of the Nobel Prize but because of the coming

together of “probe microscopists”, whom Sekhsaria refers to as an “Instrumental Community”, using a term developed by Cyrus Mody, a historian of science and technology (S&T) at Maastricht University.

Dharmadhikari’s recruitment to the community was “integral but not central”: “Integral, because this was the community that became his primary reference; not central, because he did not seem to have had any significant influence on the community or its development and also because he remained on the geographical margins of the community that was located primarily in Europe and North America.”

Although Dharmadhikari’s contribution was acknowledged only marginally in the scientific community in India, what he accomplished was significant in the annals of science in India, given that he was successful in making an instrument at the frontiers of global science and in such quick time.

‘TECHNOLOGICAL JUGAAD’

The full and actual story of the laboratory is examined in Chapter 5 under the heading “Dharmadhikari’s microscopes and technological jugaad”. I am of the view that this business of “jugaad” is a distraction in the book. The author defines “technological jugaad” as: “The element of reconfigured materiality that is implicated very centrally in the processes involved—in materials to uses not imagined initially, giving fresh meaning and purpose and creating new

worth and value”. This could be motivating for scientists, technologists and researchers engaged in similar exercises and in understanding the “success of Dharmadhikari in his laboratory in creating the first indigenous STM and SFMs”.

The preceding chapter focusses on “Jugaad and its many avatars”. The author has chosen “jugaad” as the prism through which to view the work of Dharmadhikari’s laboratory, and this, in my view, seriously restricts the scope of his work. At the same time, one must acknowledge that the author does present all the critical views on “jugaad”, including trenchant critiques of the concept by scholars such as Thomas Birchnell.

Jugaad aside, one must emphasise that there is right through the work an innate intellectual honesty and authenticity. For example, in the chapter on science and technology in modern India, he concludes the section on “Contextualising the methodology” with a quote from Amit Prasad, who says there is “a surfeit of academic analyses of science as well as government policy documents on scientific research in India, but these provide little insight into how particular techno-scientific researches are conducted in India”.

In the latter context, Sekhsaria makes his own conclusion: “There are very few ethnographic studies in the Indian context of life and work within the laboratory, of the inter-sections of the many worlds within science and technology or indeed of so-

ciety’s complex interfaces with this science and technology. The specific details of work done by and in laboratories—the nuts and bolts of what happens there—is missing because there has been a serious deficit in the efforts at entering the black boxes of science and technology.”

Similar to what Amit Prasad says, it follows that in works such as that of Sekhsaria it is difficult to avoid the bad intellectual legacy of our so-called critical S&T policy researchers and their muddled views regarding the market and the state. These views arise from a combination of reasons.

One is the mixed-up notions of non-market, including socialist, solutions as alternatives; two, trying to integrate “Gandhian” views as “alternatives” and ending up as intellectual fashion statements; and, finally, intellectual dishonesty on the part of the researchers. The latter is mainly because they work in state institutions of apex science bodies but do little to make their own institutions more publicly accountable. As an alibi, they engage in mega critiques of the S&T policy that are of little or no consequence.

In areas such as agriculture and S&T policy, these researchers get foreign funding for their so-called agricultural policy research and make visits to rural areas to publish, and climb the academic ladder. After they have secured their personal and academic fortunes in state-funded public institutions, post-retirement they are individually more likely to move to well-funded private universities. This

after great pronouncements about the market and the state. It may be legitimate to ask what is their knowledge contribution to rural societies? Have they triggered any chain of creative change or innovation?

Semi-academic efforts to strike out new paths, for instance through well-meaning manifestos such as “Knowledge Swaraj” cited in the book and similar attempts to chart out citizens science manifestos, do not really succeed in what they set out to do. They also remain within exclusive elite circles and closed networks (largely non-governmental organisations acting as “civil society”), often patronised by Western scholars, which are lionised as contributors to “alternative thinking” on the one hand, and to vehement anti-Western attitudes in the name of “patriotic peoples’ science” on the other.

There is little or no effort to look at other developing countries, rid of the Gandhian cloak, especially in Asia because subconsciously there is an attitude of superiority as Indians to other societies, be it in Asia or Africa. They are like what the American jurist and writer Oliver Wendell Holmes called “Boston Brahmins”, referring to the New England elite in early America. The Indian version of “Boston Brahmins” abounds in S&T policy discussions.

STRIKING NEW PATHS

New, creative work can come only if young scholars strike completely new paths in working on an S&T policy in India. Fortunately, this is happening

from emerging young scientists, and Sekhsaria's work is definitely in that direction. His work, hopefully, will inspire more work in this direction as he himself keeps emphasising at different points in his book. From that perspective one can see the excitement and passion with which Sekhsaria was attracted to the work of Dharmadhikari and his co-workers and their achievements in the laboratory. Truly inspiring, but in a country like India where such dedication does not find recognition, the instruments he made came to be finally junked. They did not even reach a museum or a teaching institution to inspire others.

As in many other domains in India, one senses a kind of "apartheid" at work. I see it often when I visit a science college in a tier-II city, smaller town or a university which chooses to locate itself in a rural area and does such extraordinary work in not only making higher education accessible to rural children but embarks on new paths of research and technology creation in areas critical to society and the economy, such as energy and waste.

These rural universities are not eligible for Department of Science and Technology funds or other Central funding because the "Boston Brahmins" in our S&T establishment have their own networks for funding and are reluctant to support good work of younger scholars mostly working in smaller institutions on the periphery. How then will the grandiose pronouncements such as those in the Budget

There is, right through the work, an innate intellectual honesty and authenticity.

translate into real outcomes on the ground?

Sekhsaria is able to make explicit the subconscious "apartheid" perspectives that influence institutional policy and that of the high priests of S&T working in these policy-making institutions. Referring to the TV 2035 document produced by TIFAC (Technology Information, Forecasting and Assessment Council), he points out how "in spite of invoking complexity and diversity as the key constituents of an India of the present and future" it reduces Indians of 2035 to "six specifically articulated categories".

These six non-exclusive segments are as follows: a) Rooted and Remote; b) Globalised and Diaspora; c) Left out or Left behind; d) Alternative Lifestyles and World Views; e) Creative, Innovative and Imaginative; and f) Beehives and Production Lines. Sekhsaria makes a salient point about the TIFAC policy document by saying: "There are many things to be underscored in the subtext of the language and visual representations offered."

He points out that "the man representing the Rooted and Remote in TV 2035 wears a kurta and has a turban for headgear; the representative of the Glob-

alised and Diaspora is a man of his youth in suit and tie; while the woman who represents the Left Out or Left Behind Indian is dark, has long plaited hair and prominent rings hanging from her ear lobes". He raises a number of fundamental questions about the meanings of such classifications and their implications.

Talking of the future of India's food and agriculture in the TIFAC policy document, he points to the absence of the farmer in the highly technology-oriented statement and asks: "If a majority stakeholder like a farmer is missing so prominently in the fine print, can one really expect that more marginalised sections that might include tribals, Dalits, fisherfolk and industrial labour have been included?"

Sekhsaria's book and his work as a younger scholar in this depressing scenario has to, however, provide hope for research on S&T policy. This is in spite of the fact that his book ends on the depressing note of Dharmadhikari's instrument being junked. It is rather touchingly captured in a conversation Sekhsaria has with one of Dharmadhikari's doctoral students, Sumati Patil, in the presence of the eminent scientist A.K. Raychaudhury who found that the Indian Institute of Science (IISc), Bengaluru, junked the instruments he made once he left the institution.

Ultimately, what is the value of "making" and "creating" even in a laboratory in India amidst its great plans captured in slogans of "Make in India" and "Assemble in India for the

World". It made me reflect on the larger questions of "making" and "creating", of actual labour with the hand, of crafting and designing. The controversy created over T.M. Krishna's book on mridangam makers readily came to mind. Distancing oneself from the "materiality", the cow's skin in the making of the mridangam, and the material made the book the centre of an unnecessary controversy. The creators and makers and the materiality they fashion to make music possible, in this case the mridangam makers, are asked to be invisible. The creative act and labour that produces the instrument that elevates the music were not to be spoken about.

In the melancholy of my reflections spurred by Sekhsaria's work on Dharmadhikari's instruments and their being junked, I was reminded of Subramanya Bharathi's song "*Nallathor veenai seithe*": "After making a good veena,/ does anyone let it gather dust and throw it away?/ Tell me goddess Sivasakthi/You have created us with the power of knowledge and wisdom,/ to make this country live with a purpose/Give us power and strength so our region can be of value."

The Finance Minister freely quoted Indian poets in her Budget speech, but the reality is that we are unable to translate their thoughts to shape and influence reality. What we have in the end are words and slogans and the empty rhetoric of public policy statements, be this in S&T or aesthetic pursuits such as music. □

Biting the bullet

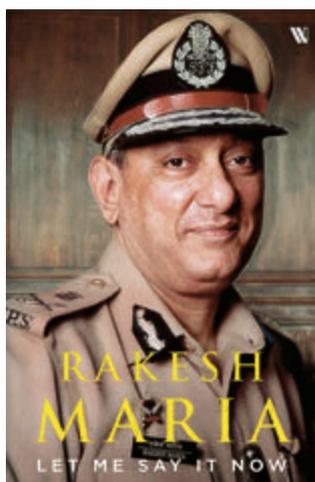
A book of **explosive revelations** by the former Mumbai police chief Rakesh Maria.

BY **ANUPAMA KATAKAM**

FORMER Mumbai Commissioner of Police (C.P.) Rakesh Maria is perhaps the most well-known of the city's "super cops". When he retired in January 2017, it was hard to imagine a Mumbai police force without him. In his tenure of 36 years, Maria had been part of almost every major investigation in Mumbai involving the underworld; terror attacks; rape cases, notably the Shakti Mills rape case; and murder cases, including the Sheena Bora murder.

This February, Rakesh Maria made a sensational comeback with the release of his memoirs, titled *Let me say it now*. The book, which chronicles his life as an Indian Police Service (IPS) officer, has stirred a hornet's nest with its explosive revelations on high-profile cases, including the ongoing Sheena Bora murder case. It will be interesting to see whether these revelations have an impact on the trial.

A few months before he was to retire, Maria was "promoted" as Director General of Police (DGP), Home Guards. The transfer made headlines as he had just begun investigating the Sheena Bora murder case in which the power couple, the media



Let Me Say It Now

By Rakesh Maria

Westland, 2020

Pages: 624

Price: Rs.799

mogul Peter Mukerjea and his wife Indrani Mukerjea, had been arrested.

In his tell-all page-turner, Maria explains how and where it all happened. He alludes to two officers as being behind his transfer and to the scuttling of an investigation that should have started much earlier. When the book was released, it sent the State administration into a tizzy as one of the officers, Deven Bharti, is the current Maharashtra Police Anti-Terror Squad (ATS) chief and the other, Ahmed Javed, is a former Indian Ambassador to Saudi Arabia.

Bharti responded to Maria's allegations in the book saying that they were a marketing strategy to attract publicity. He also said

that Maria belonged to a film family and knew the art of creating drama. Javed, who replaced Maria as C.P. and whom the latter calls "a Mukerjea-friendly C.P." in the book, said his comments were in "poor taste" and "bereft of truth".

The other controversial chapter is Maria's investigation of Ajmal Kasab, the lone terrorist nabbed in the 26/11 terror attacks on Mumbai. Maria was the first to interrogate Kasab, who was responsible for the attack on the Chhatrapati Shivaji Terminus and the killing of three top police officers, Hemant Karkare, Vijay Salaskar and Ashok Kamte. He says in the book that he found a "chink in his armour". "If all had gone well, he [Kasab] would have been dead with

a red string tied around his wrist like a Hindu," he writes. Maria explains that the Lashkar-e-Toiba (LeT) wanted the world to believe that the Mumbai terror attacks were "Hindu terror" unleashed on its own people. Questions are now being raised by opposition parties on why he withheld this angle during the investigation.

Maria's story could be the chronicle of crime in the maximum city over the last three decades. Using the analogy of a film opening, Maria begins his narrative with his controversial removal as C.P. but quickly shifts to the traditional format of an autobiography by describing his childhood as a "Bandra boy", his family background, and his determination at a very young age to become a policeman.

Those who have interacted with Maria know him as tough and ruthless. The charming personal anecdotes provide a glimpse into his softer and humorous side, particularly his experiences as a young married man posted in the districts.

Maria's language is simple, even somewhat colloquial, but his accounts of the several cases he cracked are gripping and absorbing. While in office, Maria rarely opened up to the media even during the 26/11 attacks. Hence, his version of events in this book could be considered documentation of what really happened during some of the worst cases of communal violence and terror attacks in Mumbai.

In every chapter, he acknowledges all the policemen who helped him.

Maria's tenure began in the early 1990s at a time when crime in Mumbai (then Bombay), especially gangland warfare, was at its worst. The first important case he worked on was pursuing the notorious don Varadarajan Mudaliar. Maria's pursuit eventually led to Mudaliar fleeing Mumbai, never to return.

BOMBAY RIOTS

Maria was a junior officer when Mumbai was in the grip of communal violence following the Babri Masjid demolition on December 6, 1992. Interestingly, while he is a loyal policeman, Maria is also candid about the police and their failures. The Mumbai Police were accused of bias and were held culpable for much of the violence during the riots in December 1992 and January 1993.

In the chapter on the riots titled "God disposes", Maria writes: "When everything else was failing, the police were the only ones left holding the baby. Restoring discipline was a priority for which we had to be harsh; assuaging victims' grief also became our job where we had to shed our harshness.... The riots raged on till mid-January. Thereafter, the situation improved slowly, but not before taking its toll on the police force which came under severe criticism for failing to control the situation, being biased and siding with the Hindus."

The riots led to the serial blasts in 1993. Maria was back on the streets, trying to keep a restive city under control. He says that

Rakesh Maria's role and personality were such that police officers in films have been modelled on him.

his beloved city was under attack and that the police were doing all they could to help people. When he was chosen to lead the investigation, he was among the most junior IPS officers in the State. He writes: "History bears testimony, and time and again it had been proven, how easy it is to brand a policeman a failure and make a scapegoat out of him.... An opportunity not just to prove myself, but to serve my commissioner, my force and my nation. Which Bombay officer worth his salt would have said no?"

Maria was singularly responsible for cracking the blast case which had been masterminded by some of the most dangerous underworld dons in the country.

The case and investigation is well-documented in books and films. Yet, Maria's version manages to plug so many holes and corroborate several aspects of the story, such as the abandoned Maruti car stashed with a cache of arms that led the police to a flat owned by Tiger Memon in the Al Hussaini building. A scooter key found in the flat led them to one of the vehicles used to plant the bombs. In a later chapter, Maria writes about the funeral of Yakub Memon, who was hanged for being a main perpetrator of the blasts, but does not comment on the execution.

There are chapters devoted to the killing of Dilip Khatau, a mill owner; the rise of the Indian Mujahideen; the 2003 Mumbai serial blasts; chasing the erstwhile IPL chief Lalit Modi; and a few incidents involving film personalities from Bollywood.

THE 26/11 ATTACKS

Of course, Maria dedicates several chapters to the worst terror incident Mumbai has witnessed. As a senior police officer, the C.P., Hasan Gafoor, placed Maria in the control room, while Maria himself believes he should have been fighting at the front. Maria's sorrow and regret at losing three top police officers in the attack comes through in several chapters. He even addresses the charges against him by Vinita Kamte, the wife of slain officer Ashok Kamte, who accused Maria of mismanaging the shootout.

Referring to the ATS chief Hemant Karkare's death, he says: "What the Mumbai police and its Control Room had handled that night was many times more, in terms of horror, gravity and sorrow. It was pure distilled terror." When Maria circles back to the most important investigation of his career, that of breaking a hardened, indoctrinated jihadi, he regains his threatening police demeanour. He provides every detail of the interrog-

ation, including Kasab's capitulation and reverence to him. The final chapters deal with the horrific Sheena Bora case, where Indrani Mukerjea, along with an accomplice, reportedly strangled her own daughter. Unfortunately for Maria, as he began the interrogation, he was not only taken off the case but also transferred to a soft post. He reproduces ad verbatim in the book his dialogue with the Chief Minister and his justification of the sequence of events.

While Maria writes briefly about the media and the condition of the police force, he does not touch the subject of political control over the force. As an officer who did not toe the line, this is an unusual distancing but perhaps a wise one. While he was in service, there was hearsay about Maria's methods of interrogation to extract information from the accused. He does not directly address this but says there are different forms of third degree.

Rakesh Maria's role and personality were such that characters in films have been modelled on him. A web series on his career is reportedly in the making. Using the same film analogy, Maria ends the book, saying: "(An imaginary voice asks) And just one confirmation, please. If you take rebirth, would you want to be back in khaki, as a Mumbai cop? That's final? (Maria says) Yes, sir, back at your service. And the packed audience of Mumbaikars trail out of the subconscious theatre to pour out into the streets of the City of Dreams." □

Relevance of Akbar

The author chooses events in history to give a lesson about the present times that will find favour with people who believe in peaceful coexistence.

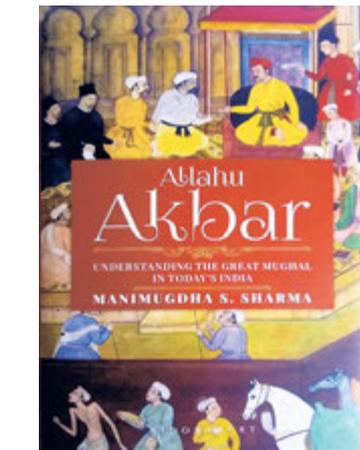
BY ZIYA US SALAM

SHORTLY after the former President A.P.J. Abdul Kalam passed away in July 2015, the Government of India honoured him by promptly naming a road in Lutyens' Delhi after him. The choice of the road was interesting. Aurangzeb Road was renamed APJ Abdul Kalam Road. Aurangzeb the bigot giving way to Kalam, widely respected in pluralist circles for his intellect and wisdom. It proved to be a conclusion in haste.

Days after the renaming, there was a demand from within the ruling Bharatiya Janata Party (BJP) to rename Akbar Road after a Rajput prince.

It spoke of a nation keen to erase its pluralist ethos and soon paved the way for more outrageous claims; that the Taj Mahal was a Siva temple and Akbar was a foreigner. That the government of the day was respectful of such demands became apparent when the Uttar Pradesh government, in 2017, included nondescript Hindu and Buddhist temples in its list of must-visit places in the State and excluded the Taj Mahal from it.

The attempt to wipe out the memory of Akbar,



**Allahu Akbar
Understanding
the Great Mughal
in Today's India**

By Manimugdha
S. Sharma

Bloomsbury

Pages: 306

Price: Rs.599

the Mughal emperor who was hitherto seen as one of the greatest Indian rulers, and the Taj was part of an elaborate exercise to erase all Muslim contributions to the nation.

Manimugdha S. Sharma says in his perceptive and cogently argued book, *Allahu Akbar: Understanding the Great Mughal in Today's India*: "The overarching narrative though is this: Muslim rulers were bad for India and Indians [read Hindus]. And because of this, Akbar who was already not quite visible, has been almost buried.... And that's quite a spectacularly unfair fate of the man who in his lifetime and even afterwards was considered to be an avatar of Vishnu by the Hindus,

the Jains and the Buddhists."

"Unfair fate" is a mild description for the emperor who gave the nation one of its early philosophies of tolerance, even appreciation of differences. His Sulh-i-Kul, in many ways, can be seen as a preceptor to the modern Indian nation where the Constitution, not necessarily the government, gives every Indian the right to equality and the freedom to practice and propagate any religion. Back in the 16th century when the faith of the ruler usually decided the faith of the empire, Akbar talked in terms of uniting people across the barriers of dogma. He not only gave them freedom of religion, he respected the divergent views of scholars of differ-

ent faiths.

In the chapter titled "Conquering India's Heart and Mind, and Uniting its Spirit", Sharma comes across as a nuanced raconteur. Rather than stating the obvious with respect to the amalgamation of adhesive principles of various faiths in Sulh-i-Kul, he narrates the fascinating tale of the origin of the Ibadat Khana.

"When Akbar returned to Fatehpur Sikri in 1575 from the conquest of Bengal, he carried with him a favourable impression of something that the late Sultan Sulaiman Kararani of Bengal used to do. That, coupled with his own inner churning, was manifested in a building that housed the first nursery of what is today called secularism in India. It was the Ibadat Khana.... The Ibadat Khana became a very unique experiment in improving the theological discourse. It was a bid to end conflicts among rival religions by creating a middle ground. To what extent it managed to achieve that objective is subject to debate, but it certainly had an impact on the Mughal state system and distanced it further and further from the church. This separation of the state from the church was a stellar achievement of Akbar's empire."

It is a lesson today's India would do well to imbibe at a time when the idea of a Hindu Rashtra is raising a din, and the Rashtriya Swayamsewak Sangh, the ideological parent of the BJP, is emphasising the idea of every Indian being a



COURTESY OF CHESTER BEATTY LIBRARY, DUBLIN

A STILL from the movie “Jodhaa Akbar”. There have been only two noteworthy period films with Akbar as the protagonist, “Mughal-e-Azam” and “Jodhaa Akbar”.

Hindu. Sharma tells us that the Ibadat Khana “was constructed around what was once the room of Shaikh Abdullah Niyazi Sirhindi, a disciple of Shaikh Salim Chishti who later became a devotee of Lord Shiva. That this whole journey of the Ibadat Khana began from the room of a Sufi who became a follower of Shiva makes it a very interesting beginning.” The place soon became a meeting point for not only Islamic scholars but also Brahmins, Christians, Jains, Zoroastrians, Jews and scholars of other religious denominations for a free and frank exchange of views.

Here Sharma weaves in a story about Abd al-Qadri Badauni, historian of the Mughal era and a man given to intolerance. A Shia scholar named Mullah Mohammed Yazidi, who had come from Persia, allegedly spoke in an unflattering manner about the companions of the Prophet. Badauni, who

thought the scholar wished to turn the emperor into a Shia, responded with words that showed him in poor light.

“Badauni’s frustration is that of every bigot’s when surrounded by liberals and progressives,” Sharma writes. Incidentally, Akbar had asked the ulema of his time to write commentaries of the Quran. As each scholar had his own interpretation, it often led to fierce debates with even Hindus joining in. Once a Hindu Raja, Deb Chand Rajah Manjholah, claimed that Allah had great respect for the cow as the animal was mentioned in the first chapter of the Quran. He was not banished for stating his views. It showed the empire as a place where free exchange of views was favoured. Coming to modern India, the Mughal period has been reduced to a 300-year rule. While both Babur and his son Humayun are treated in a cursory manner, some justice is sought to be done

to Akbar, Jahangir, Shah Jahan and Aurangzeb. There, too, stereotypes flourish, preventing a nuanced approach to each emperor and his times. It has been no different since India attained Independence. Films made in the 1950s and the early 1960s, which often talked of the country’s shared past and Nehruvian socialism, similarly failed to do justice to the Mughals.

MUGHALS IN FILMS

Sharma devotes a chapter to the media’s depiction of Akbar. Beginning with Hindi cinema, he writes: “Despite having ruled India for 300 years, leaving behind a tall and robust sociocultural legacy, the representation of the Mughals in mass media has been less than satisfactory. In the 70 years since Independence, there have been only two noteworthy period films with Akbar as the protagonist—K. Asif’s *Mughal-e-Azam* (1960) and Ashutosh Gowariker’s

Jodhaa Akbar (2008).... *Jodhaa Akbar* was a largely fictionalised take on Akbar and the legendary Jodha Bai, his queen consort.” To his credit, Gowariker consulted historians for the movie. They told him Akbar did not have a wife named Jodha Bai. But Gowariker went ahead with the project and came up with a film replete with bloomers all the way through. Lopsided as the film’s depiction of the Mughal emperor was, it was still yards ahead of a television serial on Maharana Pratap, the man who was defeated by Akbar in the Battle of Chittor, and who, in these days of revisionist history, is hailed as the winner of that battle. The TV serial reduced Akbar to a caricature, a villainous extra in the life of a brave Rajput prince.

Allahu Akbar is not a typical history book, even the title is far from the usual. Its back-and-forth style of narration defies the stereotypes of recounting the past. The author picks and chooses events in history to give the reader a lesson about the times.

The book may not please those looking for a profound understanding of the emperor or expecting a well-rounded depiction of the man who was both a warrior and a philosopher. It will rankle those given to bigotry but will surely find favour with people who believe in peaceful coexistence and understand that everybody in this land is an immigrant. All that matters is how far back in time you go. *Allahu Akbar* could well nudge a few fence-sitters. □

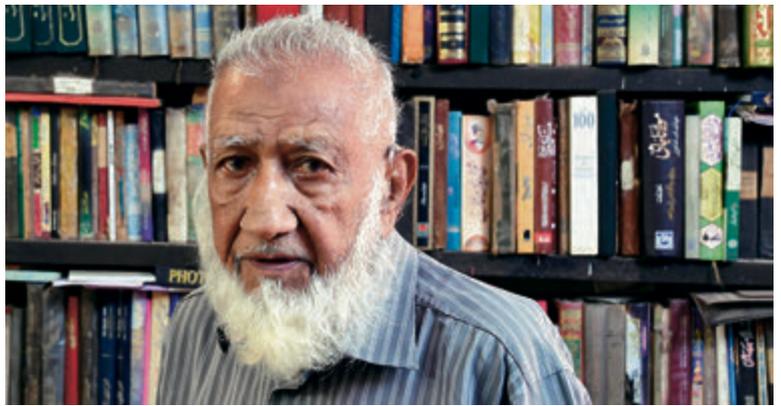
Rumi's translator

With the publication of his Urdu translation of Rumi's *Masnavi*, 97-year-old poet and translator Syed Ahmed Esar feels that he has accomplished everything he set out to do. BY VIKHAR AHMED SAYEED

WITH the recent publication of Syed Ahmed Esar's magnum opus, an Urdu translation of the 13th century Persian poet Rumi's extended mystical poem *Masnavi*, the 97-year-old Urdu poet and translator based in Bengaluru feels that he has finally finished everything that he set out to accomplish. If we add these six volumes to his past published work, the total comes to 19 books, which is a sizeable corpus for a man who said that before his first translation was published in 1997, he "never expected that there'll be a single book in my name".

The Urdu translation of *Masnavi* has been published by the National Council for the Promotion of Urdu Language and is slated to be launched in Bengaluru soon. The nonagenarian, whose *takhallus*, or pen name, is Esar, which he has permanently suffixed to his name, has worked relentlessly on translating canonical Persian literary works into Urdu since he retired from the Indian Forest Service as the Chief Wildlife Warden of Karnataka in 1980.

It is appropriate perhaps that this elderly resident of the city lives in the oldest locality of Bengaluru. The jumble of narrow bylanes abutting Avenue Road in the foundational quarter of Bengaluru is called the *pete* area and was laid out during Kempegowda's reign in the 16th century. Esar has lived in an ancient house in Sher Khan *galli* (lane) here since 1948. Belying his advanced age, Esar excitedly shows off the freshly printed six volumes of *Masnavi* that lie on his table before he launches



SUDHAKARA JAIN

into a story of how he became fascinated with Persian poetry.

Esar was born in 1922 in the garrison of Mysore Lancers, which is in Munireddy Palya in Bengaluru and still remains under the control of the Indian Army. His early life was spent in the garrison as his father was a soldier in this military regiment of the Mysore princely State who saw action during the First World War in Egypt. "He saved a fellow soldier from drowning in the Nile," Esar said in English, adding that his father was a terrific swimmer. It was here while listening to a sermon as a child at the garrison mosque that Esar first heard a verse from Rumi's *Masnavi*: "*Tan bajaan jumbad, nami beeni tujan/Lekin az jumbee dane tan jaan badan*" ("The body's quickened by the soul, yet you don't see the soul/ But by the body's quickening know the soul.")

"When I first heard this, I remained stupefied although I didn't understand the deeper meaning of this verse at the time," Esar said, re-

counting this life-changing moment from almost nine decades back. Esar was sitting comfortably in a lounge chair as he spoke and his published works were stacked in a tall tower in the table in front of him. A table next to him was piled high with a variety of 19th-century Persian dictionaries, the most distinguished of which was a three-volume dictionary of Arabic and Persian titled *Furhung-e-Anandaraj*, published in 1888 in honour of Ananda Gajapati Raj Maharaj, the princely ruler of Vizianagaram. The title page of the first volume was falling apart but the well-used set of dictionaries had clearly helped Esar in his mammoth translation as he handled them reverentially. The massive bookshelf behind him held an eclectic collection of books reflecting the varied interests of Esar. There was an Urdu translation of Plato's *Republic*, a volume of poetry by Ghalib, exegeses of the Quran, Dominique Lapierre's *Freedom at Midnight*, a book titled *Sanctuaries and Wildlife of*

Karnataka and a book on the philosophy of Al-Ghazali.

It was as a child that he also began to read the poetry of medieval Persian poets like Omar Khayyam, Shams Tabrez, Saadi and Rumi. "Since the script of Urdu and Persian is the same, I would read the poetry even if I didn't understand it completely," Esar said, explaining his autodidactic learning of Persian. While in middle school, Esar was introduced to the work of Allama Muhammad Iqbal (1877-1938), whose poetry is steeped in philosophy, and he immediately fell in love with the work of this astounding poet. "When I was in college, I remember that I had copied his *Asrar-e-Khudi* [The Secrets of the Self] in entirety as I could not afford to buy the book itself, which had the very high price of Rs. 6!"

Esar, who continues to have a prodigious memory and can recite many Persian and Urdu couplets without a moment's hesitation, says that he first started doing this during his long walks from his home in Munireddy Palya to Central College. Preferring to walk alone, he would repeat these verses as he walked. After his graduation, he joined the Forest Department and was even sent for an advanced postgraduate course to the University of Washington in Seattle in the United States. He spent two years between 1954 and 1956 in the U.S. before he returned home by ship. "It was a long journey, and I left on August 19, 1956, and reached Bangalore [now Bengaluru] only on October 19 via Southampton, London, Cape Town, Colombo and Madras," he said.

He continued to work in the Forest Department and supervised *kheddah* operations to capture elephants. Considering his long career as a forester, he has many interesting tales from the jungles to narrate, including close encounters with tigers. His constant companion through his time in many of these lonely outposts in the wilderness of Karnataka was his Urdu and Persian poetry. "It was on September 17, 1977, when I was in the jungles of Sagar, that I translated my first Persian verse into Urdu, which

was the 70th quatrain from the *Rubaiyyat of Omar Khayyam*," he said, recalling the moment when he embarked on his translations. "My mind was blown when I did this and I had to go to the [Forest Department's] depot, but nothing registered in my head," he continued. He finished the translation of 772 quatrains of Omar Khayyam within a year and picked up the work of Saadi and Hafez for translation. He continued translating Saadi and Hafez even after his retirement in 1980, but left this work incomplete when he was driven to translate the Persian poetry of Iqbal.

CHALLENGING ASSIGNMENT

Iqbal's deeply philosophical poetry is a challenging assignment for any translator, especially for someone already in his sixties, but Esar hurled himself into this project headlong and completed the translation of all his seven volumes by 1992. His first translation of Iqbal's work, titled *Payam-e-Mashriq* (A Message from the East), was published in 1997 while the remaining volumes were published subsequently. These include *Asrar-e-Khudi*, *Rubooz-e-Bekhudi* (Hints of Selflessness), *Javednama* (Book of Javed), *Zuboor-e-Ajrm* (Persian Psalms), *Pas Chih Bayad Kard* (What Should Then be Done?) and *Armaghan-i-Hijaz* (The Gift from the Hijaz).

Critics have commented that his translations retain the essence of the philosophy and the rhythm of the poetry, which is a complicated feat considering the profundity of someone like Iqbal. Notable admirers of these translations include Javed Iqbal, the son of Iqbal; Shamsur Rahman Faruqi, a leading Urdu writer; and Prof. B. Sheik Ali, the historian from Mysuru. A Japanese scholar of Urdu from Osaka University, T. Matsumura, has also relied on his work to translate Iqbal into Japanese. Esar's work on Iqbal by itself could have been sufficient for most scholars of Persian and Urdu and had already, in a way, made him immortal in literary circles, but Esar was not done yet.

After completing his translations of Iqbal's Persian works, Esar re-

turned to his translation of Rumi's work. *Masnavi* consists of 27,720 verses spread over six volumes. Translating this took up almost two decades of Esar's life and with its publication, Esar has completed the goal that he had set for himself. In between his gargantuan work on the *Masnavi*, Esar has also translated and published the Persian poetry of Omar Khayyam, Saadi and Tabrez. He has also published a collection of his own poetry and an acclaimed autobiography which was published in 2014.

The Karnataka government presented him with the Rajyotsava Award in 2016, which is the second highest civilian honour in the State. He has been feted several times by the Karnataka Urdu Academy and a few of his books have received awards from the Urdu academies of Uttar Pradesh and Maharashtra. Considering his vast corpus of work and his wide contribution to the world of translation and Urdu literature, this limited recognition remains grossly disproportionate to his long career and prodigious output.

Mohammed Azam Shahid, an Urdu writer and journalist based in Bengaluru, said that Esar had done "commendable work which can inspire writers in the present generation" and blamed the north Indian bias in the Urdu world of letters for Esar's marginalisation. "Esar's work, translating from Persian to Urdu, has to now be taken forward and these works can be further translated into Indian languages like Kannada. Translations strengthen the multicultural legacy of our country, which is much needed in these times," Shahid added.

People who know Esar well say that he maintains a low profile and has never sought public recognition for any of his literary feats. Through his interview, he said many times that he was "...a man from the jungles, Persian poetry accompanied me during my sojourns in the forests and I have done all this work without any expectations because of my love for language and poetry. I derived a deep sense of satisfaction from my work and it was also a lot of fun!" □

HOW THE POWERFUL TURN BAD

Stories of bad emperors of past ages show how the acquisition of power may not so much corrupt as allow our own worst qualities to slide out and harm us.

BY **A.G. NOORANI**

THERE is a strange allure of the powerful. History shows how hero-worship turns heads and the powerful become wicked. This is especially true of a society which has little tradition of democratic governance. The examples of Margaret Thatcher, Tony Blair, George W. Bush and Donald J. Trump show that even in societies with long experience of democratic governance and deep popular commitment to democratic values, people do succumb to the charm of the “strong” man only to discover his feet of clay. By which time a lot of damage is done. Those who help in the rise to power of the strong are devoured by them when they acquire supreme power.

David Motadel demonstrates that Adolf Hitler could not have grabbed total power but for the support of the former royals and a conservative aristocracy. He might have added the democratic socialists who, like very many in Britain, preferred Hitler to Communist Soviet Union, which they dreaded and loathed. His article entitled “What do the Hohenzollern Deserve?” in *The New York Review of Books* (March 26, 2020) is an eye-opener. Kaiser Wilhelm II, the last German Emperor of the Hohenzollern dynasty, fled by train into exile in the Netherlands on November 10, 1918, after Germany’s defeat in the First World War. He bore no small responsibility for it.

David Motadel records that German Conservatives “helped Hitler to power in 1933” and explains it thus: “Crucial to Hitler’s ascent to power was a coalition between the Nazis and Germany’s old conservative elites, who hoped they could use and control him for their own ends. It was they who arranged Hitler’s appointment as Reich Chancellor, plotted in the backrooms of gentlemen’s clubs, in officers’ messes, and at dinners and shooting parties on grand estates. The German historian Karl Dietrich Bracher demonstrated as early as 1955, in his *Die Auflösung der Weimarer Republik*, that it was their



ADOLF HITLER, whose rise to power was enabled by Germany’s former royals and a conservative aristocracy.

actions that destroyed Weimar democracy, not an inevitable political crisis. ‘What is more disturbing to our peace of mind,’ Hannah Arendt noted around the same time in *The Origins of Totalitarianism*, ‘is the unquestionable attraction these movements exert on the elite, and not only on the mob elements in society.’ Hitler’s regime was supported by a broad spectrum of right-wing groups, including the royalist right, which were united in their hatred of liberal democracy, communism, and Jews. The Nazis were initially eager to get backing from the monarchists. It was only after their consolidation of power that they lost interest in the former royal family.”

Indira Gandhi split the Congress in 1969 and governed with the support of Communists and Socialists. She rode to power on the plank of “Garibi Hatao”, and then discarded the allies and the ideology. She grabbed power in the guise of a bogus Emergency. Her fall was foretold.

Narendra Modi won allies when he was Chief Minister of Gujarat—businessmen, industrialists,



MARGARET THATCHER, Tony Blair, George W. Bush and Donald Trump. Their examples show even societies with long experience of democratic governance succumb to the charm of the “strong” leader only to find the leader has feet of clay.

Hindutvaites and others who yearned for a “strong” leader. The Old Guard was shoved aside. He became Prime Minister in 2014 and set about fulfilling the Rashtriya Swayamsewak Sangh’s (RSS) triple agenda—a uniform civil code, Ram temple in Ayodhya and the abrogation of Article 370 of the Constitution.

But his calculations have begun to go awry. Kashmir is spinning out of control. The agitation against the Citizenship (Amendment) Act (CAA) has put him on the defensive. The sheen of international prestige has worn off. But he has assets. The RSS does not like men who acquire a persona of their own. A senior functionary has already sounded an alarm. But the constituency of Big Business and Hindutva is intact, though frayed. Large sections of media—print and, more so, electronic—vie with one another to praise Modi. The Cabinet system is destroyed. The civil service is suborned. The Supreme Court, mostly a frail reed, is increasingly quiescent. The opposition is fractured. But public opinion remains a decisive factor and public opinion has begun to turn against him.

C. Rajagopalachari sensed all this years before Independence. While in jail, he made the following entry in his diary: “Elections and their corruptions [*sic*], injustice and life power and tyranny of wealth and inefficiency of administration will make a hell of life as soon as freedom is given to us. Men will look regretfully back to the old regime of comparative justice and efficient, peaceful, more or less honest administration.

“The only thing gained will be that as a race we will be saved from dishonour and subordination. Hope lies only in universal education by which right conduct, fear of God and love will be developed among the citizens from childhood. It is only if we succeed in this that Swaraj will mean happiness. Otherwise it will mean grinding injustices and tyranny of wealth.”

At the end of the Constituent Assembly’s labours, Dr B.R. Ambedkar warned that it was “quite possible for this new born democracy to retain its form but give place to dictatorship in fact.... If we wish to maintain democracy not merely in form, but also in fact, what must we do? The first thing, in my judgment, we must do is to hold fast to constitutional methods of achieving our social and economic objectives.... It means that we must abandon the

method of civil disobedience, non-cooperation and satyagraha.... [They are] the Grammar of Anarchy and the sooner they are abandoned, the better for us.”

ROAD TO DEGRADATION

The rest is so strikingly relevant to the situation today as to bear quotation *in extenso*: “The second thing we must do is to observe the caution which John Stuart Mill has given to all who are interested in the maintenance of democracy; namely, not ‘to lay their liberties at the feet of even a great man, or to trust him with powers which enable him to subvert their institutions’. There is nothing wrong in being grateful to great men who have rendered life-long services to the country. But there are limits to gratefulness. As has been well said by the Irish Patriot, Daniel O’Connell, no man can be grateful at the cost of his honour, no woman can be grateful at the cost of her chastity and no nation can be grateful at the cost of its liberty. This caution is far more necessary in the case of India than in the case of any other country. For, in India, Bhakti or what may be called the path of devotion or hero-worship, plays a part in its politics unequalled in magnitude by the part it plays in the politics of any other country in the world. Bhakti in religion may be a road to the salvation of the soul. But in politics, Bhakti or hero-worship is a sure road to degradation and to eventual dictatorship.”

Let us go to the original source, John Stuart Mill: “There are nations who will not voluntarily submit to any government but that of certain families, which have from time immemorial had the privilege of supplying them with chiefs. Some nations could not, except by foreign conquest, be made to endure a monarchy; others are equally averse to a republic....

“But there are also cases in which, though not averse to a form of government—possibly even desiring it—a people may be unwilling or unable to fulfil its conditions. They may be incapable of fulfilling such of them as are necessary to keep the government even in nominal existence. Thus a people may prefer a free government, but if, from indolence, or carelessness, or cowardice, or want of public spirit, they are unequal to the exertions necessary for reserving it; *if they will not fight for it when it is directly attacked*; if they can be deluded by the artifices

used to cheat them out of it; if by momentary discouragement, or temporary panic, or a fit of enthusiasm for an individual, they can be induced to lay their liberties at the feet even of a great man, or trust him with powers which enable him to subvert their institutions; in all these cases they are more or less unfit for liberty” (John Stuart Mill, *Representative Government*, 1861).

Mill adds: “Of what efficacy are rules of procedure in securing the ends of justice, if the moral condition of the people is such that the witnesses generally lie, and the judges and their subordinates take bribes? [Or are supine.] Again, how can institutions provide a good municipal administration if there exists such indifference to the subject that those who would administer honestly and capably cannot be induced to serve, and the duties are left to those who undertake them because they have some private interest to be promoted? Of what avail is the most broadly popular representative system if the electors do not care to choose the best Member of Parliament, but choose him who will spend most money to be elected? How can a representative assembly work for good if its members can be bought, or if their excitability of temperament, uncorrected by public discipline or private self-control, makes them incapable of calm deliberation and they resort to manual violence on the floor of the House, or shoot at one another with rifles?...

“Whenever the general disposition of the people is such that each individual regards those only of his interests which are selfish, and does not dwell on, or concern himself for, his share of the general interest, in such a state of things good government is impossible.... Government consists of acts done by human beings; and if the agents, or those who choose the agents, or those to whom the agents are responsible, or the lookers-on whose opinion ought to influence and check all these, are mere masses of ignorance, stupidity, and baleful prejudice, every operation of government will go wrong; while, in proportion as the men rise above this standard, so will the government improve in quality; up to the point of excellence, attainable but nowhere attained, where the officers of government, themselves persons of superior virtue and intellect, are surrounded by the atmosphere of a virtuous and enlightened public opinion.

“The first element of good government, therefore, being the virtue and intelligence of the human beings composing the community, the most important point of excellence which any form of government can possess is to promote the virtue and intelligence of the people themselves.”

The historian Professor Josiah Osgood did not select, translate and publish the Roman biographer Gaius Suetonius Tranquilius’ biography *Lives of the Caesars* for fun. It covers altogether 12 Caesars beginning with Julius Caesar. Prof. Osgood has selected four instructive cases – Julius Caesar, Tiberius, Gaius Caligula, and Nero (*How to Be A Bad Emperor: An Ancient Guide to Truly Terrible Leaders*, Suetonius, Princeton University Press, 2020, 288 pages). It is part of a series published by the Princeton University Press very creditably, titled *Ancient*

Wisdom for Modern Readers. It comprises 10 studies, including Cicero’s *How to Run A Country*.

FASCINATION WITH GREAT POWER

Prof. Osgood reveals the purpose of his work in detail. “What is the purpose of gathering together Suetonius’ stories of bad emperors? One answer is that *they help to explain features of our own time. Our fascination with great power and with great personalities owes something to the Romans, even to the Lives of the Caesars* in particular. Suetonius spawned many sequels in antiquity and beyond, and through translation and adaptation—including Robert Graves’ famous Claudius novel—he has given us a sense that to be a Caesar is to be outsize, outrageous, out-of-this-world. It is no coincidence that one of Las Vegas’ longest-running casinos is called Caesars Palace.

“We are shocked by Caligula’s cruel put-downs or Nero’s mania for performance, but we also find their transgressions just a little bit pleasurable—find the men themselves almost entertaining. In the twenty-first century, we see better than ever how politicians can build movements around their personalities. Suetonius helps us to understand why. In giving free rein to their own desires, Caesars may tap into our hidden wishes too.

“But then they pull us up short. We see just how badly they dealt with the challenges they faced, for the buck did stop with them. In a reversal of the usual self-help formula, *How to Be a Bad Emperor becomes a guide to how you can be a good leader, whatever your role in life*. Caesar refusing to stand to greet the Senators when they come bearing honours: a lesson in how to treat colleagues. Tiberius trying to win glory from a disastrous fire: a reminder that you shouldn’t always try to take credit for your accomplishments. Caligula brutalising those around him, even forcing his father-in-law to cut his throat with a razor; brutalise, and you will be brutalised back. Nero meeting the threat of rebellion by loading his wagons with organs for the theatres and concubines with buzz cuts: your pet projects may fatally undermine you and your organisation.”

Reading *Lives of the Caesars* from cover to cover can be daunting; so many details are included. The stories of the bad emperors and the weird worlds they constructed make for an entertaining selection. They are also a meditation on how the acquisition of power may not so much corrupt, as the old adage has it, as allow our own worst qualities to slide out and harm us. Unrestrained power may be thrilling, but in the end proves ineffective. The polity is wrecked; the people are deceived.

History teaches by analogy, not identity, Henry Kissinger often remarks. No two cases are identical. Ancient Rome presents a different case. We are concerned not with the details of their abuse of power, murders and sexual excesses but with their techniques, which the reader will find relevant. They are disturbingly identical to those we have seen in our times, as the reader will discover for himself—take allies, win power, discard them and rule ruthlessly. □

From red light to limelight

The film-maker Bipuljit Basu collaborates with youngsters from Kalighat to make what he claims is the first participatory film in a red-light area in Kolkata, but more importantly, he provides them an opportunity to reimagine their lives. BY SUHRID SANKAR CHATTOPADHYAY

KALIGHAT, in central Kolkata, is one of the most sacred pilgrimage centres in the country. As is the case with many other such destinations, right next to it there is a red-light area, one of oldest in the city. For at least more than a century, the sacred and the sacrilegious have existed side by side.

The Kalighat red-light area, located in the midst of one of the busiest residential parts of the city, is a shadowy, enigmatic world that stands on the periphery of mainstream society, which neither accepts it nor completely denies its existence. It is a nocturnal world of labyrinthine narrow lanes and cubbyhole dwellings; a

world that appears sinister, brutal and violent, with its own rules and logic. It is a society whose very existence is unsettling to the “respectable” and whose inhabitants are trapped in it forever branded by a mark of shame created by the world outside.

In this grey world that exists outside the purview of middle-class morality, where no differentiation is made between the coins of the villain and the virtuous, a group of young boys and girls grew up with hopes and aspirations that until recently seemed likely to remain confined to their dreams. The film-maker Bipuljit Basu came across these youngsters while working on his

short film *Midnight Blues*, the story of a little boy growing up in a brothel. They had formed a group called Cam-On and were making small films on the lives of people living in the red-light area and putting them up on the Internet. Basu decided to collaborate with them for his film and roped them in at every stage of the production, making members of Cam-On the line producers of *Midnight Blues*. This project is perhaps the first “participatory” film to be made in the red-light area of Kolkata and has opened up a window of hope and opportunity for these young people.

“From script to make-up, loca-



THE DIRECTOR BIPULJIT BASU (extreme right) with team Cam-On.

DEBASISH BHADURI



BY SPECIAL ARRANGEMENT

BIPULJIT BASU directing a scene for “Midnight Blues”. (Below) Shooting in progress.



BY SPECIAL ARRANGEMENT

tion hunting to grooming artistes, Cam-On members became an integral part of the film. This is a huge experience both for them and for me. For those boys and girls, this is their first professional project with veterans of film production and is a massive boost to their confidence. For me, it is a thrill to make what is possibly the first ever participatory film in India,” Basu told *Frontline*.

“We are often stigmatised for hailing from the red-light area. We want people to be aware that there is talent here as well and acknowledge that it is not just the dregs of society who come from here. There are many good people here who can go far with the right guidance and direction.



DEBASISH BHADURI

PEPSI AND KALPANA of Kalighat have been working hand in hand with Cam-On.

Working with Bipuljitda is allowing us to dream a new dream for our future,” said Raju Mondal, president of Cam-On. He is the oldest member of the group and has been a mentor and a teacher to many of the children of the Kalighat red-light area. He pointed out that though there were many non-governmental organisations working with sex workers’ children, nobody but those who grew up there could understand the life and the problems of the community. Cam-On hopes to identify talent among the children and young people living there and include them in its future projects. The group’s membership has been growing in the last couple of years: from six youngsters when it started out to 25 now.

In those little hole-in-the-wall rooms where a large, high bed occupies most of the space, members of the Cam-On group, like all the other children of brothels, grew up with the love of struggling mothers who refused to give them up. There is a painful yearning in them to be accepted for who they are and to not be judged for where they come from.

In many ways, the formation of Cam-On is what has saved the children from going down the path of self-destruction in such an environment. “Kids our age after a point tend to stray and fall victim to drug addiction or get into bad company. Just as we avoided those pitfalls and formed

‘What they need is recognition’

Interview with the film-maker **Bipuljit Basu**. BY **SUHRID SANKAR CHATTOPADHYAY**

THE film-maker and musician Bipuljit Basu has tried a unique experiment by making a “participatory film” for the first time in a red-light area of Kolkata. He discovered a group of young amateur film-makers, all children of sex workers, and roped them in as line producers for his upcoming short film, *Midnight Blues*. In an exclusive interview with *Frontline*, Basu talks of his experience working with the youth from Kalighat. “They have the capability to go a long way. Now what they need is recognition from the Indian mainstream film industry,” he says. Excerpts:

Tell us something about “Midnight Blues”. Where do you plan to go with the film?

Before starting my career in film, I used to work as a music composer. In 2008, I got in touch with the brothel children through a media project in Kolkata, and soon I developed bonhomie with them. I saw there the women receive “customers” in their tiny rooms to earn a living; the little children have no space to stay till midnight. Be it monsoon or winter, they roam around the roadside, and so many untold stories are born there every night.

It affected me so much that I scored a song for the children in 2008. It was recorded in 2013. You can find it on YouTube as “*Tor mukh*” [Your face]. That song had been lingering in my ears for years. In August 2019, I conceptualised the film project on the red-light area children in Kalighat and started writing the screenplay. If I hadn’t written the song, the film *Midnight Blues* wouldn’t have happened.

I am planning to float the film on every conventional and non-conventional film domain, including the international film festival circuit, national and foreign universi-



BIPULJIT BASU with Abhijit Dutta, his producer, between shots.

ties, film institutes, chambers of commerce, social clubs and consulates and finally on OTT [over-the-top media services]. I have entered into a partnership with Independent Film Circle [United States]. I have spoken to Surjyodoy Chatterjee, Film Division, Goethe-Institut, so that the film can reach audiences in the U.S. and European film circuits. The French actress Tiphaine Mayran has acted in this film. I don’t want to leave any stone unturned to let the audience know the children’s story, which is unknown to the rest of the world, and the unique film production process that happened in India for the first time.

How did you come across Cam-On (the group of young amateur film-makers)?

I wanted to make it a completely participatory film. Otherwise, there was no point in making it. My young, energetic producer, Abhijit Dutta, and I agreed on this. But we couldn’t find a way [to do this]. Because it [the red-light area] is an overtly sensitive area, and we hardly got a chance to enter there with my unit. With a small team, we started spending time in the Kalighat red-light area from October and started speaking to various people, local clubs and NGOs. But we were not

getting any response from them. Then, an unprecedented incident took place. During our meetings with various people in Kalighat, we identified a group of young people who happened to be sex workers’ children, and all of them are creative amateur short-film makers who upload their videos on YouTube. I started motivating them to collaborate with us as a technician team. Soon, their mothers also joined them. They belong to a vulnerable group, and keeping them motivated and focussed to join a mainstream film was my initial challenge. Abhijit Dutta supported me wholeheartedly to form the group, giving every effort and resource.

What was it like working with these young people from Kalighat?

Let me tell you an interesting incident. I always found the deconstruction theory of Jacques Derrida very difficult to understand. I am not ashamed of admitting it.

In a script-reading session, I read the screenplay to the sex workers, mothers and children, and asked them to get back to me with their perspective. One week later, when they got back to me, what a transformation they had made! On that day, I understood what “deconstruction” is! What I couldn’t understand from reading hundreds of pages for years, they taught me in just an hour.

They have groomed and trained the actors to act like them. The actors—Manosree, Sylvia, Prabal Bhadra, Sania and Deep Sarkar [child actor]—themselves spent week after week with the sex worker community, and I thank them for it.

The women worked on the costume and make-up, sharing their knowledge and the way they dress up every day. The Cam-On team and the community have been involved from location hunting, art

setting and production controlling to acting, casting finalisation, assisting in direction and editing. They are also making a documentary on the entire process of how they have emerged as a film production house, the first from a red-light area in India. My entire team is astonished with their performance. I must thank my team: My producer Abhijit Dutta, DOP [director of photography] Pravatendu Mondal, art director Ranajit Garai, editor Anirban Maity, sound designer Partha Burman, associate director Mousumi Bilkis. Without their spontaneous support, the Cam-On formation wouldn’t have been possible.

Working on this film with you has given the youngsters a lot of hope. Where do you think they can go from here?

It’s a mainstream film, and they have designed a mainstream film’s production. So, it shows they have the capability to go a long way. Now, what they need is recognition from the Indian mainstream film industry. They need to get a technician card from the cine employees’ association so that they can work on other film productions.

Do you plan to work with Cam-On again?

My next feature film will be based on 10 tribal Muslim girls who challenged religious patriarchy in their *mohalla*. I am looking for collaboration for it, and I will want the Cam-On team working as a line producer unit. I want to see a marginal group like them designing another sublime story creatively on the screen. In Indian cinema, this approach has also never been experimented with. Only mainstream cinema can bring about such a social impact.



A SCENE from “Midnight Blues”.

Cam-On, we want to help other children do the same. Most important is that Cam-On allows us to express our problems. Through our films we express our pain, our hurt, our little victories and defeats. It is all our creation,” said 22-year-old Mousumi Shaw, who is studying mass communication.

EARLY DAYS

Initially, before the idea of forming a group came into being, the boys and girls mostly amused themselves by shooting images using their mobile phones. Their common passion for cinema brought them together, and they decided to take up film-making seriously. The Cam-On group came into being even though they had not yet named themselves. They pooled their resources to buy a second-hand video camera for Rs.11,000 and, with the new equipment, made their most successful film (in terms of viewership) to date, *Poltu’s Life*, which is a short film on the travails of a young boy growing up in the red-light area of Kalighat. The role was played by the 12-year-old son of a sex worker. “Our biggest encouragement was the popularity of *Poltu’s Life* on YouTube [uploaded on February 5, 2017]. Till date it has received around 18,000 views. This was a huge thing for us and strengthened our resolve to not give up,” said Rabin Bag, who is a graduate in education. So far Cam-On has uploaded six films, made between 2017 and 2019,

on YouTube: *Poltu’s Life*, *Ancient Ring*, *Speechless*, *Love Decision*, *Amader Chhoke Elaakar Khobor* (“The news of the neighbourhood from our eyes”, which is a documentary) and *Wish*. “All our films have a social message and are not more than 20 minutes long,” said 26-year-old Rupesh Chaturvedi, who is interested in the editing aspect of cinema.

It was not just love for cinema that was the driving force behind the formation of Cam-On; it was also a desperate need to project the reality of their lives. “We grew up here and faced all the usual problems a child can face growing up in a red-light area: the abuse, the drunks, being kept down, and so on. When we started watching movies, particularly Bollywood films, we realised that what was being shown was not the reality that we face. So we resolved to depict our reality through the films we made with Cam-On,” Chaturvedi added.

The youth of the Kalighat red-light area realise that their participation in *Midnight Blues* may be a huge step towards their social inclusion, so when the local political goons initially created problems for Basu and his crew, Cam-On stepped in and, with the support of the red-light community, forced the hoodlums to back off. “We told them clearly that we would not allow them to interfere as the future of the children of this community was at stake,” said Raju Mondal.



DEBASISH BHADURI

SEX WORKERS helping the heroine with her make-up.



DEBASISH BHADURI

MEMBERS OF CAM-ON setting up lights before a shot.

One of the main problems that children of red-light areas face in the outside world is the stigma attached to their background. The exposure and recognition *Midnight Blues* will give them will be a crucial step in the long struggle for social acceptance for the children of Kalighat. “We hope to make people understand that the children here are like all other children. We do not want the children of today to face the same problems we faced when we were growing up here. Getting an opportunity to work on this film is a huge learning experience for us,” said 26-year-old Ranajit Majumder.

COMMUNITY PARTICIPATION

If the community of the red-light area was initially reluctant to be a part of the project, under Cam-On’s influence it too began to get involved in different ways. For example, Shampa Saha and Kalpana Jana are overseeing the make-up of the actresses. “There is a particular way in which we girls do our make-up when we go out. We ensure that the make-up of the actresses remains authentic,” said Shampa. Kalpana pointed out that it was Cam-On’s presence in the project that drew her to it. “My son acted as Poltu in Cam-On’s film *Poltu’s Life*. It was one of the proudest moments of my life to realise he had so much talent. It gave me hope that with Cam-On’s help my boy will be able to find his way in the world. Cam-On helps us and we help Cam-On. These are all our children,

our little brothers and sisters,” she said.

Such was the cooperation and involvement of the sex workers’ community that on some nights the actresses themselves stood in “the line” on the road, with the sex workers dropping to the background but keeping a protective eye on them. They had trained their wards so well that even local residents were fooled. “They allowed us to shoot the film at night and even enter the most interior parts of the area,” said Basu, acknowledging their help at the cost of their business.

One unique thing about the Kalighat red-light area is that the criminal elements there do not control the sex workers and hence cannot always exert their influence. “The women of the area are independent and self-contained, which is the reason they can stand up to the hoodlums and the political bullies. Their sense of empowerment allowed me to film there.” Their independence is why something like Cam-On could come into existence. The level of education is also considerably higher in Kalighat compared with other red-light areas.

With *Midnight Blues*, Cam-On no longer remains just a medium of self-expression for the youth of Kalighat but is a vehicle of progress and emancipation. The members have recently applied for the outfit to be registered as a “society” and have big plans for the future. “We may in the future make it a private trust or a

private limited company working on film production,” said Raju Mondal.

Subhojit Maity, who is studying philosophy at Jadavpur University, said that one idea is to venture into theatre. “Doing theatre is also an exercise for mental health. In our community, we see many children suffering from depression. We are thinking of forming a theatre group and doing workshops,” he said. Also, the group does not wish to restrict itself to the red-light community but wants to coordinate with other marginalised, poor people, particularly in rural areas. “For so long we worked without any support. Even our equipment was bought second-hand. With *Midnight Blues*, we are getting paid for our work for the first time. Through Cam-On we want to reach out and extend the kind of help we never got,” said Mousumi Shaw.

Basu also has big plans for the film after it is completed. He will be taking it to international film festivals and plans to screen it in universities, chambers of commerce and consulates. Whether the film wins critical acclaim or not, it has already achieved something very special: it has given recognition to talent that would otherwise have remained unnoticed; it has opened a window of opportunity for those who have been banging on closed doors all their lives; and, most important, it has injected hope and enthusiasm in a community that has always been shrouded in darkness and despair. □



C.P. CHANDRASEKHAR

Oil shock in reverse

The steep fall in oil prices improves India's manoeuvrability to address an economic recession. However, the government's decision to **increase the excise duty** on fuel betrays an attempt to appropriate for itself the benefits that may have otherwise accrued to the citizens.

THE cooperation between the Organisation of the Petroleum Exporting Countries (OPEC) and some non-OPEC oil exporters, including oil major Russia, to limit production and supply of oil and help hold oil prices has collapsed. In a dramatic post-COVID-19-pandemic turn, discussions to extend this agreement among OPEC-plus countries broke down at the end of the first week of March. The agreement had been arrived at in December 2016 and had been strengthened as recently as December 2019, when production cut commitments were raised from 1.2 to 1.7 million barrels a day.

The trigger for the breakdown of talks was the damaging effect that the coronavirus shock has had on global growth and consequently the demand for oil. The International Energy Agency's forecast indicates that for the first time since 2009 there would be an absolute fall in oil demand in 2020. Falling demand has already resulted in a steep decline in oil prices, with the price of Brent crude moving from close to \$70 a barrel at

the beginning of January to around \$45 a barrel by the time of the OPEC-plus meet on March 10. This required additional production cuts to align supply with demand and reverse the price decline, which was what the March discussions sought to secure.

In those discussions, Saudi Arabia's demand was that Russia, the other dominant producer in the post-2016 oil-exporter alliance, should join OPEC in ensuring a further 4 per cent fall in global production. Russia demurred, making it difficult for Saudi Arabia or OPEC to go ahead with production cuts, since increased Russian production could push down prices even further. This would imply that oil revenues of countries enhancing production curbs could be hit by a combination of lower sales and lower prices. Faced with that possibility, Saudi Arabia decided instead to increase sales so as to offset falling prices with increased production. But the announcement that it, too, would increase output at a time when demand was falling only intensified the

price collapse, with the price of Brent crude falling from close to \$39 a barrel to just above \$32 a barrel between March 10 and 13.

TWO IMPLICATIONS

Unless a new agreement helps redress the demand-supply imbalance that is driving down prices, the current situation has two implications. One is that the increase in global oil supplies as a result of the surge in production of shale oil in the United States is likely to see some correction, since shale oil reserves at a number of locations can be competitively exploited only at prices higher than the current levels. Lower shale output would moderate the adverse effect of the demand-supply imbalance on prices. The other implication, however, is that even if the oil price decline tapers off, prices of the resource are likely to remain depressed for some time to come.

This turn of events is surprising, given that the agreement on a further dose of production cuts had been struck as recently as December 2019. Moreover, in early March Russia had



GETTY IMAGES/ISTOCKPHOTO

TALKS TO EXTEND the agreement to limit oil production collapsed in the first week of March.

said that following a call from Saudi Arabia's King, the two countries were planning "to further co-ordinate their actions" to stabilise the global oil market. Russia's decision to go back on that commitment seems to have been influenced by recessionary fears and the demands from public and private sector barons close to the Vladimir Putin administration who rule the oil sector and who are looking to keep shale production down and increase Russia's market share. The government decision was also spurred by its extreme dependence on oil. Oil and gas account for close to two-fifths of Russia's GDP, pointing to the inadequate diversification of the country's economy which makes it dependent on a range of imports.

Oil and gas also account for more than 60 per cent of the country's exports. So, any cutback in oil production not only directly affects the GDP and its growth, but also limits the ability of the country to access crucial imports. Clearly, President Putin and his team have calculated that, given the economic threat posed by the COVID-19 pandemic, a price fall will be less damaging than the loss in output and export revenues that production cuts imply. *Financial Times* reports that Russia had declared that it could survive with oil at \$25-\$30 a barrel for a decade, drawing on its national wealth fund for budgetary resources aimed at keeping the economy running.

However, what the Russian au-

thorities may not have taken into account is the Saudi response and the consequent magnitude of the oil price decline that decision could precipitate. A steep decline hurts Russia because its ability to expand production to compensate for lower prices is limited, given the production capacity it has in place. Saudi Arabia, too, is a heavily oil-dependent country, perhaps even more than Russia. But it has substantial leeway on the production front, and would not only be in a better position to offset falling prices with enhanced production but is also better placed in terms of the costs of exploiting its reserves to win back market share by displacing U.S. shale producers. The latter, given their costs, would not be able to stay in production as prices fall below some threshold.

Beyond a point, Russian oil facilities, too, face a similar cost problem. According to one industry estimate, Saudi Arabia can allow prices to go down to as low as \$13 a barrel and still cover cost and turn a profit. Whereas, at exchange rates that prevailed until recently, Russian producers would be looking for price levels closer to \$40 a barrel to cover costs, though rouble depreciation can help bring that dollar figure down.

Outside of the OPEC-plus grouping, countries have responded to the consequences of the Russia-Saudi Arabia stand-off very differently. The U.S.' position is ambiguous. While that country had earlier always pushed for lower oil prices, the fact that it is now self-sufficient has altered its stance. It still would need to keep pump prices low to appease an automobile-dependent population. But when oil prices trend too low they threaten the viability of the shale industry. That would have repercussions elsewhere in the economy, especially the financial sector, since shale investments were substantially financed with credit, including with junk bonds. Not surprisingly, Donald Trump came to the rescue of beleaguered U.S. oil firms and their financiers with a decision to order purchase of oil ostensibly to shore up the country's strategic reserve. On March 13, he

said: "Based on the price of oil, I've also instructed the Secretary of Energy to purchase at a very good price large quantities of crude oil for storage in the U.S. strategic reserve." Oil prices immediately rose 5 per cent.

INDIAN SCENARIO

The government in oil import-dependent India has decided to garner for itself the benefits from the oil price drop. With the dollar price of a significant import falling, the country looks to benefit in the form of a lower import bill and lower trade and current account deficits. That improves the manoeuvrability of a government that has to address an economic recession. But, rather than allow lower oil prices to translate into lower prices paid by consumers, which is what should happen in an ostensibly market-determined pricing system, the government has decided to increase the excise duty levied on petrol and diesel by Rs.3 a litre. It presumably hopes to make up for revenues lost because of corporate tax concessions doled out to mitigate the effects of the recession on the profits of Indian business and use the money to meet its self-imposed fiscal deficit targets.

National Democratic Alliance governments have relied heavily on this source of revenue, with the excise duty per litre levied in the case of petrol rising from Rs.9.48 in January 2014 to Rs.22.98 currently, and that in the case of diesel from Rs.3.56 to Rs.18.83. So the response to the global oil price seeks to appropriate for the government the benefits that may have accrued to the citizens it governs. That, however, may have been a good idea when the economy was performing well. Raising the price of a universal intermediate that enters into the cost of production of multiple commodities is to court inflation. Rising prices, even of essentials, would depress demand further and intensify the recession. The unintended outcome could be stagflation in a country that is only beginning to experience the economic effects of the COVID-19 pandemic that, as expected, has crossed its borders as well. □

CRUDE WARS

The downturn in the global economy precipitated by the coronavirus is made worse as Saudi Arabia and Russia fall out over crude oil production levels and engage in a price war resulting in a free fall of fuel prices. BY JOHN CHERIAN



ANDREY RUDAKOV/BLOOMBERG

GLOBAL OIL PRICES HAVE PLUNGED AFTER the bitter parting of ways between Saudi Arabia and Russia. After a meeting in Vienna in the first week of March, attended by the oil Ministers of the Organisation of the Petroleum Exporting Countries (OPEC) and Russia, the unity that was on show for many years crumbled dramatically. Russia opposed the Saudi proposal to cut oil output further in order to stabilise global prices after the coronavirus pandemic adversely impacted global demand. The Saudi demand for a cut in oil production by 1.5 million barrels a day, amounting to 1.5 per cent of world supply, was rejected by Russia. Russia said it favoured continuing with the current production levels agreed upon with OPEC until the middle of the year.

Saudi Arabia reacted with anger, and Crown Prince,

AT AN OILFIELD near Almeteyevsk, Tatarstan, Russia, on March 11. Saudi Aramco's plans to boost its oil output raises the stakes in a price and supply war with Russia and U.S. shale producers.

Mohammed bin Salman, the *de facto* ruler of the kingdom, ordered the ramping up of production and a cut in the price of Saudi crude by 10 per cent. It was the biggest cut in two decades. The Saudis are hoping to cut into Russia's market share. By drastically cutting prices, Saudi Arabia is hoping to teach Russia a lesson for not toeing the Saudi line on production caps. Asian countries importing Saudi oil were offered a special discount.

The Russians have followed suit in a tit-for-tat move by upping their own production. The result was that by

the second week of March, global oil prices had plunged by 25 per cent. It was the fastest decline recorded since 1991. The CEO of Saudi Aramco, Amin Nasser, announced in mid March that his company would further deluge the market in the month of April. He said that



ALEX HALADA/AFP

PRINCE ABDULAZIZ BIN SALMAN AL SAUD, Minister of Energy of Saudi Arabia, arrives for the 178th meeting of OPEC in Vienna, Austria, on March 6.



BANDAR AL-JALOUJI/AFP

A FILE PHOTOGRAPH of Muhammad bin Nayef (right), when he was Crown Prince, with Mohammed bin Salman, who was then Deputy Crown Prince. Saudi authorities arrested Muhammad bin Nayef and three others on charges of plotting a coup.

production would be set at “300,000 barrels a day over the company’s sustained capacity of 12 million bpd [barrels per day]”. Saudi Aramco is the world’s single biggest exporter of oil. According to experts, Saudi Arabia has started “a price war” against Russia, promising to sell its oil at a discount in order to maximise its own revenues.

The turmoil in the oil industry coincided with the downturn in the global economy precipitated by the coronavirus pandemic. The demand for jet fuel, petrol and diesel drastically declined while the energy market is facing a supply-and-demand crisis. The stock markets around the world were already plunging when the three-year-old alliance between the Saudis and the Russians fell apart. Saudi Aramco’s shares—the company had recently gone public—was one of the most affected. They fell by 9 per cent after Russia ended its agreement with OPEC. The authorities in Russia are confident that they will be able to outlast the low oil prices as they will be able to produce oil at the lowest cost, at around \$20 per barrel. The Saudis too can produce oil cheaply but will have to sell it around \$75 a barrel if they have to balance the national budget.

A prolonged oil-price collapse is beneficial to energy-dependent countries such as India, China and Japan. It is, however, not good news for the United States’ oil industry, which has become overly dependent on oil extracted from tar sands and fracking. The U.S. recently became the largest oil producer in the world, overtaking Saudi Arabia and Russia. But with the price of oil remaining low for the last seven years, many small oil companies in the U.S. have either closed down or gone bankrupt. According to oil industry analysts, for small shale oil companies in the U.S. to remain profitable, oil prices should be at least \$50 a barrel.

One of the key reasons why Saudi Arabia decided to join hands with Russia was to keep the U.S. oil companies from undercutting them. The U.S. has become a big exporter of oil since 2014, cornering markets in countries such as India that until recently depended mainly on oil and gas imports from West Asia. In just seven years, U.S. shale production jumped from 0.4 million bpd to 4 million bpd. The last time OPEC had allowed oil prices to fall was in 2014, increasing production to offset the threat posed by rising sales of shale oil producers from the U.S. The price of oil had crashed to \$30 a barrel that year.

Russia joined with OPEC in 2016 to stabilise the price of crude. The two sides coordinated in setting up production quotas until their break-up in the first week of March. Russia was convinced that the Saudi proposal of enforcing further cuts in production at this juncture would only benefit U.S. shale oil producers. Russia has now decided to take the U.S. shale industry head-on. A cold and calculated decision was taken by Russia to sacrifice the budding friendship with the Saudi monarchy. “The Kremlin has decided to sacrifice OPEC+ to stop U.S. shale producers and punish the U.S. for messing with Nord Stream 11,” said Alexander Dynkin, the head of the Russian think tank the Institute of World Economy and International Relations (OPEC+ is an ac-



DAVID MCNEW/AFP

A FRACKING OIL FIELD in California, U.S., a file photograph.

ronym for the short-lived alliance between the oil cartel and big exporting nations like Russia). Stocks in small- and medium-size U.S. shale companies are already in free fall.

The U.S. had earlier imposed sanctions on companies involved in Nord Stream 11, which supplies gas to Germany and the Russian oil giant, Rosneft. The U.S. government had imposed sanctions on the state-owned Russian oil company for marketing oil from Venezuela. German Chancellor Angela Merkel strongly criticised the U.S. move on the Russian pipeline and urged the U.S. to desist from interfering in the internal affairs of European countries.

OIL PRICES TO REMAIN LOW

The price of oil in the second week of March was about \$34 a barrel. Most oil industry experts predict that oil prices will remain low for the foreseeable future as there was a glut in the oil market. The low revenues from oil will also be detrimental to the economies of even the rich OPEC members like Saudi Arabia. For the Saudis to sustain their current level of governmental spending, oil revenues have to be at least \$80 a barrel. After the Arab spring uprisings, the monarchies in the region had to dole out more subsidies to the populace to stave off unrest. Oil accounts for nearly 70 per cent of Saudi Arabia’s fiscal income. With their economies doomed to be dependent on oil for the foreseeable future, social unrest could be a distinct possibility if the price continues to remain low for a long period. Russia has \$150 billion in reserves to cover a budget deficit for up to 10 years even if oil sinks to \$25 a barrel. Oil and gas provides 40 per cent of Russia’s fiscal income.

The Saudi-Russian break-up also occurred at a time when the fissures within the Saudi royal family were becoming more and more visible. Recent events have cast a shadow on the privatisation of Saudi Aramco and the ambitious Vision 2030 programme. Saudi Aramco announced in the third week of March a 20.1 per cent drop in the profits for 2019. The world’s most valuable firm also announced that it was slashing expenditure for this year. The oil spat with Russia and the coronavirus pandemic have already had an impact on the Saudi economy.

At least four senior members of the ruling royal fam-

ily have been put under arrest. They include Prince Ahmed bin Abdulaziz, the brother of King Salman, on charges of plotting a coup. The others are his son, Prince Nayef bin Ahmed bin Abdulaziz, the head of the Land Forces Intelligence and Security Authority; the former Crown Prince, Muhammad bin Nayef; and his half-brother, Nawaf bin Nayef. Prince Ahmed bin Abdulaziz is a direct descendant of the founder of the Saudi kingdom, Ibn Saud. He has openly criticised the present government’s policies, especially those relating to Yemen and its immediate neighbourhood.

The head of the International Energy Agency (IEA), Fatih Birol, meanwhile, warned that the Saudi-Russia oil price war could put at risk the ongoing fight against the coronavirus pandemic. “The world is facing a major challenge in fighting against the coronavirus,” Birol told the *Financial Times*. “I find it at best irresponsible that they are having a price war now. The people of the world will not forget who was on the side of fighting the virus, and which countries were on the side of making the fight more difficult.” Birol said that oil-dependent economies such as those of Nigeria, Algeria and Iraq would face large budget shortfalls as a result of the ongoing price war. The situation of oil-exporting countries like Venezuela and Iran, already reeling under U.S. sanctions, is even more dire. The IEA chief also warned that it would be a mistake to write “the obituary” of the shale oil industry in the U.S.

The Trump administration is unhappy with both its ally Saudi Arabia and its strategic rival Russia for triggering the oil price war. It has not only had an adverse effect on the oil industry in Texas, a State Donald Trump has to win if he has to retain his presidency, but also on the U.S. stock market. The country has witnessed the sharpest drop in its equity market since 2008. Trump’s supporters in the Congress are openly urging him to apply pressure on the Saudi Crown Prince into reversing his decision on oil prices.

Texas Senator John Cornyn, speaking on behalf of the shale oil lobby, suggested that Trump urgently speak to the Saudi Crown Prince and remind him of Saudi Arabia’s dependence on the U.S. for its security. □

Retaking Idlib

The Syrian army makes a concerted effort to liberate every inch of Idlib province from Turkish army-backed jihadi forces. BY JOHN CHERIAN

THE SYRIAN ARMY, WITH THE SUPPORT OF the Russian Air Force, made a concerted effort to drive out the last remnants of the jihadi forces from the north-eastern Idlib province in early February. It is the only Syrian province where the extremist forces are still holding out with the support of the Turkish Armed Forces. But the latest onslaught by the Syrian army has made their presence tenuous. The Syrian government was determined to liberate every inch of its territory and remove foreign fighters from its soil.

The Syrian army launched an assault on Idlib in December 2019, signifying the collapse of the Sochi agreement of September 17, 2019. The army has been making a steady advance since then in the province. The Sochi agreement had called for the establishment of “de-escalation zones” separating the Syrian army from the rebel forces. Under the agreement, the Turkish Armed Forces was supposed to remove all “radical groups” from the province by October 15, 2019, along with tanks, rocket launchers and artillery under their control. Turkey had played a big role in the arming and training of the radical groups. Ankara failed to live up to any of the commitments it made in Sochi last year.

That is why the Syrian government ordered its military to start the much-delayed process of liberating Idlib province. By early February, the Syrian army had surrounded many Turkish army posts within Idlib while inflicting heavy losses on the terrorist groups it was backing.

The Recep Tayyip Erdogan government, which had masterminded the abortive bid at regime change in Damascus with the open support of the West and the Gulf monarchies, is still attempting a rearguard battle to carve out an enclave in Idlib province to help provide sanctuary for terror groups that have refused the Syrian government’s offers of amnesty and safe passage. The



most potent militant group in Idlib is the Hayat Tahrir al-Sham, led by fighters who until a couple of years ago swore allegiance to Al Qaeda. The group has been designated as a “terrorist” outfit by the United Nations.

In the first week of March as fighting raged in Idlib, President Erdogan flew to Moscow to hold emergency

SYRIANS CLIMB atop Turkish military vehicles as they attempt to block traffic on the M-4 highway, which links the Syrian provinces of Aleppo and Latakia, before the joint Turkish and Russian military patrols arrive, at al-Nayrab, about 14 km from Idlib on March 15.

peace talks with his Russian counterpart, Vladimir Putin. After more than six hours of talks, a ceasefire agreement on Idlib province was announced. Under the terms of the agreement, a “security corridor” is to be created to help civilians fleeing the conflict zone. The safe zone for civilians will be six kilometres wide and situated along the important M-4 highway. It will be jointly supervised by the Russian and Turkish militaries.

The Syrian army had recaptured much of the highway and the key town of Saraqib during its recent offensive. Many observers of the region describe the battle for Saraqib as the first open confrontation between the armies of Turkey and Syria. Saraqib is situated at the confluence of the M-4 and M-5 highways in eastern Idlib. The Russian Defence Ministry stated that it would deploy its forces to counter Turkish attempts to retake the town. Rebel control of the town had blocked traffic between Damascus and Aleppo, Syria’s commercial capital. The highways had come under the control of the rebel forces soon after the civil war in Syria started in earnest in 2013.

Turkey has been loath to allow the Syrian government to retake Idlib, which is along its border. Erdogan felt that a comprehensive Syrian military victory would send hordes of civilian refugees into Turkey. When the war started, Turkey had actually instigated Syrian civilians to cross over in order to manufacture a humanitarian crisis that would provide the basis for open foreign military intervention in Syria. But after Erdogan’s dreams of a quick-fire regime change failed to materialise and the fighting intensified, around three million Syrian refugees poured into Turkey.

The Erdogan government also feels threatened by the growing assertiveness of the Kurds. Turkey invaded northern Syria last year with the aim of nipping in the bud the rise of an autonomous Kurdish-dominated statelet on its borders. A military defeat in Idlib would encourage the Kurds to regroup and pose another challenge to Turkey. Erdogan wants to settle Syrian refugees in the Kurdish-dominated areas of northern Syria.

In a televised address to the nation in February, Erdogan justified his targeting of Kurdish militias in Syria. “If we do not clear our borders of terrorists now, we might have to fight bigger wars inside Turkey later on,” he said.

Turkey angered Russia and other governments in the region by sending hundreds of rebel fighters it had trained to fight in Syria to Libya. It is helping the internationally recognised government in Libya to fight against the forces of Khalifa Haftar, the warlord who controls much of the country and its oil resources. Haftar has the tacit backing of Russia, France, Egypt, the United Arab Emirates and some other countries. The government based in Tripoli survives on the military support of Turkey, Qatar and a few other countries. Turkey’s intervention and the role of the Syrian rebels helped prevent the fall of Tripoli under the Haftar-led military juggernaut.

In early February, the Syrian army escalated its ground and air assault on the rebels holed up in Idlib with



MIKHAIL KLIMENTYEV/AP

RUSSIAN PRESIDENT Vladimir Putin (right) and his Turkish counterpart Recep Tayyip Erdogan during the peace talks in Moscow, Russia, on March 5.

the support of Russia. The Syrian artillery shelling and air attacks killed more than 58 Turkish soldiers who had forcefully intervened to help the jihadi forces. Turkey had initially alleged that it was the Russian Air Force that was involved in the attack that claimed 36 of its soldiers. The Russian Defence Ministry strongly denied the claims but at the same time insisted that Turkish troops “were in battle formation with terrorist groups” when the attack took place.

Turkey retaliated by launching “Operation Spring Shield”, in continuation of its undeclared war on Syria, deploying 10,000 soldiers in Idlib, inside Syria. Turkey claimed that it had shot down two Syrian jets, eight helicopters and a large number of tanks in retaliation for the killing of its soldiers. Ankara claims to have killed more than 2,000 Syrian troops. The figures trotted out are mainly for the consumption of a domestic audience.

Both sides have suffered heavy casualties but a full-scale war between Turkey and Syria has been avoided for the time being. Such a war would have drawn in foreign powers once again into the region and started a potential face-off between Russia and the North Atlantic Treaty Organisation (NATO).

The European Union foreign policy chief, Josip Borrell, issued a warning that the serious military clashes in Syria could quickly escalate “into a major open international military confrontation”. The U.N. Secretary-General, Antonio Guterres, issued an appeal to both sides to “step back from the edge of further escalation”.

TURKEY THREATENS TO OPEN BORDERS

In the wake of the looming confrontation with Russia over Idlib, Erdogan called for military help from his NATO partners, but the NATO headquarters in Brussels

did not oblige. Turkey then threatened to open its borders once again and allow refugees to flood Europe. In fact, Ankara briefly allowed some refugees to cross into Greece and neighbouring European countries, prompting strong protests from Brussels and the European governments.

Erdogan has been saying that if the West does not help him find a solution to the refugee problem, he has the option of letting them loose. Already more than a hundred thousand Syrian citizens have been given Turkish citizenship, and this has not gone down well with the general populace. A range of opposition parties want the expulsion of Syrian refugees.

The U.S. has adopted a “carrot-and-stick” policy with Turkey. Secretary of State Mike Pompeo said that the U.S. was evaluating Turkey’s request for military aid. “We firmly believe that our NATO partner Turkey has the full right to defend itself from the risk that is being created by what [Bashar al-] Assad, the Russians and the Iranians are doing inside of Syria,” Pompeo said in the first week of March. But Defence Secretary Mark Esper and the U.S. Chairman of the Joint Chiefs of Staff, Gen. Mark Milley, told Congress that the Donald Trump administration had no plans to “re-engage in the civil war” in Syria.

The Trump administration indicated that Turkey would have to first disentangle itself from close political and economic ties it had established with Russia to benefit from any meaningful military help. The U.S. and NATO are particularly unhappy with Turkey’s deal to purchase the sophisticated S-400 surface-to-air missiles from Russia. In February, after its forces suffered a military reverse, Turkey specifically asked the U.S. to deploy its Patriot missile batteries along its border with Syria to counter Russian and Syrian air power. Washington refused to oblige. The Russian Air Force is in full control of the air space over the Idlib province.

RUSSIA-TURKEY TIES

Bilateral relations between Russia and Turkey seem to have been papered over for the time being following the new agreement on Idlib. The Putin-Erdogan summit emphasised the durability of bilateral relations. Erdogan said the relations between the two countries were “at a high point” although Turkey had to make significant concessions, including accepting a new “de-escalation zone”, which reflected the advances made by the Syrian army. Both sides have reaffirmed their commitment to the sovereignty and territorial integrity of Syria.

The majority of Turkey’s fortified “observation posts” are now surrounded by Syrian forces. Meanwhile, the Syrian government has stressed that it will not rest until it liberates every inch of its territory. “Syria fights terrorism on behalf of the whole world and it will continue to do so until it fully liberates Syrian land,” said Bouthaina Shaaban, President Bashar al-Assad’s political and media adviser. She said the ceasefire deal was possible only because of the major gains and sacrifices made by the Syrian army. □

For a global movement with a radical agenda

Interview with Marxist economist and former Greek Finance Minister **Yanis Varoufakis**. BY JIPSON JOHN & JITHEESH P.M.



GETTY IMAGES

YANIS VAROUFAKIS: “If anything, the first few pages of the Communist Manifesto describe today’s globalisation far more pertinently than it described 19th or 20th century capitalism.”

YANIS VAROUFAKIS IS AN INTERNATIONALLY known Marxist economist and a Greek politician who served as Minister of Finance in Greece from January 2015 to July 2015. At present, he is engaged in mobilising people for a better and inclusive world with a progressive economic and political vision. Before entering active politics, he taught economics at various universities across the world, including the University of Cambridge, the University of Sydney and the University of Athens. As Finance Minister, he led negotiations with Greece’s creditors during the government debt crisis. After Greece surrendered to the austerity demands of the European Commission and accepted another loan without debt restructuring, Yanis resigned from Alexis Tsipras’ Syriza (Coalition of the Radical Left) government on July 6, 2015. Since then, he has been actively involved in politics in Europe, and Greece in particular. In February 2016, he launched the Democracy in Europe Movement 2025 (DiEM25) with the aim of transforming the European Union (E.U.). It is an alliance of “people of the Left and liberalism, greens and feminists”.

On the formation of DiEM25, he says: “The main idea is twofold. First, since our main crises [private and public debt, banking, poverty, xenophobia, and climate] are transnational, we need a transnational movement, with a single, coherent agenda. Secondly, political parties that confine themselves to the nation-state are no longer relevant to the struggle against globalised banking and authoritarianism. On the basis of a new transnational politics, and with our Green New Deal as a unifying agenda, we are seeking to unite workers, the precariously employed, intellectuals, etc.”

In March 2018, he founded the European Realistic Disobedience Front (MeRA25), the “electoral wing” of DiEM25 in Greece with the stated aim of freeing Greece from “debt bondage”. MeRA25 secured nine seats in the Hellenic Parliament. Yanis returned to Parliament in 2019. In December 2018, he launched Progressive International, a grass-roots movement for global justice with the United States Senator and Democratic Party leader, Bernie Sanders. He supports and advocates the idea of basic income.

Yanis has authored several bestselling books addressing issues such as the European debt crisis, the financial imbalance in the world and game theory. They include *Adults in the Room*, *And the Weak Suffer What They Must?*, *The Global Minotaur*, *Foundations of Economics: A Beginner's Companion*, *Economic Indeterminacy*, and *A Game Theory: A Critical Text*.

Yanis contributes articles to *Project Syndicate*, *The Guardian*, *The New York Times*, CNN, *The Economist*, *The New Statesman*, *Financial Times* and other international publications.

In this interview, the first to Indian media, Yanis speaks elaborately on the 2019 British election, Brexit, the E.U. crisis, the 2020 U.S. presidential election, the global financial crisis, rising ultra-national forces, the need for a progressive international movement, the DiEM25, rising inequality and the Greek crisis. Excerpts:

How important is this year's U.S. presidential election for the world? What were the challenges Bernie Sanders faced in electoral politics? What did you look for in Sanders' candidature? How do you view President Donald Trump's years in the White House?

Every American election is significant given that its purpose is to elect the most powerful political operative in the world. However, none will be as crucial as the one that took place in 2016. Donald Trump's election [that year] was transformational. Even if the liberal establishment returns to the White House, for instance a Joe Biden presidency, there will be no going back to the earlier model of U.S. hegemony. What died in 2016 was the post-War pattern of U.S. domination of a coordinated alliance of Western powers, with the U.S. determining the common line, and Europe, on the one hand and Japan-Australia-New Zealand on the other toeing that line. The new, Trumpian model of U.S. hegemony is based on what I call the bicycle wheel principle: The U.S. being the hub and all other powers the spokes of the wheel that is global political economy.

Trump correctly discerned that the multilateral NATO-G20-ANZUS-TTIP-TPP [North Atlantic Treaty Organisation-Group of 20-Australia, New Zealand, United States Security Treaty-Transatlantic Trade and Investment Partnership-Trans-Pacific Partnership] model was incapable of reproducing the U.S. hegemony as the size of the U.S. economy shrank proportionately. But, the bicycle wheel principle is different in the sense that the hub will always be stronger than any individual spoke.

In practical terms, this means that the U.S. downsizes or even blows up the institutions it helped create, NATO-G20-ANZUS-TTIP-TPP, and replaces them with bilateral agreements and relations. Trump's loathing of the E.U. and his determination to fragment it [his support for Brexit, Marine Le Pen in the 2017 French presidential election, Matteo Salvini in Italy] must be seen in this context. What will change if someone like Biden is elected? Very little, I fear. Any member of the liberal establishment, Democrat or Republican, that manages to



JESSICA TAYLOR/AFP

BRITISH PRIME MINISTER Boris Johnson (right) and Labour Party leader Jeremy Corbyn during the state opening of Parliament on December 19, 2019. "Brexit eclipsed the popularity of the Labour manifesto because of the coup in the Labour party," Yanis says.

reclaim the White House will give some nice speeches, alluding to the importance of multilateralism, but, in practice, will neither manage nor want to shift away from Trump's bicycle wheel model. And, thus, the world will continue to move in the direction of global feudalism under the military and monetary hegemony of a U.S. decoupling increasingly from both the supply lines of countries such as China and global capitalist institutions such as the International Monetary Fund (IMF) and the World Trade Organisation (WTO).

In this context, only Sanders could make a real difference. He is the only potential U.S. President who could do what Franklin D. Roosevelt did to Herbert Hoover-like policies that every other President would continue. This is precisely why he was targeted the same way that [Labour leader] Jeremy Corbyn was in the United Kingdom.

You ask me about the challenges Sanders faced in this electoral year. His greatest foe is the Democratic Party's bureaucracy and power brokers. As in 2016, they would much rather see Trump re-elected than Sanders win. If Sanders wins the primaries, the Democratic Party apparatchiks will do their damndest to re-elect Trump, exactly as the so-called radical centre of the Labour Party was so relieved that Boris Johnson beat Corbyn.

I suppose that the lesson that progressives all over the world must draw from the United Kingdom and the U.S., from the Corbyn and Sanders experiences is this: centrist parties that used to be in the business of civilising capitalism, of restoring some balance between capital and labour, have become the greatest brake on progressive politics. Why? Because they were central in, first, un-

leashing the financial genie that caused 2008 [recall that it was Democrat and Labour administrations that deregulated fully Wall Street and the City of London in the 1990s] and, then, were central during 2009 in re-floating the bankers after their paper pyramids collapsed. In short, since the 2008 crash of Western financialised capitalism, centrists have been responsible for implementing socialism for the financiers and harsh capitalism for the many. The resulting discontent led to two intertwined phenomena: the nationalist international led by Donald Trump, on the one hand, and centrist parties, on the other hand, whose top priority is to prevent progressives like Sanders and Corbyn from challenging the nationalist international.

The 2020 U.S. presidential election must be seen through this prism. It is why the Progressive International is such an important project.

In the December 2019 British election, the Conservative Party under Boris Johnson won a historic mandate. How does it reflect on Britain's domestic politics, the E.U. and the world? What went against Corbyn although the Labour had a promising manifesto?

There is a tendency to over-think this result. The situation is clear: Johnson took advantage of the voters' collective fatigue with a never-ending Brexit process and of a Parliament incapable of making up its mind, to unite the Leave vote under a single ticket and with a simple slogan [Get Brexit Done!]. On the opposite side, the Remain vote was split between Labour, LibDems, the SNP [Scottish National Party] and Plaid Cymru [Party of Wales]. The final result was the culmination of the worst own goal in British politics scored by the hard Remainers who, on the one hand treated Leavers like vermin and on the other they attacked Corbyn, the only leader who could deliver them the second referendum they craved for.

Corbyn's assessment, which has been ridiculed *ad nauseam* since it was delivered, was right: Labour won the argument but lost the election. What he meant, and where he was right, was that the Labour manifesto resonated with the views of a large majority: On the need for a massive investment in a green industrial revolution; for a National Investment Bank to work in conjunction with the Bank of England; for the extension of the National Health Service to a National Care Service; for transfer of shares from capital to labour; for an end to the U.K.'s *carte blanche* support of foreign wars. Alas, none of that mattered in the end. Why?

Brexit eclipsed the popularity of the Labour manifesto because of the coup in the Labour party and, in particular, by *The Guardian* and the BBC. Ever since Corbyn was elected leader of the Labour party, the centre-left's establishment made it its top priority to overthrow him. A series of coups took place within the party, but they failed because hundreds of thousands of new members kept supporting Corbyn. The plotters were banking on the 2017 general election, hoping that a terrible result would help them oust a party leadership that challenged the privileged classes' capacity to reproduce their privileges by co-opting the young and the working class. Alas, in 2017 the then Prime Minister, Theresa May, made the error of going to the polls before she had an over-ready Brexit deal. That gave Corbyn the opportunity to campaign on the basis of an anti-austerity, progressive Labour manifesto. The result was a remarkable 40 per cent of the vote and denying the Tories an overall majority.

From the next day, the internal campaign to unseat Corbyn took a nastier turn: they attacked his character, with anti-Semitism as the tip of their spear. And they ridiculed, as indecisiveness, his worthy attempt to behave like an honest broker of unity between working-class Leavers and Remainers.

For two years *The Guardian* and the BBC adopted twin tactics. First, they chose a turn of phrase whenever they referred to Corbyn that indirectly, but surely, insinuated that he was of suspect character and, most certainly, an enabler of anti-Semitism. Secondly, and more poignantly, they pushed hard the view that "they are all the same", successfully building on the majority's dislike of politicians by portraying everyone, from Johnson and Nigel Farage to Corbyn and John McDonnell, as different sides of the same coin. Moreover, their incessant campaign to cancel Brexit by any means helped turn progressive Leavers away from a Labour party in which Corbyn struggled to keep Leavers and Remainers united by keeping alive the prospect of resorting to...democracy—to a second referendum.

Given that most of the media were always in the pocket of the Tory party, ready and willing to promote Johnson when it mattered, having the only outlets of anti-Brexit, non-Tory, opinion (*The Guardian* and the BBC in particular) taking a neutral stance on the basis of "they are all the same" proved a decisive advantage for the incumbent Tories. If "they are all the same", why not vote for Johnson, who will at least end once and for all the Brexit saga? Thus, Brexit trumped the popularity of La-

"How do I place China? Certainly not a socialist country, it is nevertheless a fascinating experiment in combining markets, planning, common purpose, individuality, high technology and a refreshing scepticism over globalised finance."

bour's manifesto, giving a magnificent opportunity to Corbyn's opponents within Labour to take back the leadership of the working class' party and, once more, turn it against the working class, against the precariously employed, against the young (who voted overwhelmingly for Corbyn), against those on the fringes of a failing British capitalism.

The lesson from the 2019 U.K. general election is the same as the lesson from Greece's 2015 referendum: At crucial moments when people get a chance to win power, their worst enemy emerges not within the ranks of the establishment's servants but within their own progressive block's, or party's, *nomenklatura*.

Britain is no longer a member of the E.U. What would be its political and economic implications in the international system and Europe, in particular? Would other E.U. member-countries choose the path of Britain in the future?

The main impact will be on the E.U. itself. Already, the funding gap that the U.K.'s departure caused has made it necessary for Brussels to distribute cuts among the remaining member-states. The E.U., like all cartels, is quite good at distributing gains but awful at distributing losses. It is not so much the missing money. What matters is the manner in which the need to distribute losses is exposing existing rifts within the E.U.. While I do not envisage other 'exits', Brexit is already causing the existing bonds within the E.U. to weaken. The E.U.'s greatest danger, therefore, is that policy agendas on migration, banking, debt, etc., are re-nationalising. In the limit, the E.U. runs the serious danger of ending up formally intact but, in reality, an empty shirt. And would that not be music in Trump's ears?

Because of the memories of the World Wars and the traumatic past experiences, most of the European Left is more in favour of an integrated Europe and also sceptical about the demands for exit or separation. You were personally against Brexit. Why so? Don't you smell a 'revolt against Capital' in Brexit? You advocated 'Greece exit' earlier when Greece was in the crisis. Why two different positions?

Brexit and Grexit are like chalk and cheese: very, very different propositions. Brexit was a home-made campaign and aspiration. It reflects an essential incongruity between British and Continental capitalism and, importantly, a commitment of the British [bourgeoisie and working class] to parliamentarianism that is absent on the continent. In contrast, Grexit was never a home-grown campaign in Greece. In fact, Grexit was a threat invoked by the European establishment to make Greece accept new loans to pass on to the French and German banks: "Take these loans on condition of stringent austerity or we throw you out of the eurozone." Also, whereas Brexit was about exiting the E.U. by a member-state that never adopted the euro, Grexit was about Greece returning to its national currency [exiting the eurozone] but not the E.U. itself. You are correct to say that I cam-



DEMOCRATIC PRESIDENTIAL hopefuls former U.S. Vice President Joe Biden and Senator Bernie Sanders greet each other with an elbow bump as they arrive for the 11th Democratic Party 2020 presidential debate in a CNN Washington Bureau studio in Washington, D.C., on March 15. "His [Sanders] greatest foe is the Democratic Party's bureaucracy and power brokers. As in 2016, they would much rather see [Donald] Trump re-elected than Sanders win."

paigned against Brexit. Why? Because it was always going to reinforce the British ruling class, divide progressives and magnify xenophobia. The events of the last year or so confirmed this prediction. As for Grexit, while I never advocated it, my reply to the European establishment was clear: If you are forcing us to choose between permanent debtor's prison and Grexit, we shall take Grexit, thank you very much.

How would you trace the economic and political interest behind the establishment of the E.U.? You had earlier said that "Europe is disintegrating". Whether Brexit and similar demands point to a fundamental discontent against the E.U. set-up other than just reading these developments as demands of right-wing populism? Also, Alternative for Deutschland (AfD) campaigned for "Germany exit" from E.U. ahead of the European election last year.

The E.U. was set up as a big business cartel, inimical even to bourgeois democracy. Following the 2008 global financial crisis, the E.U. began to disintegrate. To keep it together, its establishment imposed a class war against the weak across Europe [from Greece to Germany and from Latvia to Portugal] while printing mountains of money to re-float the failed banks. Is it any wonder that good, progressive people began to question the desirability of this E.U.? However, it is one thing to come up with the above diagnosis and it is quite another to advocate the disintegration of the E.U. The latter will only blow fresh wind into the sails of deflation and the ultra-Right. As for the fact that the ultra-right has advocated exiting/disintegrating the E.U., it reinforces my point and reminds us of how in the 1920s and the 1930s, the Fascists followed the strategy of adopting elements of the Left's critique of existing institutions before taking them over and weaponising them against the people.

As a Finance Minister of Greece in 2015, you presented the Greece Debt Restructuring plan before the establishment of Brussels. What were your key suggestions in the "debt restructuring plan" then to address the crisis?

I knew that the German government could not "sell" an outright haircut to the German Parliament. So, to make it more palatable for them, I proposed a series of debt swaps. For instance, swapping existing debt obligations

that specified fixed interest rates and repayments with new bonds specifying repayments and interest rates that were analogous to Greek gross domestic product [GDP] size and growth rate. More precisely, I was proposing to link the total amount to be repaid by, say 2040, to Greece's total GDP between 2015 and 2040 and the rate of repayment to the rate of Greece's GDP growth.

What was the reason put forward by the establishment in Brussels for not accepting your plan of restructuring Greece's debt?

No economic reason whatsoever. In fact, behind closed doors they agreed that it was the obvious thing to do. Alas, they rejected it because the German leaders had lied to Germany's Parliament in two ways. First, they had told their members of parliament that the loans were for the Greek people, covering up the fact that they were a bailout of French and German bankers. Secondly, that they would get every penny back from the Greek state, even though they knew perfectly well that it was impossible to retrieve monies lent to an insolvent entity, especially if you forwarded the loans on conditions of stringent austerity that would shrink the already low incomes of the insolvent. Tragically, having issued these lies in Germany's federal parliament, the German Chancellor did not want to return with a debt restructuring proposal that, in effect, was tantamount to an admission that she had lied to them. In short, they rejected my proposals in order to avoid admitting to having lied to their own people—a rejection that, interestingly, cost their taxpayers serious money (in the sense that my proposals would have allowed the Greek state to repay more of its loans in the long run).

The Greek debt crisis and the ultimatum given by the troika (the European Commission, the European Central Bank (ECB) and the IMF) in 2015 was a classic case exposing the face of institutions such as the IMF and the ECB. As the Finance Minister of Greece at that time, could you speak about the unfolding of the crisis?

My precise expression was that it was as if the eurozone crisis, which erupted in Greece before spreading like a bushfire across Europe, was designed. No one intended it, of course. But, the crisis was inevitable given the design of the euro, Europe's common currency. Think about it: They created a central bank, the ECB, without a state to have its back during a crisis while, at the same time, 19 states shared did not have a central bank to have their back [since the ECB was banned from monetising the states on whose behalf it issued the euro].

To boot, they preserved separate banking systems [a German, an Italian, a Greek, and so on] that had to be bailed out, without any help from the ECB, by the national governments, which could not rely on the ECB either. The sequential bankruptcy of states and banks was, therefore, a designer feature of the eurozone. The fact that it was not the intention of the euro's designers does not make it less of a designer feature of the common currency they produced.

Even a leftist government that came into office with the promise of a restructuring plan different from that of the troika, surrendered before the troika. It led to your resignation from the Cabinet.

You have to ask them. The moment my comrades, the Prime Minister in particular, surrendered, I resigned, joined many progressives around Europe to form the Democracy in Europe Movement and, eventually, to return to Greece's Parliament to carry on the fight that must be fought against the orchestrated misanthropy that passes for economic policy.

What are the lessons nations, especially countries of the tricontinental, should learn when dealing with international agencies. What does the case of Greece tell the world?

It is a lesson that has been learnt a long time ago, during the developing world's debt crisis in the 1970s and the 1980s, in the case of South East Asia in the late 1990s, and today in Ecuador and Argentina. And it is this. The IMF operates as a bailiff on behalf of international creditors. Their job is to come in after a government fails to meet its debt repayments and impose, in exchange of stabilising the currency, cruel conditions that amount to the expropriation of the majority's assets and public services. The trick is to, in the first place, avoid a build-up of debts to foreign financiers in a currency that your state does not control and, if this has failed, to be ready to shun the IMF even if the price is a default and a sharp devaluation of one's currency. Accepting IMF loans on conditions that turn your country into a debtors' prison is never a good idea, whatever the local oligarchy [who always benefit from IMF programmes] say.

In this context, it is worth quoting the idea of delinking championed by Marxists such as the late Samir Amin and Prabhat Patnaik. They talk about the delinking of Third World countries from the vortex of globalisation. As an economist and a politician, what is your take on this idea? What are its practical implications? How could a country not willing to bow down before the neoliberal financial capital meet the transitional economic difficulties when it dares to delink and also maintain an alternative path of economic development? Bolivia declared total independence from the World Bank and the IMF. Yet, its economic indicators show improvement. As I already said, it is crucial to delink from private loans that are denominated in a foreign currency or a currency that your government does not control. This is what is crucial, since it immunises you to IMF interventions. This does not mean, of course, turning to autarky. Joint ventures, collaborating with foreign companies on the basis of mutual advantage, technology transfers, etc., cannot and should not be avoided.

GREEN NEW DEAL AS UNIFYING AGENDA

Along with democrats from various political traditions—green, radical Left and liberal—you founded DiEM25 to

repair the E.U. What are you looking forward to “repair” through such a movement? How do you propose to “mobilise, organise and hold” the movement? What are the alternatives you are looking at to see this movement through?

Our objective is not to repair the E.U. but to transform it. You repair something that used to work well but is not broken. The E.U. was always a big business, anti-democratic cartel which could not handle the 2008 crisis and its aftermath without massive doses of misanthropy. This is why DiEM25 is not about its repair but its transformation. The main idea is twofold. First, since our main crises (private and public debt, banking, poverty, xenophobia, climate) are transnational, we need a transnational movement, with a single, coherent agenda. Secondly, political parties that confine themselves to the nation-state are no longer relevant to the struggle against globalised banking and authoritarianism. On this basis, of a new transnational politics, and with our Green New Deal as the unifying agenda, we seek to unite workers, the precariously employed, intellectuals, and others.

On the issue of inequality, Thomas Piketty's research and proposal for a global wealth tax has received much appreciation in many progressive and liberal circles. How could it be implemented in a world context where big capitalists control every organ of states in most parts of the globe? You proposed universal wealth dividend. Could you elaborate?

I have no quarrel with a wealth tax, except that it won't do much either to restore justice or to stabilise capitalism. Take for instance Elizabeth Warren's proposed wealth tax, the most radical variant of Piketty's idea. If implemented, it will not raise more than 1 per cent of the national income.

In my view, nothing will do short of redistributing property rights over capital. A first step is DiEM25's universal basic dividend. It would work very simply by making it a legal obligation of all large companies to pass, say, 10 per cent of their shares to an international wealth fund, with the accumulating dividends divided amongst the population. A second step would be to increase that percentage in proportion to automation. A third step would be to re-write corporate law. My dream would be to live in a world where shares are non-tradable and where each member of staff has a single share granting her or him a single vote on all matters pertaining to management and to the distribution of a firm's net revenues. That would end the wage-profit divide, indeed it would end... capitalism!

You say that “social democratic new deal paradigm is finished and it cannot be revived”. Could you explain? Social democracy lost its soul when social democrats [from the SPD in Germany, Tony Blair's Labour, Bill Clinton's Democrats, and so on] got into bed with the bankers, cutting a deal according to which social democrats would let the bankers run riot and the bankers, in return, would give them a cut to finance their campaigns



PRIME MINISTER Alexis Tsipras (right) and Varoufakis, at the Greek parliament in Athens on February 18, 2015.

and, partly, the welfare state. So, when in 2008 bankers went bust social democrats lacked both the analytical power and the moral strength to expropriate the bankers while saving the banks. Instead, it acted as social democrats that imposed austerity on the many and socialism for the bankers. That's when the social democratic project died.

Can it be revived? No, it can't be. Global capitalism can no longer be restrained by national governments seeking some historic compromise between national industrial capital and the nation's trade unions. We now need a transnational movement which targets both financiers and multinationals. Social democrats are neither interested in nor capable of being part of such a movement. This is why we created DiEM25. This is why we are working hard to put together a Progressive International, to which we invite our friends and comrades from India to be part of.

How do you analyse the present state of capitalism?

Capitalism suffered a large blow in 2008, inaugurating a third post-Second World War phase that poses a lethal threat both to capitalism and to humanity.

The first phase [Bretton Woods, 1944-1971] was based on a highly regulated global system with fixed exchange rates, capital controls and a U.S. which provided the global currency but which also recycled its surpluses to Europe and Asia, thus stabilising capitalism. That phase ended when the U.S. turned from a surplus to a deficit economy and could no longer stabilise global capitalism without becoming insolvent.

The second phase began with the end of the fixed

exchange rate regime [of Bretton Woods] and was typified by the important role of the U.S. current account deficit which provided huge demand to net exporters in Europe and in Asia, in exchange for 70 per cent of Asian and European profits that flowed back into Wall Street, thus closing the loop and funding the U.S. [current account and government budget] deficits. On the back of these capital flows, Wall Street built up financialisation, which in 2008 imploded.

The third phase began with that 2008 implosion. Even though the policy of bailouts for the bankers and austerity for the people re-floated banking and returned the U.S. current account deficit to its original levels, Wall Street and the rest of global finance could not recover their capacity to fund investment in real capital. Thus, since 2008 capitalism suffers a massive imbalance between savings and investment, leading to low-quality jobs and negative interest rates. The remarkable technological innovations [the rise of machine learning, 3D printers, etc.] that come on top of this failure to balance savings and investment are now magnifying the political and economic pressures upon globalised capitalism. Barbarism, xenophobia and Donald Trump are mere symptoms of this congruence.

“The old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appear.” Antonio Gramsci explained the inter-War period thus. Would you draw a similar conclusion about the present world situation?

Absolutely. This is why it is crucial that we speed up the evolutionary process, by means of a radical, transnational movement with a radical, transnational agenda that can inspire peoples from across the world: to help the new be born and end the interregnum that only benefits the varieties of authoritarianism damaging humans and the planet.

There is an upsurge of right-wing nationalist/fascist movements across the spectrum of the globe in different forms. This phenomenon can't be analysed in isolation from the trajectory of neoliberal capitalism and its predatory nature. Samir Amin called it “the return of fascism in the contemporary capitalism”. And you said that the 2008 financial crisis also is one of the reasons for such an uprising. How dangerous is the threat? Is there enough “political infrastructure” to counter it?

2008 was not one of the reasons: it was the reason, in precisely the same way that the crash of 1929 was the reason that the dark side of humanity took over, leading to tens of millions of deaths.

On November 30, 2018, you formed Progressive International. Is it a political counter to right-wing upsurge?

Yes, I believe Progressive International is the only weapon we have against, on the one hand, global finance and, on the other, the nationalist international that the crash of 2008 has given rise to. This is why, together with

Sanders; Katrin Jakobsdottir, the Prime Minister of Iceland; Fernando Haddad, Lula's stand-in candidate in Brazil; and many others we inaugurated Progressive International in Vermont [U.S.] in November 2018.

Developments in 2019 proved beyond doubt the Progressive International's importance. To put it bluntly, the progressives' lack of coordination, of a common programme, of common institutions, led to 2019 being our collective *annus horribilis* all over the globe: From the E.U, where in May 2019 European Parliament election, regressives and authoritarians triumphed, to the unchallenged dominance of Narendra Modi, Boris Johnson, Benjamin Netanyahu, Jair Bolsonaro, and the new conservative Greek government. Everywhere we turned in 2019 we saw progressives lost, defeated or, at the very least, on the back foot.

This is why in 2020 we shall do our utmost to give Progressive International a boost. We begin in February with the launch of a board comprising progressive leaders from around the world, each of whom will join not just symbolically but in order to pursue a particular project on behalf of Progressive International; e.g., to organise a global trade union recruitment and coordination exercise or a consumer boycott of multinationals pushing workers into precariousness and small business into bankruptcy. Then, in the Fall of 2020, we plan our first large-scale event where a common programme and a manifesto will be hammered out.

You opined that Chinese economic management is the most adorable in the world. And, China helped a lot in managing the 2008 financial crisis. Still, you have differences with the Chinese mode of governance. How do you see their economic growth and poverty alleviation in the last decades? Do you think China is still on the socialistic track? If not, where do you place China?

I opined that the Chinese government proved to be an adept macroeconomic manager and, also, that without China's massive investment drive after 2008, global capitalism would have been in a far, far worse state.

What is my problem with China? The abject authoritarianism, the manner in which workers have been denied a voice, the environmental damage wilfully inflicted... How do I place China? Certainly not a socialist country, it is nevertheless a fascinating experiment in combining markets, planning, common purpose, individuality, high technology and a refreshing scepticism over globalised finance. Future socialist experiments have a lot to learn from contemporary China.

In Europe, the refugee influx has been used by right-wing political movements to increase their appeal. It seems that not only the right but even liberal politicians hold anti-immigrant views. "Europe must curb immigration to stop right-wing populists," said the former U.S. Secretary of State Hillary Clinton. You criticised her for this comment. Could you talk about the so-called "European refugee crisis"? How does the Left

politically engage with this?

There is no such thing as a European refugee or immigration crisis. Europe is large, rich and comprising half a billion people. One or two million wretched souls arriving on our coasts and crossing our borders would not have been an issue if it were not for the deep crisis of European capitalism which, as always, gives a splendid opportunity to xenophobes to jump on a soap-box and point the finger at the "brown people" as the reason for the crisis.

How should the Left engage with this phenomenon? By denouncing politicians of the Hillary Clinton variety who advocate "racism lite" as an antidote to the Right's full-blown racism. No version of racism can counter its true-blue variety. Only radical humanism can do it. It takes courage but it is our only option. This is why DiEM25 states clearly: Let them in! Europe has been colonising the world for 1,000 years. Now that we are getting older, as a continent, the migration flows have reversed. No walls can change this. Let's embrace the immigrants. Let's see them as a gift. Let's fight fascism with the only worthy weapon we have: radical humanism.

The world has changed in many ways from the time of Karl Marx. How relevant is the analytical framework and revolutionary theory of Marxism in understanding our times and for changing the world?

More than ever. If anything, the first few pages of the Communist Manifesto describe today's globalisation far more pertinently than it described 19th or 20th century capitalism. As if to disgrace social democratic notions of a mixed economy and a middle-class liberal democracy, capitalism has recently destroyed both the mixed economy and the middle class; as if to confirm Marx's prognostication that capital accumulation, once globalised, creates a dynamic that polarises humanity between a tiny ruling class and a massive precarious proletariat.

You taught economics across the world before assuming the post of Finance Minister in Athens in 2015. While in office, you saw "how power and its establishments work". As a Marxist, what did you learn about the opportunities and limitations when working within the state?

That it is utterly possible to disrupt the establishment by means that even authentic liberals would approve (e.g. denying bailout funding from the IMF). And that the worst enemy is not the ruling class but, alas, our own comrades who can ever so easily be lured by the establishment in surrendering—and, at once, turning against the common cause. □

Jipson John and Jitheesh P.M. are fellows at Tricontinental: Institute for Social Research and contribute to various national and international publications, including The Hindu, The Caravan, The Indian Express, The Wire, Frontline and Monthly Review. The writers can be reached at jipsonjohn10@gmail.com and jitheeshpm91@gmail.com.

Rescue act, again

By forcing SBI to take over Yes Bank, the government and the Reserve Bank of India appear to have **abdicated their responsibility** to ensure the systemic safety of the Indian banking system. **BY V. SRIDHAR**

INDIA'S biggest bank rescue act could not have happened at a more inopportune time. The collapse of Yes Bank—an oddly sounding name for a bank that is now on life support—and the rescue package initiated by the government diverts resources and distracts attention from an unprecedented pandemic that the government has its hands full with. What happened on March 5, when the Reserve Bank of India (RBI) announced a moratorium on withdrawals from Yes Bank and a temporary takeover as its custodian, would have surprised only those who were habitually used to looking the other way when there was ample evidence that the private bank was a serial offender not just in terms of banking regulations but also in terms of dressing up balance sheets.

The RBI's "draft" reconstruction scheme did not leave much room for doubt that the central bank was acting at the behest of the Finance Ministry. The diminishing autonomy of the RBI in recent years, not only as a regulator but also as a systemic watchman, had set the ground for this directed script. In keeping with the penchant for using other state-owned financial institutions—as was the case with Life Insurance Corporation's takeover of IDBI Bank in 2018—the Yes Bank rescue is being compered by State Bank of India, India's biggest bank.

Yes Bank had assets to the tune of Rs.3 lakh crore, but assets as defined in the banking industry are a peculiar artefact of accounting practices.



RANA KAPOOR, Yes Bank founder, in ED custody on March 8.

Assets in banking are actually loans that have been extended, and they are assets only because they generate returns for a bank, which is what assets are supposed to deliver. But when assets turn bad, non-performing assets (NPAs) in banking parlance, they are very different from

the way assets function in other realms of the economy. An asset in the hands of other entities can be liquidated to generate capital, but in the case of a bank when an asset turns bad the bank starts bleeding its capital base. Now for some specific context to the story of Yes Bank,

AADESH CHOUHARY



VIJAY BATE

AT A YES BANK branch in Mumbai, depositors waiting to withdraw money.

which was the darling of the media for its buccaneering spirit.

When the entire Indian banking industry was locked into a credit freeze, partly because of its unwillingness to lend because of impaired balance sheets and also the poor demand for credit following the economic slowdown, Yes Bank seemed to be on a different planet altogether. Its advances increased by a whopping 338 per cent between 2013-14 and 2018-19 (see chart). The other side of this apparently rosy picture of a heavier loan book lay in its accounting practices, of which the RBI was fully aware as early as 2017. The RBI discovered huge holes in the bank's books, especially in the manner in which it concealed NPAs in order to inflate profits.

Hemindra Hazari, the intrepid financial analyst well known for speaking his mind, had pointed out in October 2017 that Yes Bank was a serial offender in this regard. He pointed out that for fiscal year 2015-16 Yes Bank disclosed its gross NPAs as Rs.7,490 crore but the RBI estimated these to be Rs.49,257 crore, a shocking divergence of 558 per cent. Incidentally, the RBI also found divergences to the extent of 155 per cent by Axis Bank and of about 20

per cent in the case of ICICI Bank.

In the following year, 2016-17, the sordid story was repeated. Whereas the Yes Bank management reported gross NPAs of Rs.20,186 crore, the RBI found these to actually amount to Rs.83,378 crore, a divergence of Rs.63,552 crore. Consequently, the net profit for 2016-17 was scaled down from Rs.33,301 crore as claimed by the bank, to Rs.23,161 crore, a scaling down by Rs.10,140 crore.

Obviously, this dressing of accounts was intended to conceal the true extent of provisions that needed to be made, with obvious consequences for profitability. In other words, the only reason for concealing the NPAs was to boost profits as shown in its books. The RBI's revision resulted in the scaling down of net profit by a whopping 22 per cent for 2016-17. Not just that, the revision also resulted in the scaling down of the bank's capital base (Tier-1) by about 4 per cent. Hemindra Hazari pointed out in a 2017 report that Yes Bank did not report this significant divergence discovered by the RBI as it went shopping for a fresh bout of equity injection (at Rs.1,500 a share) from institutional investors, amounting to \$750 million, in

March 2017. He pointed out that the lead merchant bankers to the issue failed to conduct due diligence. Hazari also pointed out that Yes Bank was excessively top heavy even when compared with its peers among private banks. In 2015-16, for instance, Yes Bank, with assets of about Rs.1.65 lakh crore, had a "top management" strength of 146, whereas ICICI Bank, commanding assets to the tune of Rs.7.09 lakh crore, had a "top management" of just 32. Hazari also found a significant churn in the extent of the "top management," which he characterised as being odd.

Yet, the RBI, despite mounting evidence that it was well aware of the reckless ways of the top management at Yes Bank, allowed the promoter and CEO, Rana Kapoor, to complete his term in January 2019. Neither the RBI nor the Finance Ministry thought it fit to send a clear message that it intended to curb the buccaneer banker. The flurry of cases filed against him by the Central Bureau of Investigation (CBI) and the Enforcement Directorate serve no purpose as the damage has already been done. In any case, these cases now under scrutiny have no relevance either to the health of the bank or to bringing

him to book for having driven it to the ground.

The normal process of bankruptcies cannot be allowed to proceed in the case of banks, especially large ones like Yes Bank, simply because an uncontrolled collapse poses significant systemic risk to the entire banking system. A significant aspect of this relates to the need to protect the interests of depositors, although the Narendra Modi regime has time and again tried to change the rules of protection but has only stalled in the face of protests.

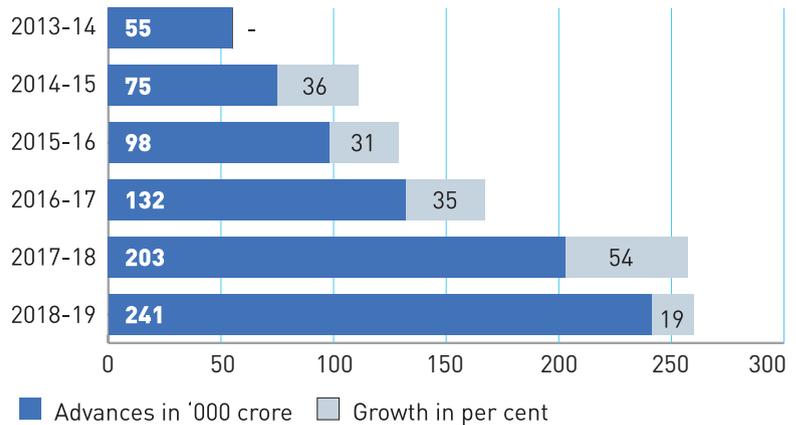
SAVING A BANK

So the question was never about whether to save Yes Bank but about how to get it done. The choice of SBI as the adopting parent of a wayward child is indicative of its sheer hypocrisy. While the Modi government has gone out on a limb arguing that governments ought not to be in business, or that business institutions ought to focus sharply on their business interests, it nevertheless sees nothing wrong in thrusting a dud asset in the hands of its tallest child in the banking sector, SBI.

The restructuring plan that is now operational makes Yes Bank all but a subsidiary of SBI. It can own up to 49 per cent of the bank (currently just below it), of which 26 per cent is subject to a lock-in of three years. It is clear to anyone in the banking world that the capital infusion of Rs.10,000 crore needs to be followed by much, much more fund injection. Given the state of the economy and the rising risk aversion, as evidenced by the collapse of markets worldwide, this is going to be a costly affair if it materialises at all. What this means is that SBI will need to throw more good money after the bad it has already sunk in this venture.

Matters have been worsened by the uncertainty surrounding Yes Bank's Additional Tier-1 (AT-1) bonds valued at almost Rs.11,000 crore. The initial draft restructuring plan advocated a complete write-off of these bonds, which are of a very special class. Such bonds exist in "perpetuity" until they are extinguished at certain pre-specified trig-

FIGURE 1 **Yes Bank loan book**



Fund infusion in Yes Bank

Institution	Infusion (in Rs. Crores)	Stake (in per cent)
SBI	6050.00	48.21
ICICI Bank	1000.10	7.97
HDFC	1000.00	7.97
Axis Bank	600.00	4.78
Kotak	500.00	3.98
Federal Bank	300.00	2.39
Bandhan Bank	300.00	2.39
IDFC First	250.00	1.99
LIC	205.50	1.64

ger points. Since these bonds are akin to equity, which carry a high level of risk, all over the world they are sold only to institutions, never to individuals. But Yes Bank, in keeping with its status as an innovator par excellence, mis-sold them to retail customers too; moreover Provident Fund and pension fund investments have also been made in these instruments, which are now in jeopardy. Faced with mounting protests, the decision to cancel these bonds has been kept out of the finalised scheme for restructuring the bank. However, since these instruments generally carry a higher rate of interest, supposedly reflecting the higher risk associated with them, it is now likely that the interest rate on fresh issues of such bonds in order to bolster the capital base of the bank would result in higher costs for the bank because of the higher risk premium that goes with investments in a sagging bank.

The reliance on public sector

banks as saviours at a time when they are already reeling under the burden of NPAs is fraught with serious risk. The case of IDBI's takeover by LIC is the most recent example of how a well-performing institution is saddled with a dud asset. Even if one accepts the logic that only public sector banks are available for such a takeover, there is nothing in either the rule books or economic logic that prevents the government from funding the salvage operations. Both the RBI and the government, being responsible for protecting the systemic safety of the financial sector, have the power as well as the wherewithal to undertake the task directly instead of offloading it to a bank, knowing fully well that this poses systemic risk as well. For now, the RBI has extended a line of credit of Rs.60,000 crore. The fact that depositors have not made a rush to the exit could well be because of these measures. But as more NPAs come to light the line of credit may well be inadequate to staunch their hurried exit.

It is possible that at some point down the road SBI may be forced to take over the rump of a bank that it now holds albeit only partially in theory. If and when that happens, the full weight of responsibility for having contrived a crisis at India's biggest bank would well fall on both the RBI and the Finance Ministry. For now, a cover-up of sorts has been managed as other weighty and urgent issues grab the attention of the country. □

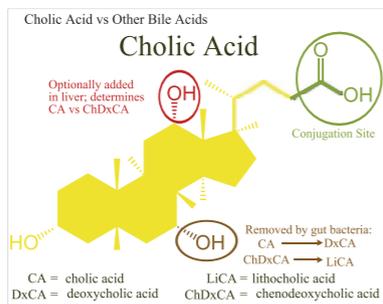
New bile acids discovered

THANKS to a new discovery made by scientists at Michigan State University (MSU), led by Robert Quinn, and published in the latest issue of "Nature", the textbook description of the role of bile acids and their role in the human digestive system is likely to change.

Much of our knowledge about bile has not changed. Bile is produced in the liver, stored in our gall bladder and injected into our intestine when we eat, where it breaks down fats.

The first bile acid was discovered in 1848, and Heinrich Otto Wieland, the German chemist who revealed the structure of bile acids, won the 1927 Nobel Prize for Chemistry for his work that he began in 1912. He had isolated three bile acids and discovered that they had similar structures and were structurally related to cholesterol.

"Since then, our understanding of the chemistry of bile production in the liver was that the cholesterol backbone of the bile acid structure is linked to the amino acids glycine or taurine to produce our primary bile acids," said Quinn, the lead author of the study. "It begs the question of how the new bile



STRUCTURE of cholic acid, the primary bile acid, showing relationship to other bile acids.

acids we've discovered have remained hidden during the past 170 years of bile acid chemical research."

These new bile acids are not produced by our enzymes; they are made by microbes in our gut. This discovery will change how medical textbooks address digestion, and it contributes to an ever-growing body of knowledge supporting the importance of the microbiome, the collective community of bacteria and other microorganisms living in our guts.

According to the MSU press release, Quinn's team, comprising sci-

entists from MSU, the University of California San Diego and a number of collaborating institutions, showed that microbes in the gut produce unique bile acids by conjugating the cholesterol backbone with myriad other amino acids. This represents a fifth mechanism of bile acid metabolism by the microbiome that greatly expands our understanding of mammalian bile, the release said.

While much of the study was conducted in mice, these novel bile acids were also found in humans. Interestingly, the study found that these acids are particularly abundant in the guts of people suffering from gastrointestinal diseases, such as Crohn's disease and cystic fibrosis.

"These molecules can alter signalling pathways in the human gut that result in a reduction of overall bile acid production, representing a new mechanism where our gut bacteria can manipulate our own physiology," Quinn said.

"Clearly, our understanding of these compounds is in its infancy. This exciting new discovery opens more questions than answers about these compounds and their role in our health," he said.

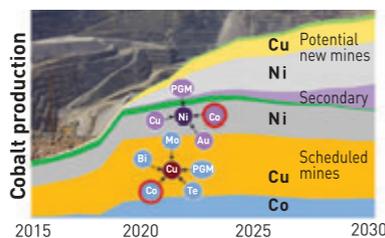
High demand for Li-ion batteries can affect cobalt supply

WHILE the greater use of electric vehicles might benefit the environment, further growth hinges on continued availability of critical battery components such as cobalt. Cell phones and other electronics also depend on the element's availability. Supplies of cobalt are adequate in the short term, but there could be shortages down the road if refining and recycling are not ramped up or made more efficient, according to research published in "Environmental Science & Technology" of the American Chemical Society.

The Democratic Republic of Congo (DRC) provides roughly 60 per cent of all mined cobalt, according to the paper. The element is often recovered as a by-product from mining copper and nickel, meaning that the demand and pricing for those metals affect the availability of cobalt. Half of the current supply of cobalt is incorporated into cathodes for lithium-ion batteries, and many of those batteries are used in consumer electronics and electric

vehicles. Demand is increasing for these vehicles and their batteries. To determine potential cobalt supply and demand through 2030, Elsa Olivetti and co-workers analysed variables, including electric vehicle demand; cobalt mining, refining and recycling capacity; battery chemistry trends; socio-economic and political trends; and the feasibility of substituting other materials for cobalt.

These variables could be affected by political instability in the DRC, policy decisions favouring electric vehicles, disruptions in China (which refines around half of the cobalt supply), and fluctuations in copper and nickel prices. The researchers feel cobalt supply is adequate in the short term. They estimate that supply will reach 320-460 thousand tonnes by 2030, while demand will reach 235-430 thousand tonnes. The team recommends that the industry invest in additional efficient refining and recycling capacity so it can continue to meet demand.



Microbes deep beneath the ocean floor

IN a study published in a recent issue of "Nature", scientists from the Woods Hole Oceanographic Institution (WHOI) describe how micro-organisms survive in rocks nestled thousands of feet beneath the ocean floor in the lower oceanic crust. The first analysis of messenger RNA, the genetic material containing instructions for making different proteins, from this region, coupled with measurements of enzyme activities, microscopy, cultures and biomarker analyses, has provided evidence of a low biomass but diverse community of microbes that includes heterotrophs that obtain their carbon from other living (or dead) organisms.

"Organisms eking out an existence far beneath the sea floor live in a hostile environment," says Paraskevi (Vivian) Mara, a WHOI biochemist and one of the lead authors of the paper. Very little resources find their way into the seabed through fractures in the rock and carry inorganic and organic compounds.

The researchers collected rock samples from the lower oceanic crust, spending over three months aboard the International Ocean Discovery Program Expedition 360. The research vessel travelled to Atlantis Bank, an underwater ridge that cuts across the southern Indian Ocean. Tectonic activity there exposes the lower oceanic crust at the sea floor, "providing convenient access to an otherwise largely inaccessible realm", the authors write.

"We applied a completely new cocktail of methods to explore these precious samples," says Virginia Edgcomb, a microbiologist at WHOI and the principal investigator of the project. By isolating messenger RNA and analysing the expression of genes, the researchers found evidence that micro-organisms under the ocean floor express genes for various survival strategies. Some microbes appeared to have the ability to store carbon in their cells for use in times of shortage. Others showed indications they could process nitrogen and sulphur to generate energy, produce Vitamin E and B12, recycle amino acids, and pluck out carbon from the hard-to-break-down compounds called polycyclic aromatic hydrocarbons.

The findings provide a complete picture of carbon cycling by illuminating biological activity deep below the oceans.

A STUDY reveals life in the plutonic rocks of the lower oceanic crust. Shown here is a thin section photomicrograph mosaic of one of the samples.

Bt cotton no match for Indian pests



AN INDIAN farmer spraying pesticide to his cotton field.

A FIRST long-term analysis of the impact of Bt cotton in India has found that production gains were due to changes in insecticide and fertilizer use and not the adoption of Bt cotton itself. The study has implied that the intrinsically produced insecticide (Cry toxin) by the transgenic cotton, which has the Bt gene genetically inserted, is not good enough to combat insects in the Indian context.

The analysis, published in the journal "Nature Plants", is authored by Glenn Davis Stone,

anthropologist at Washington University in St. Louis, and K.R. Kranthi, entomologist and the former director of India's Central Institute for Cotton Research who is currently at the Washington-based International Cotton Advisory Committee. Genetically modified (GM) Bt cotton was introduced in India in 2002 and today accounts for 90 per cent of all cotton grown in the country. The apparent increased yields and reduced pesticides have been used to justify its large-scale cultivation. Bt cotton has been credited with tripling cotton production between 2002 and 2014. But the recent study dismisses the claim.

According to its authors, the production gains came before widespread seed adoption and must be viewed in line with changes in fertilization practices and pest population dynamics.

"Since Bt cotton first appeared in India there has been a stream of contradictory reports that it has been an unmitigated disaster, or a triumph," Stone said, noting the characteristic deep divide in conversation about GM crops. "But the dynamic environment in Indian cotton fields turns out to be completely incompatible with these sorts of simplistic claims." The earlier positive assessments were based on shorter time frames. The new study spans 20 years.

Stone said: "There are two devastating caterpillar pests for cotton in India. From the beginning, Bt cotton did control one of them, the American bollworm.... It initially controlled other one too, the pink bollworm, but that pest quickly developed resistance and is now a worse problem than ever. Bt plants were highly vulnerable to other insect pests that proliferated as more and more farmers adopted the crop." "Yields in all crops jumped in 2003, but the increase was especially large in cotton. But Bt cotton had virtually no effect on the rise in cotton yields because it accounted for less than 5 per cent of India's cotton crop at the time," Stone pointed out.

Stories compiled by R. Ramachandran



SHINING SECTOR

India is the world's second-largest steel producer. While the country's consumption is on the rise, exports are erratic. By **Ramesh Chakrapani**

In February, the Press Information Bureau announced that according to World Steel Association data, India had become the second largest producer of crude steel after China in 2018 and 2019, replacing Japan. The United States was in the fourth place in both years, followed by South Korea in 2018 and Russia in 2019.

Data from the association showed that China also led the world in exports of steel products in 2018, followed by Japan, Russia, South Korea and Germany. These five countries accounted for 42.3 per cent of all exports in the world and India has some way to go before it can gain a place in this league.

According to a report by the India Brand Equity Foundation (IBEF) in December 2019, India's crude steel production capacity rose from 80.36 million tonnes in 2010-11 to 137.97

million tonnes in 2018-19. In 2019, blast and blast oxygen furnaces accounted for 47 per cent of the steel produced in the country, followed by induction furnaces (27 per cent) and electric arc furnaces (26 per cent).

The IBEF report also said that finished steel production more than doubled from 60.62 million tonnes in 2009-10 to 131.57 million tonnes in 2018-19, while consumption of finished steel products rose from 59.34 million tonnes in 2009-10 to 97.54 million tonnes in 2018-19, a growth of nearly 65 per cent.

Statistics from the World Steel Association showed that India's exports had been erratic in the past decade. They rose from 8.94 million tonnes in 2011 to 10.38 million tonnes in 2014 but fell to 7.56 million tonnes in 2015. The exports zoomed to 16.34 million tonnes in 2017 but declined to 11.10 million tonnes in 2018.



STRONG PERFORMANCE

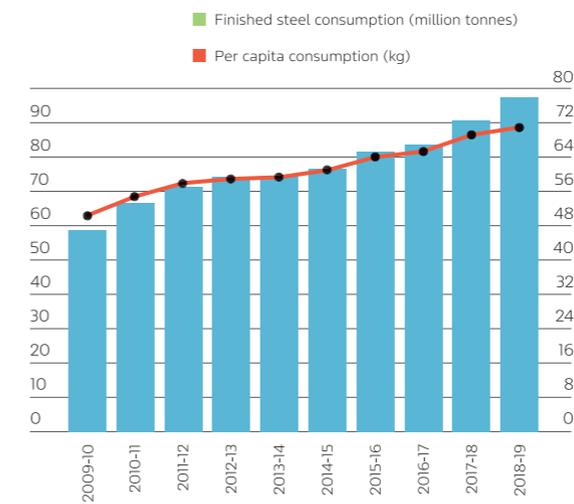
- India replaced Japan as the **world's second largest steelmaker** in 2018.
- Provisional crude steel output **hit 106.40 million tonnes** in 2018.
- Annual capacity has **increased to 137.98 million tonnes**.
- Finished steel consumption **reached 90.68 million tonnes** in 2018.

Crude steel producers in the world (million tonnes)

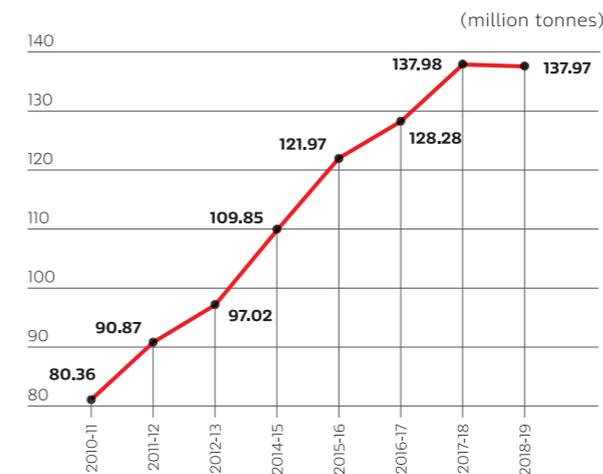
2018			2019*	
Rank	Country	Quantity	Country	Quantity
1	China	920.0	China	996.3
2	India	109.3	India	111.2
3	Japan	104.3	Japan	99.3
4	U.S.	86.6	U.S.	87.9
5	South Korea	72.5	South Korea	71.6

Source: Worldsteel. (*Provisional)

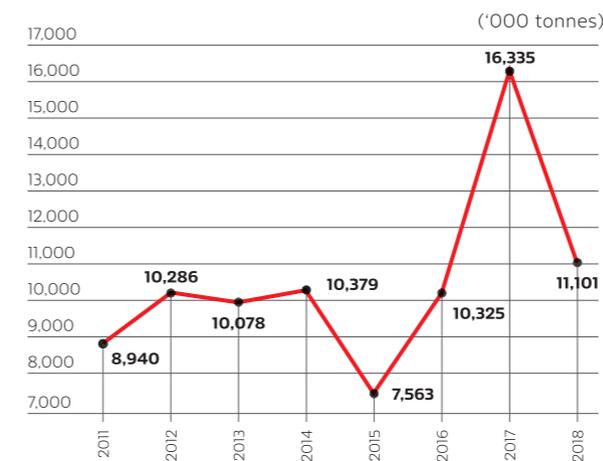
Finished steel consumption patterns



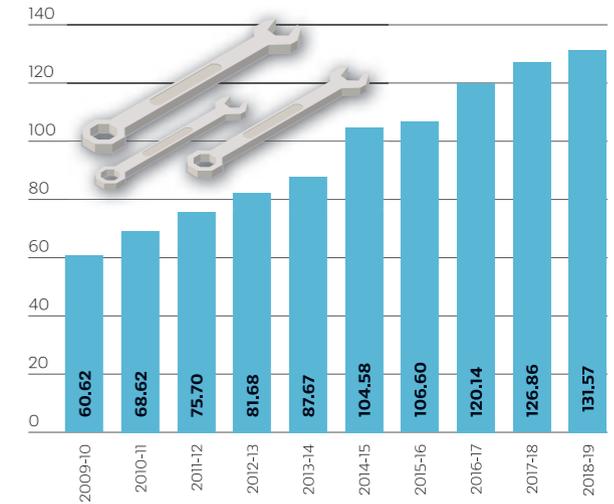
Growth in crude steel production capacity



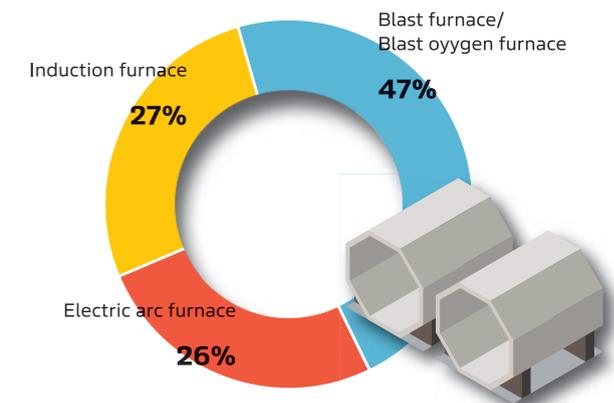
Growth in exports of steel products



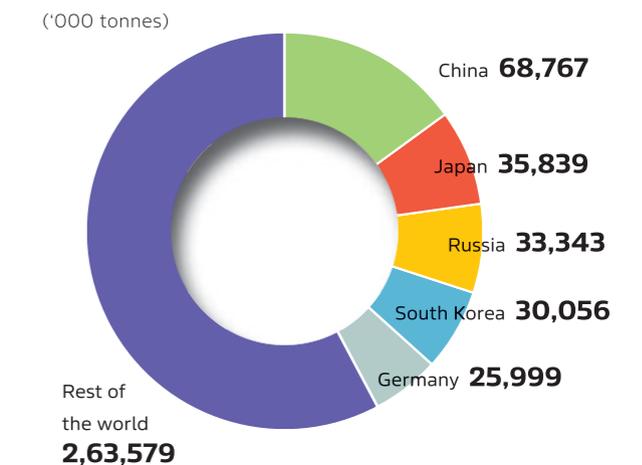
Finished steel production (million tonnes)



Production capacity by type in 2019



Top global exporters of steel products in 2018



Delhi riots



THE orchestrated violence against the minorities in Delhi is a serious threat to the very foundations of democracy (Cover Story, March 27). Sadly, the RSS and its cohorts have succeeded in carrying out their nefarious designs and gagging rightful protests. One has to accept, grudgingly, that the RSS brigade has scored a pyrrhic victory. While its cynical triumph is palpable, the response of the secular parties has been muted. It is a blot on the Fourth Estate that most of the mainstream media have not exposed the treachery of the Sangh Parivar and have acted hand in glove with the BJP.

The naked communalism exhibited by India's rulers, in tandem with goons and the security apparatus in Delhi, makes a mockery of the basic tenets of the nation.

S. MURALI
VELLORE, TAMIL NADU



IT was sad and shocking that the capital, known for its rich cosmopolitan culture, was rocked by communal riots for three successive days. The riots were a calculated attempt by vested interests to tear apart the fabric of society. That the violence coincided with the visit of the U.S. President Donald Trump to New Delhi appeared to be part of a nefarious design by anti-social/national elements to show the nation in poor light.

Communal riots affect the common man irrespective of his religion. The failure of the law enforcement agencies to crack down on the rioters in the initial phase of the riots made matters worse. The reports of people protecting their neighbours of a different faith in several pockets of the riot-torn city were the only silver lining.

Although the crisis has been defused, all stakeholders need to strive to erase the scars of the riots. It is also time for citizens to redeem the pledge that they are Indians first and last.

B. SURESH KUMAR
COIMBATORE, TAMIL NADU

THE high death toll in the riots is a clear sign that they were pre-planned. U.S. Democratic presidential hopeful Bernie Sanders' comments slamming Trump for remaining silent on the riots, which happened during his visit to India, were shocking. Similarly, it was totally unnecessary for the Organisation of Islamic Cooperation to term the violence in Delhi as alarming when it keeps silent about the systematic blatant human rights violations in Pakistan against the minority communities.

As the situation was limping back to normalcy, Congress leaders finding fault with BJP functionaries when its own leaders were coming out with various statements to keep the pot boiling is a clear indication that that there was larger conspiracy behind the whole episode.

K.R. SRINIVASAN
SECUNDERABAD, TELANGANA

INDIA slipped 10 places in Democracy Index 2019 of the Economist Intelligence Unit, and the press freedom index is around 133 out of 180 ("The media circus", March 27). Unlike in the West where misinformation campaigns



backed by foreign elements have been launched against countries, in India, it is our very own political parties that are churning out an enormous amount of misinformation. We are routinely fed fake news, rants and divisive propaganda by television and social media platforms. Deepfake, a recent technology innovation, is making inroads into India's media landscape. Its insidious impact is to create a society where people no longer care to distinguish truth from fabrication. Digital deception is the painless way to do it.

Unfortunately, the media as a whole is at the receiving end of a sustained campaign against them. Disparaging comments like "presstitute", urban naxals and fake news are made against them. A free press and media are the guard rails of democracy, without which the country will slide into authoritarianism. In the current climate, the media have now to manage how news stories are handled, which topics/events can be covered and which ones have to be dropped.

H.N. RAMAKRISHNA
BENGALURU

CORRECTION

In the article "Flash in the pan" (March 27), the first sentence of the second paragraph under the subheading "Supreme Court's record" should read as follows and not as published: "The human rights advocate... seeking registration of FIRs against Anurag Thakur, Kapil Mishra, Parvesh Verma and Abhay Verma and their arrest."

ANNOUNCEMENT

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

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- * M.Sc. Chemistry
- * M.Sc. Botany
- * M.Sc. Zoology
- * M.Phil Zoology

Self-Financed

- * B.A. Hindi
- * B.A. French
- * B.A. English
- * B.Sc. Mathematics
- * B.Sc. Physics
- * B.Sc. Chemistry
- * B.Sc. Biochemistry
- * B.Sc. Microbiology
- * B.Sc. Computer Science
- * B.Sc. Visual Communication
- * B.Sc. Information Technology
- * B.Sc. Physical Education
- * B.Sc. Food Science & Nutrition
- * B.Sc. Psychology
- * B.Com.
- * B.Com (Computer Applications)
- * B.Com (Information Technology)
- * BBA
- * BCA
- * B.Com. Professional Accounting
- * M.A. English
- * M.A. Social work
- * M.Sc. Physics
- * M.Sc. Microbiology
- * M.Sc. Food Science
- * M.Sc. Mathematics
- * MCA
- * M.Com.
- * M.Sc. Data Science
- * M.Sc. Applied Psychology
- * M.Sc. Visual Communication

Satellite Campus (Self - Financed)

- * B.A. English
- * B.Com
- * B.Com. (Computer Application)
- * BBA
- * MBA
- * B.Sc. Computer Science
- * B.Sc. Physics
- * B.Sc. Mathematics
- * B.Sc. Data Science

Master of Philosophy

- * Tamil
- * English
- * Mathematics
- * Physics
- * Chemistry
- * Economics
- * Commerce
- * Botany
- * Business Administration

Doctor of Philosophy

- * Tamil
- * English
- * Economics
- * Mathematics
- * Physics
- * Chemistry
- * Zoology
- * Commerce
- * Botany

Hostels

For Men

- * Washburn Hall
- * Wallace Hall
- * Zumbro Hall
- * Dudley Hall
- * Telfer Mook Hall

For Women

- * Women's Hall
- * Noyes Garden
- * Jivana Jyothi

International Hostel

- * Separate hostel facility is available for International Students

Facilities

- * Wi-Fi and Well-Equipped Lab
- * Experienced Faculty
- * Frequent seminars, workshops
- * Placement Assistance & Campus Drive
- * E-Learning Facilities
- * Language Laboratory
- * Overseas Internship Options

Canadian Transfer Program (CTP)

Canada as our study destination is possible only through Canadian Transfer Program (CTP) offered by The American College, Madurai. To enroll in CTP, students have to undergo the general admission procedure under the appropriate norms complied with The American College. CTP is a student an oriented academic program which provides opportunity to choose the appropriate course as per their preference. The selection of courses will be based on students' recent past study such as English, Commerce, Business Administration and so on. CTP is not only guiding students to opt for the best suitable course but also keeping in mind their future career prospects.

Under Student Direct Stream, there are three possible intakes every year i.e. January(winter), May(summer) and September (Fall) to join at St.Clair College, Canada. Students can start their planning process six months before intake. After getting offer letter from St.Clair College, Canada, the process will flow from file documentation & submission for visa, initial settlement, aid in part time jobs, extension of study and work permits till obtaining permanent residency with the help of intermediate processes.

Canada is a very safe country to live and study with affordable fee structure. CTP promotes multicultural diversity and globally recognised study network.

College

The American College, a higher educational institution, is known for its focus on academic excellence and social relevance, its pioneering role in the development of college autonomy in India in 1978, its successful early implementation of Choice Based Credit System under autonomy and its completion of 139 years of service bear testimony to the position that the college currently enjoys. Originally founded by American Missionaries in 1841, the American College grew into a collegiate department in 1881 at Pasmalai by the initiatives taken by Rev. G.T. Washburn, the Founder Principal of the College.

Presently, the college offers twenty five undergraduate, sixteen postgraduate & nine M.Phil programmes in the Main Campus and eight undergraduate, one postgraduate & one M.Phil programme in the Satellite Campus. There are nine research centres offering Ph.D Programmes in various disciplines, and two autonomous centres of Department of Applied Sciences (DAS) and Study Centre for Indian Literature in English and Translation (SCILET) that have received international attention. The college was re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3.46 on a 4 point scale in 2016. Its alumni shine as luminaries internationally as scientists, intellectuals, administrators, corporate managers, statesmen, and leaders. The college has active theatre groups, National Service Scheme, N.C.C. units, and Service Learning Programme (SLP) that offer students a wide range of opportunities to serve society. These activities add up to make the campus vibrant for developing one's personality.

American Transfer Program (ATP)

BEST OF BOTH WORLDS

To enter the American Transfer Program (ATP), students must first be accepted to The American College under their normal admission process and meet the established criteria. ATP provides several options for accepted students who are interested in obtaining an American degree. Students will study at The American College for 4 semesters pursuing coursework in Bachelors of Commerce, Economics, English, Visual Communication, Business Administration, Botany, Zoology, Biochemistry, Microbiology, Religion, Philosophy & Sociology and all other relevant courses of study and then transfer to Concordia for 3 semesters to obtain their American undergraduate degree from Concordia College-New York. During the fourth semester, they will begin their transfer application process to Concordia. If accepted by Concordia, students will be issued an I-20 to apply for their US student visa. Concordia's office located in T.Nagar will assist students in completing all the necessary paperwork as well as applying for their US visas.

American Transfer Program (ATP) is designed for The American College students interested in earning an American Degree by studying 2 years in India (The American College, Madurai) and 2 or 3 Semesters at Concordia. During their first and second years, students will take five Concordia online courses. They will run one at the time for five weeks each. These courses are compulsory in the Concordia curriculum. These courses are taught by American Professors. Courses will be taught in a Modern Online Classroom Platform. Students will interact with professors and classmates through discussion boards and participation in regular web conferences. The courses are assignments based and there are no final exams. In addition, most assignments are due on weekends so students will have time to complete their regular coursework and online coursework.

After completing their undergraduate degree, students can opt to pursue accelerated Masters programs either at Concordia College, or its affiliate, Valparaiso University in Indiana and complete their PG degree in 2 semesters, rather than the normal 6 semesters.

ATP minimizes the cost of an American education by allowing students to study in India for two years. It also minimizes the risks for students enrolled in this program. If, for some unforeseen reason, a student is unable to transfer to Concordia, student will be allowed to continue their studies at The American College for third year and earn their degree locally.

*Application forms can be downloaded from the college website www.americancollege.edu.in

Dr. M. Davamani Christofer
Principal & Secretary