



**Manmohan Singh to head Congress panel on COVID-19 crisis**

page 6



**3,000 Kota students sent home in U.P. government buses**

page 7



**Hong Kong activists arrested over last year's democracy rallies**

page 9

**Global virus deaths pass 1,50,000 as Trump endorses lockdown protests**

page 9



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**Asymptomatic patients to be monitored**

**CHENNAI**  
Asymptomatic patients in the high-risk category, including the elderly and those with co-morbid conditions, will be monitored in high-dependency units.

**TAMIL NADU** ▶ PAGE 2

**All police personnel in Perambalur to be tested**

**PERAMBALUR**  
All police personnel in Perambalur district have been asked to get themselves tested for COVID-19, after a policeman tested positive.

**TAMIL NADU** ▶ PAGE 2

**Expert panel discusses exit strategy**

**CHENNAI**  
The 21-member expert committee, constituted by the State government to formulate an exit strategy from the lockdown, met on Saturday.

**TAMIL NADU** ▶ PAGE 2  
**MAGAZINE** ▶ 8 PAGES  
**CLASSIFIEDS** ▶ PAGE 3

## Govt. nod mandatory for FDI from neighbouring countries

Move may be aimed at preventing 'opportunistic takeovers' by Chinese entities

PRISCILLA JEBARAJ  
NEW DELHI

In a move that will restrict Chinese investments, the Centre has made prior government approval mandatory for foreign direct investments from countries which share a land border with India. Previously, only investments from Pakistan and Bangladesh faced such restrictions.

The revised FDI policy is aimed at "curbing opportunistic takeovers/acquisitions of Indian companies due to the current COVID-19 pandemic," said a press release from the Department for Promotion of Industry and International Trade on Saturday.

**'With land borders'**  
"A non-resident entity can invest in India, subject to the FDI Policy except in those sectors/activities which are prohibited," says the new policy.

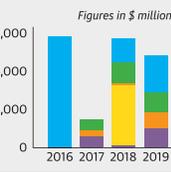
"However, an entity of a country, which shares land border with India or where the beneficial owner of an investment into India is situated in or is a citizen of any such country, can invest only under the Government route." Pakistani investors face further restrictions in requiring government ap-

### China's economic footprint in India

Chinese investment in India increased from \$1.6 billion in 2014 to \$8 billion in 2017 according to a Brookings India report. The investments span a range of sectors with a significant share in the start-up space

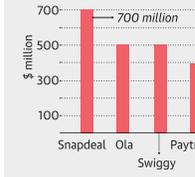
### INVESTMENT VALUE

The chart depicts the estimated value of China's investments in India since 2016 across various sectors such as infrastructure, consumer goods, real estate and automobiles. The chart includes both actual and planned investments. Data sourced from Brookings India



### BACKING UNICORNS

Many Indian unicorns (start-ups with valuation >\$1 billion) have a Chinese investor. The chart depicts the estimated investment by Chinese companies in select start-ups



proval for FDI in defence, space and atomic energy sectors as well.

India shares land borders with Pakistan, Afghanistan, China, Nepal, Bhutan, Bangladesh and Myanmar. Investors from countries not covered by the new policy only have to inform the RBI after a transaction rather than asking for prior permission from the relevant government department.

With many Indian busi-

nesses coming to a halt due to the lockdown imposed to contain the COVID-19 pandemic and valuations plummeting, a number of domestic firms may be vulnerable to "opportunistic takeovers or acquisitions" from foreign players.

Last week, housing finance company HDFC informed the stock exchanges that the People's Bank of China now holds a 1.01% stake in the company. This was an instance of portfolio investment through the stock market and not FDI.

The official statement added that a transfer of ownership of any existing or future FDI in an Indian entity to those in the restricted countries would also need government approval.

The decisions will become effective from the date of the Foreign Exchange Management Act notification.

**CONTINUED ON** ▶ PAGE 6

## ICMR reports a huge spike in infections in a single day

83% of all deaths so far have been due to co-morbidities

SPECIAL CORRESPONDENT  
NEW DELHI

In a major spike in COVID-19 cases, the Indian Council of Medical Research reported that a total of 16,365 individuals have now been confirmed positive in the country. On Saturday till 9 p.m., 2,154 persons (the highest in a single day) were found positive for SARS-CoV-2.

The Union Health Ministry reported that there were 36 deaths in the past 24 hours.

"An encouraging trend has been noted in 47 districts across 23 States with no positive cases being reported over the past 28 days. This includes 22 new districts in 12 States that have not reported any fresh case

### Keeping the virus away

The government has announced a list of 22 districts that have not reported a single COVID-19 case in the past 14 days. The State-wise list of such districts:

- Assam (5 districts): Karimganj, Golaghat, Kamrup Rural, Nalbari, South Salmara
- Bihar (3): Lakhisarai, Gopalganj, Bhagalpur
- Haryana (2): Rohtak, Charkhi Dadri
- West Bengal (2): Jalpaiguri, Kalimpong
- Odisha (2): Bhadrak, Puri
- Rajasthan (2): Udaipur, Dholpur
- A.P. (7): Visakhapatnam
- Arunachal Pradesh (7): Lohit
- J&K (7): Pulwama
- Karnataka (1): Chitradurga
- Manipur (7): Thoubal
- Punjab (1): Hoshiarpur



**Ramping up checking:** A health worker monitoring the temperature of people waiting to collect food being distributed in New Delhi on Saturday. ■ R.V. MOORTHY

### COVID-19

during the past 14 days," joint secretary in the Health Ministry Lav Agarwal said.

Among the 22 new districts are Lakhisarai, Gopalganj, Bhagalpur in Bihar, Dholpur and Udaipur in Rajasthan, Pulwama in J&K, Thoubal in Manipur, Chitradurga in Karnataka and Hoshiarpur in Punjab.

The Health Ministry added that the mortality rate in the country is currently

around 3.3%.

"An age-wise analysis indicates that 14.4% deaths have been reported in the age group of 0-45 years. Between 45-60 years it is 10.3%, between 60-75 it is 33.1% and for 75 years and above it is 42.2%," Mr. Agarwal said. He added that 83% of the cases had co-morbidities.

According to reports from the State Health Depart-

ments, the death toll stood at 522, with 12,874 active cases out of 15,667 positive cases. With 3,105 active cases, Maharashtra leads the tally followed by Delhi (1,778), Gujarat (1,230) and Madhya Pradesh (1,206).

**CONTINUED ON** ▶ PAGE 6  
**MORE REPORTS ON** ▶ PAGES 2,3,4, 5,6,7,8,9,11 & 12  
**CONVALESCENT PLASMA** ▶ FAQ

## Onus on States to expand PDS net: Paswan

SOBHANA K. NAIR  
NEW DELHI

As lakhs of stranded migrant workers in the cities face hunger and starvation, Union Minister for Food and Public Distribution Ram Vilas Paswan shifted the blame on State governments for not enlisting more beneficiaries under the PDS scheme and failing to launch his Ministry's ambitious 'one nation, one ration card' project.

The Union government had been planning to launch the one nation-one ration card scheme from June 1 to enable beneficiaries to get their entitlement of subsidised foodgrains even if they are not in their home State or Union Territory.

Speaking to *The Hindu*, Mr. Paswan said only 12 States had joined the project, pointing out that U.P. and Bihar, two States with maximum migrant populations, are yet to come on board.

**'CENTRE HAS NOT STOPPED STATES'** ▶ PAGE 8

## Gujarat sees steepest single day jump in cases

12 patients die; infections rise by 277

SPECIAL CORRESPONDENT  
AHMEDABAD

Gujarat on Saturday reported an increase of 277 new COVID-19 cases, the sharpest single day jump, and 12 deaths, taking the State's total to 1,376 cases and 53 deaths.

The outbreak has now covered 25 of the State's 33 districts, with fatalities reported from 12 districts.

Gujarat now has 10 people on ventilator support, while 1,220 patients are under treatment and stable. So far, 93 persons have recovered and been discharged from hospitals. According to the Health Department, so far 26,102 samples have been tested, out of which 1,376 tested positive.

Ahmedabad is the worst hit, contributing more than 50% of the total positive cases in the State. As on Saturday, Ahmedabad had recorded 862 cases, out of which 25 patients have succumbed, while 27 have recovered and been discharged.

On Saturday, the city reported 239 new infections



Municipal workers disinfecting health workers in Ahmedabad. ■ PTI

and four deaths.

Within the city, almost 95% of the cases have emerged from slums and congested pockets, spurring concerns of community transmission of the disease. The Ahmedabad Municipal Corporation has increased testing, with almost 1,000 samples being collected per day.

Principal Secretary (Health) Jayanti Ravi said there was no need to panic over the sharp increase in cases as authorities had expected the number to rise in the wake of the State's decision to adopt a more aggressive testing strategy.

## 26 Navy personnel test positive

SPECIAL CORRESPONDENT  
NEW DELHI

In the first instance of COVID-19 in the Navy, 26 personnel have tested positive at *INS Angre*, a shore-based logistics and administrative support establishment of the Western Naval Command in Mumbai.

"There has so far not been a single case of COVID-19 on board any ship, submarine or air station," the Navy said in a statement on Saturday.

"The detection of these cases is a result of meticulous contact tracing and aggressive screening/testing carried out by Western Naval Command after one sailor tested positive on April 7. All these sailors continue to remain asymptomatic and are being monitored at *INHS Asvini* under the care of the best medical professionals," the Navy said.

Separately, a woman medical officer of the Army tested positive at Dehradun, taking the total count in the Army to nine.

**CONTINUED ON** ▶ PAGE 6

## 49 fresh cases, all from containment zones

Panel tasked with aiding lockdown exit expanded; more rapid test kits arrive

SPECIAL CORRESPONDENT  
CHENNAI

On Saturday, Tamil Nadu reported 49 fresh cases of COVID-19, taking the total number of cases in the State to 1,372.

Eighty-two more persons were discharged from hospitals across the State. "For the last three days, fewer persons have tested positive, while the number of persons who have recovered with treatment has increased. With 82 persons discharged today, a total of 365 persons have been discharged so far," Health Minister C. Vijayabaskar told reporters.



**Quick results:** Health workers analysing samples at the Rajiv Gandhi Govt. General Hospital on Saturday. ■ B. VELANKANNI RAJ

There have been no deaths in the last two days, the Minister said. The State lifted 5,363 samples in a day.

So far, 35,306 samples have been lifted and 29,997 individuals tested. "As of now, positive cases are occurring

within containment zones," he said. The State received 12,000 rapid testing kits on Saturday, this time from the Centre. It is expecting another consignment of testing kits by the weekend, officials said.

The State expanded the expert committee, which is to formulate the guidelines for a phased exit from the lockdown, and included three more members - Commissioner of Revenue Administration, Director of the National Institute of Epidemiology and a representative of Tamil Nadu Small and Tiny Industries Association.



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## Foreign Direct Investment (FDI)

Any investment from an individual or firm that is located in a foreign country into a country is called Foreign Direct Investment.

Generally, FDI is when a foreign entity acquires ownership or controlling stake in the shares of a company in one country, or establishes businesses there.

It is different from foreign portfolio investment where the foreign entity merely buys equity shares of a company.

In FDI, the foreign entity has a say in the day-to-day operations of the company.

FDI is not just the inflow of money, but also the inflow of technology, knowledge, skills and expertise/know-how.

It is a major source of non-debt financial resources for the economic development of a country.

FDI generally takes place in an economy which has the prospect of growth and also a skilled workforce.

FDI has developed radically as a major form of international capital transfer since the last many years.

The advantages of FDI are not evenly distributed. It depends on the host country's systems and infrastructure.

The determinants of FDI in host countries are:

Policy framework

Rules with respect to entry and operations/functioning (mergers/acquisitions and competition)

Political, economic and social stability

Treatment standards of foreign affiliates

International agreements

Trade policy (tariff and non-tariff barriers)

Privatisation policy

FDI in India

Investment climate in India has improved tremendously since 1991 when the government opened up the economy and initiated the LPG strategies.

The improvement in this regard is commonly attributed to the easing of FDI norms.

Many sectors have opened up for foreign investment partially or wholly since the economic liberalization of the country.

Currently, India ranks in the list of the top 100 countries in ease of doing business.

In 2019, India was among the top ten receivers of FDI, totalling \$49 billion inflows, as per a UN report. This is a 16% increase from 2018.

In February 2020, the DPIIT notifies policy to allow 100% FDI in insurance intermediaries.

In early 2020, the government decided to sell 100% stake in the national airlines Air India.

## Automatic Route FDI

In the automatic route, the foreign entity does not require the prior approval of the government or the RBI.

Examples:

Medical devices: up to 100%

Thermal power: up to 100%

Services under Civil Aviation Services such as Maintenance & Repair Organizations

Insurance: up to 49%

Infrastructure company in the securities market: up to 49%

Ports and shipping

Railway infrastructure

Pension: up to 49%

Power exchanges: up to 49%

Petroleum Refining (By PSUs): up to 49%

ments have been told to is-  
sue medications for one or

recommended.  
Only life-saving emergen-

wards with dedicated car-  
diac equipment.

to any other State or abroad.  
He is likely to have come in

A. Amalraj, Inspector  
General of Police, Central

elves for COVID-19 testing,  
in batches, he said.

industry is allowed to func-  
tion, it will be between 6  
a.m. and 1 p.m. and not for  
the entire day. Even after  
May 3, many members felt  
that opening of malls and ci-  
nemas should not be al-  
lowed for some more time,"

Industry experts too felt  
that even if the restrictions  
were relaxed, mobilising hu-  
man resources from far off  
locations would be a major  
concern. The panel is sche-  
duled to submit its report to  
the government on Monday.

## Secretariat finds ways to dispose of used masks, incinerator in place

Bins placed on all  
floors of buildings  
on the campus

DENNIS S. JESUDASAN  
CHENNAI

Officials in the Secretariat  
have found ways to safely  
dispose of used masks, as  
several government depart-  
ments on the Fort St. George  
campus in Chennai continue  
to function with skeletal  
staff, who report for work  
wearing masks.

The pile of used masks has  
gotten bigger with the num-  
ber of meetings being held,  
albeit following physical dis-  
tancing norms.



Zero waste: The napkin incinerator in the old building can be  
used only for cloth masks. • B. JOTHIRAMALINGAM

Separate bins have been  
placed on all floors of build-  
ings on the Secretariat cam-  
pus to collect used masks

from staff and visitors so that  
they are not mixed with oth-  
er disposables. Conservancy  
workers collect the used

masks and dispose of them  
separately.

"Our employees come  
from far off places and it is  
easy if we keep separate bins  
on all floors," a senior official  
said.

### For employees

Besides, a napkin incinerator  
has been installed on the  
third floor of the old building  
for the benefit of employees.

K. Ilangovan, proprietor  
of E.R. Ventures, that in-  
stalled the incinerator on the  
campus, told *The Hindu*:  
"The incinerator can be used  
only for cloth masks. Masks  
that have rubber parts or  
elastic parts cannot be used."

The State government is  
also procuring masks from  
the Tamil Nadu Ex-Service-  
men Corporation (TEXCO)  
under the Public Depart-  
ment to ensure that all em-  
ployees undertake precau-  
tions.

Officials are already en-  
couraging employees to  
wear cloth masks since they  
are easy to dispose. Masks  
are also being procured from  
the Tamil Nadu Corporation  
for Development of Women.

With the Secretariat cam-  
pus continuing to see footfall  
even during the lockdown,  
officials are on their toes, en-  
suring that public health  
norms are being complied

with. "We use disinfectants  
every day. Greater Chennai  
Corporation workers ensure  
that the norms are followed  
inside the campus. About  
three to four meetings are  
held every day, some even  
with the Chief Minister," an  
officer said.

Physical distancing is  
strictly followed during  
meetings and disinfectants  
are sprayed before and after  
meetings. Thermal scanners  
are used regularly, a senior  
officer told *The Hindu*.

"Hand sanitisers are pro-  
vided to all employees and  
house-keeping staff are given  
gloves," the senior officer  
added.

## 4 held for making arack

R. SIVARAMAN  
CHENNAI

With Tasmac shops re-  
maining shut due to the  
lockdown, two youth in  
the city decided to make  
arack, only to be nabbed  
by the police.

They were later let off  
with a warning.

Rahul, an IT staff, and  
his friend Vinodh Raj, a  
marketing executive, were

habitual tipplers. "They  
decided to make arack in  
their house. The duo  
watched videos on You-  
Tube and other online plat-  
forms and procured  
grapes, jaggery and other  
materials to make arack,"  
said a police officer.

The Teynampet police  
also arrested a duo who  
prepared arack after  
watching TikTok videos.

**Under the government route, the foreign entity should compulsorily take the approval of the government. It should file an application through the Foreign Investment Facilitation Portal, which facilitates single-window clearance. This application is then forwarded to the respective ministry or department, which then approves or rejects the application after consultation with the DPIIT.**

**Examples:**

- Broadcasting Content Services: 49%**
- Banking & Public sector: 20%**
- Food Products Retail Trading: 100%**
- Core Investment Company: 100%**
- Multi-Brand Retail Trading: 51%**
- Mining & Minerals separations of titanium bearing minerals and ores: 100%**
- Print Media (publications/printing of scientific and technical magazines/specialty journals/periodicals and facsimile edition of foreign newspapers): 100%**
- Satellite (Establishment and operations): 100%**
- Print Media (publishing of newspaper, periodicals and Indian editions of foreign magazines dealing with news & current affairs): 26%**
- Sectors where FDI is prohibited**

**There are some sectors where any FDI is completely prohibited. They are:**

- Agricultural or Plantation Activities (although there are many exceptions like horticulture, fisheries, tea plantations, Pisciculture, animal husbandry, etc.)**
- Atomic Energy Generation**
- Nidhi Company**
- Lotteries (online, private, government, etc.)**
- Investment in Chit Funds**
- Trading in TDR's**
- Any Gambling or Betting businesses**
- Cigars, Cigarettes, or any related tobacco industry**
- Housing and Real Estate (except townships, commercial projects, etc.)**

the Esplanade police station and resides at police quarters, Alandur.

**THE HINDU**  
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In a bid to strengthen delivery of essential services during the lockdown for COVID-19, the Chennai Corporation has decided to permit a few more establishments to resume operations. At present, the Corporation has permitted 652 commercial establishments to deliver essential services in the city. On Saturday, the civic body announced that companies could get clearance

and finalised on the same day. All activities permitted under the government orders will be allowed. Passes given under such categories are valid till May 3. Further clarification can be given only after the government's announcement on Monday," said G. Prakash, Commissioner, Greater Chennai Corporation. The Corporation has per-

mitted establishments, autonomous bodies, factories and Central government agencies to resume operations. These include private establishments serving the Chennai Metro Rail communication systems and companies manufacturing masks, medical equipment, pharmaceutical products and food processing equipment. Nearly 5,000 employees of the 652 companies have

become a major challenge. On Friday, many Corporation employees were not allowed to board MTC buses from various parts of the city. "We were not allowed to board the special bus operated for government employees. They asked us to get down, claiming that the buses were only for Secretariat staff," said an employee of the Corporation.

operations, the number of workers on the streets is expected to exceed 25,000. The Corporation officials said around 25% of the companies and commercial establishments in the city were eligible to get permission to operate under the essential services category. The city has more than 75,000 commercial establishments employing over 10 lakh people.

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<b>DIRECTOR</b>	

**Various government authorities have invoked their respective powers under the Disaster Management (DM) Act, 2005 to deal with the novel coronavirus (COVID-19) outbreak in the country.**

**Key Points**

**Delegation of Powers to the Ministry of Health and Family Welfare:**  
 The powers exercised by the home secretary for being the Chairman of the National Executive Committee (NEC) under section 10 of the DM Act (2005) have been delegated to the Ministry of Health and Family welfare. Section 10 evaluates the preparedness at all governmental levels for the purpose of responding to any threatening disaster situation or disaster and give directions, where necessary, for enhancing such preparedness. It also lays down guidelines for, or give directions to, the concerned Ministries or Departments of the Government of India, the State Governments and the State Authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster. Thus it majorly monitors and implements the national plan and the plans prepared by the ministries or departments of the central government and gives superintendence power to the officer executing plans. The delegation would help to enhance preparedness and containment of novel coronavirus (COVID-19) in the country.

**Invocation of Powers by District Authorities:**  
 Some of the district authorities in the COVID-19 affected states like Maharashtra have also invoked power under the DM Act. The Act gives power to the district administration under Sections 33 and 34 to deal with any disaster-related situation. Under Section 33 and 34 the district authorities may opt for requisition powers for any officer or any department at the district level or any local authority to take measures for prevention or mitigation of disaster or to effectively respond to it and such officer or department is bound to carry out such order. This step will help to create awareness among the public regarding COVID-19 and will also help to regulate the medical supply of masks, injections and medicines, etc.

**National Executive Committee**

A National Executive Committee (NEC) is constituted under Section 8 of the DM Act, 2005 to assist the National Disaster Management Authority in the performance of its functions. Union Home secretary is its ex-officio chairperson. NEC has been given the responsibility to act as the coordinating and monitoring body for disaster management, to prepare a National Plan, monitor the implementation of National Policy etc.

# Migrants run out of money, face eviction

Greater Chennai Corporation says it will take care of workers

Over 600 migrants stuck in small lodges in the lanes around Puratchi Thalaivar MGR Central Railway Station since the lockdown began are facing eviction as they have run out of money to pay rent.

Appealing to the State government to ensure food and continuation of their stay until public transportation resumes, the workers demanded that the governments in their home States should make arrangements for their return at the earliest.

While a majority of the affected people are daily wage earners from West Bengal, Bihar and Jharkhand working in construction sector in Kerala, a small number of them are in Chennai for medical and other reasons.

Rabiu Sheikh from Paschim Bardhaman district of West Ben-



Left in the lurch: Migrant workers stranded in lodges near Central station since the lockdown began.

\*SPECIAL ARRANGEMENT

gal said he and a large group of workers boarded train on March 21 from Kozhikode soon after the announcement of 'Janta curfew' with the hope of reaching home. "However, on reaching Chennai on March 22, the trains were stopped," he said.

At least 4,500 people from other States were stranded at Chennai Central Railway Station

March 22. While more than 1,100 were accommodated by the Greater Chennai Corporation in community halls, Rabiu was among the few hundred who moved to nearby lodges.

The lodges charge them ₹100 to ₹150 per person. "We were not paying. However, we were to pay for the last four or five days," he said.

We depend on volunteers for food," said Qaiyum Ansari, another daily wage earner. He alleged that in at least one lodge, electricity and water supply were cut off on Thursday and restored only after the activists and the authorities intervened in the matter.

Gayathri Khandanai, a Chennai resident who works with a chain of freebies

A collective that is running a help-line for migrant workers, blamed the authorities for failing to ensure food and for not talking to the lodge owners until Thursday despite several representations made to them.

The manager of a lodge, speaking on anonymity, said that it was becoming difficult to supply water and electricity free of cost. "The Corporation is willing to move them to shelters. Why cannot they move," he asked.

Santosh Haldar from West Bengal, who is here with his brother and mother for treatment at a charitable eye hospital, said that they did not want to move to shelters for fear of crowding, poor hygiene and lack of adequate toilets. "This is a tough situation. The government must help us to continue to stay here," he said.

Greater Chennai Corporation on Friday clarified that its officials met lodge owners and asked them to take care of the migrant workers staying at their places until lockdown ends.

# Staff of govt. pleader's office tests negative for COVID-19

High Court relieved over confirmatory test result

MOHAMED IMRANULLAH S. CHENNAI

A court hall in the Madras High Court as well as the chambers of two judges were sanitised on Saturday after an Office Assistant attached to State Government Pleader's office was initially feared to have tested positive for COVID-19 on Friday.

However, a confirmatory test on Saturday evening found him negative for COVID-19 much to the relief of judges, lawyers, court staff, policemen and others.

Immediately after the initial report was conveyed to him on Saturday morning, Chief Justice Amresh-



war Pratap Sahi called for an urgent meeting of the administrative committee comprising top seven judges of the court and held discussions with them as well as officials from the health department.

Since the Office Assistant had attended court proceedings on Wednesday and Thursday when a case filed by Dravid Mun-

netra Kazhagam

against the restrictions imposed by the government on distribution of relief materials by volunteers was heard, it was decided to sanitise the entire court campus.

A decision was also taken to test the law officers, court staff as well as others who were present for the hearing on Wednesday and Thursday.

It was also decided to extend till May 3 a decision already taken by the court to hear extremely urgent cases through video conferencing.

Further, the summer vacation, due in May, for all courts in Tamil Nadu and Puducherry was also postponed sine die.

# COVID-19 enhances reliance on telemedicine

What is telemedicine?

Telemedicine is an all-encompassing term for providing remote virtual healthcare with the healthcare provider and the beneficiary physically in different locations. Information and communication technology (predominantly the internet) is used for history taking, reasonable relevant clinical examination and review of any investigations available. Telemedicine-enabled devices such as the thermometer, torch, stethoscope, BP apparatus, ECG, glucometers etc. convert the patient's location to a clinic. The diagnosis (provisional or final) is communicated to the patient electronically along with specific advice including a prescription.



K. GANAPATHY  
Past president, Telemedicine Society of India

## COVID-19

Aragonda, the birth place of P.C. Reddy, chairman, Apollo Hospitals.

When did telemedicine start?

The world's first telephone call made by Alexander Graham Bell on March 10, 1876 was actually a request for medical help. "Watson, come here I want you," he said after acid from a Leclanche cell fell on his hand. From 1925, the radio was used on and off to make medical diagnosis. In 1970, a telemedicine link was established between Mass General Hospital Boston and the Logan Airport in Boston. In India formal telemedicine commenced on March 24, 2000 when Bill Clinton commissioned the world's first VSAT (ISRO supplied)-enabled village hospital at

What are the components of telemedicine?

Technical requirements include hardware, software, connectivity, acquisition, storage, retrieval, display, while health care providers have to be oriented, trained, helped with customisations, to be cost effective, self-sustaining, and follow all the regulations in order to be future-ready.

Can prescriptions be given remotely?

Yes. The recently notified Telemedicine Practice Guidelines enables Registered Medical Practitioners to send prescriptions electronically. There are several

in built safety methods to prevent abuse of the system. Pharmacists have to dispense from a digital screen with the doctor's registration no and facsimile of the signature.

What are the different types of telemedicine

Different modalities includes a) Telephonic consultation, b) Chat mode, c) Whats App, d) SMS, e) Video consult, f) Proper fully fledged telemedicine using an approved EMR (Electronic Medical Record) where case records, images, investigations, teleconsults can be stored, retrieved and a good video camera is used for interaction. Peripheral medical devices located remotely can be controlled and results obtained in real time.

Are there any limitations in using telemedicine?

Yes! No! No!  
Technology is only an enabler, not an end by itself. The decision when to limit use of Telemedicine and insist on a face-to-face consult is always a clinical decision. The context, professional judgement and the patient's option alone matter. Some doctors may be satisfied with an ultrasound image showing a mass in the pelvis. Others may want to do a rectal examination. Patients may not be comfortable without seeing the doctor face-to-face at least for the first time.

What is the future of telemedicine?

The 'future' of Telemedicine started in December 2019. Worldwide Covid-19 is causing millions of people to try telemedicine for the first time. Telemedicine will continue to grow rapidly. Enforced habits of today will become the new normal. Life will never again be the same in the AC (After Corona) era. Gradually obligatory preferences of today will switch to a default mode. Patients may not want to return to the BC era when face-to-face consults were the norm and telemedicine was a bystander!

With technology becoming sophisticated and automated, doctors can do what they really want to do - spend more time with the patient - rather than spend time commuting, to go to their offices. Overheads in establishing a push office will come down.

Patients too will now have more time, avoiding the hassles of travel, and waiting outside the doctor's room. Virtual visits can make group care possible. Today considerable time is spent and effort has to be put in to get opinion of multiple specialists sequentially.

(The author is also director, Apollo Telehealth Services)

# DMK demands transparency

SPECIAL CORRESPONDENT CHENNAI

DMK president M.K. Stalin on Saturday said Tamil Nadu should take a cue from Chhattisgarh and release the details on the purchase of coronavirus testing equipment.

"Chhattisgarh Minister has revealed the details on how many equipment purchased and the price relative to the cost in the market. While the country is fighting to save lives, the administration should have transparency," he tweeted.

# Correction

In the article titled 'An initiative to help out artists in distress', that appeared in these columns on Saturday, it was erroneously mentioned that T.M. Krishna was the founder of Parivadhini. He is not.

It is also clarified that the amount of ₹23 lakh was collected by the COVID-19 Artists Fund. The errors are regretted.

Air Surcharge as applicable:  
New Delhi - Rs. 15/-  
Port Blair - Rs. 15/-

# Donation of funds, testing kits continue to come in

SPECIAL CORRESPONDENT CHENNAI

Sterile Copper has donated ₹5 crore to Tamil Nadu Chief Minister's Public Relief Fund to support efforts to battle COVID-19.

The company's employees have voluntarily donated their one-day's salary to support health and sanitation workers in Thoothukudi and have helped raise a total amount of ₹15 lakh, according to a statement.

Sterile said it had tied up with 10 Self Help Group (SHG) partners comprising 150 members to manufacture and distribute masks and personal hygiene items across 20 villages in Thoothukudi.

About 30,000 masks (out of a total target of 50,000) have been distributed to 5,200 households and also to truck drivers operating in the district, it said.

Larsen & Toubro said it had planned to donate COVID-19 diagnostic kits, PPEs, N95 masks and other medical equipment worth ₹40 crore.

L&T said it had already handed over 100 semi fowler beds with mattresses, 2 ventilators, 7 bipap ventilators and 20 multiparameter monitors to the King Institute of Preventive Medicine and Research, Chennai and further 8 ventilators will be provided.

The Akshaya Patra Foundation said in Chennai it had provided 29,025 meals as of April 18.

Aid India said it had supplied a total of 240 N-95 masks and 37,050 surgical masks to the Royapettah Government Hospital, Stanley and MMC GH, 4 government hospitals in Coimbatore, general public, PHCs, police and sanitation workers.

# OBITUARY & REMEMBRANCE

<p><b>DEATH</b></p> <p><b>SAD DEMISE</b></p> <p><b>P.V. RAMABADRANA (85)</b> Retired Assistant Engineer Expired on 17.04.2020 By Sorrowing Family Members 9551092287 / 7299955713 Chennai</p>	<p><b>DEATH</b></p> <p><b>Dr. JAYARAMAN BALASUBRAMANIAM</b> Director VHS Blood Bank 15<sup>th</sup> Nov 1938 - 14<sup>th</sup> April 2020</p> <p>Respectful Homage to a stalwart in Transfusion Medicine "Your memory will be etched in our hearts forever" Staff &amp; Management The Voluntary Health Services Hospital, Chennai 600 113</p>	<p><b>DEATH</b></p> <p><b>OBITUARY</b></p> <p>With profound grief we inform the demise of Beloved <b>B. PARANDHAM NAIDU</b> S/O Mr. Baliah Naidu DOB: 19.01.1928 DOD: 18.04.2020 Ex-President, (50 years of dedicated service) The Muthyalpet Benefit Fund Ltd., Thambu Chetty Street, Chennai.</p>	<p><b>BIRTHDAY REMEMBRANCE</b></p> <p><b>85th Birth Anniversary</b></p> <p><b>Priya Sarangapany</b> Your Angelic Voice, Magical Stories and Piety Holds us Captive And renders you Timeless Sree Pragasah and Kumari Vivek and Lygia Ajay, Anant and Achili</p>
<p><b>DEATH</b></p> <p><b>A VASUDEVAN</b> S/o Arunachala Shastri Retired GM, Syndicate Bank. Attained heavenly abode on 18-04-2020 at Chennai. Cremation on 19-04-2020 Morning</p>	<p><b>REMEMBRANCE</b></p> <p><b>16<sup>th</sup> Day Remembrance</b></p> <p><b>Dr. S ANNADURAI</b> RMO / Sr. Civil Surgeon - Retd Tamilnadu Medical Services Date of Birth: 13<sup>th</sup> Feb 1951 Date of Death: 4<sup>th</sup> Apr 2020 Family members by Family &amp; Friends</p>	<p><b>DEATH ANNIVERSARIES</b></p> <p><b>14<sup>th</sup> ANNIVERSARY</b></p> <p><b>V. MANONMANI</b> Ever your memories A. VELLASAMY - Husband N. SELVAKUMAR - Son-in-law S. SATHIABAMA - Daughter V. SABRINATH - Son S. HARIKRUPA DEVI - Daughter-in-law S. SAHAANA - Grand Daughter S. SARVESH - Grand Son S. NAVYA - Grand Daughter</p>	<p><b>OBITUARY</b></p> <p><b>V. PICHUMANI</b> (Age 83), Former ED of Modern Insulators Peacefully passed away on 18-04-2020. Deeply mourned by wife Jaya and Children Sheela, Ramaa and Krishna. Contact: 98400 57945 / 99520 77945</p>

**TAMIL NADU WATER SUPPLY AND DRAINAGE BOARD**  
ADDENDUM/CORRIGENDUM  
Second Extension of Tender Notice No. 6-2 / F. Tender Notice IDO 11/2020/DIR : 15.04.2020  
Sub: Outbidding for Operation and Maintenance of CWS in District for the Year 2020-2021 (01.04.2020 to 31.03.2021)

- CWS to 175 rural habitations in Palani & Thoppampatti Union
- CWS to Vedaswami RTPE and 74 rural habitations
- CWS to 201 rural habitations in Reddyarcharam Union
- CWS to 263 rural habitations in Gullipalambur - Extension of tender Notice - reg.

Ref: 1. This Office / P.B. No. 9 / F. Tender Notice IDO 11/2020/DIR : 04.04.2020  
2. This Office / E.A. Notice No. 6-1 / F. Tender Notice IDO 11/2020/DIR : 24.03.2020

The sale period, Last date of receipt and opening of tender in the references cited for the above works are hereby extended as below:-

Sl. No.	Description	Extended up to
1	This last date for Sale of Tender	07.05.2020 upto 5.45 PM
2	This last date for receipt of Tender	08.05.2020 upto 3.00 PM
3	Date & Time of opening of Tender	08.05.2020 at 3.30 PM

Actual date of operation and maintenance will be commensurate from the date of taking over of the scheme. All other terms and conditions already published remain unaltered.  
DIPRP/1641/TENDER/2020  
Superintending Engineer,  
TWD&D, M.D.T. Circle, Madurai

**TAMIL NADU WATER SUPPLY AND DRAINAGE BOARD**  
OFFICE OF THE SUPERINTENDING ENGINEER, TWD&D, THIRUVARUR, TENKASI, KANNIYAKUMARI CIRCLE, THIRUVALLUR, ADDENDUM/CORRIGENDUM  
TENDER THIRD EXTENSION NOTICE NO. 14/2020  
Ref: Tender notice reference I.F. No. 14/2020/DIR : 4.3.2020  
Tender extension notice No. 1 dated : 21.3.2020  
Second Tender extension notice No. 1 dated: 24.3.2020

The period of sale of tender documents, and receipt & opening of tenders called for in the reference is extended as below in relation to the procurement of the maintenance of the following CWS in Tirunelveli District for the period from 1.4.2020 to 31.03.2021.

- CWS to Manur and 450 other habitations in Manur and 7 other Panchayat Unions, Sankarapali (Municipal) and Thiruvattar (P) - Package - II
- CWS to Sengampalambur and 17 village habitations
- CWS to Sengampalambur and 17 village habitations
- CWS to Nanguneri, Thiruvannamudi and 257 rural habitations - Package-II
- CWS to 113 Tannur affected habitations
- CWS to 185 rural habitations in Nanguneri, Palayamkottai and Kalkattu Unions
- CWS to 103 Koodalambur and 100 habitations in 12 Panchayats in Tirunelveli District

Period of sale of bid documents: Upto 5.45 PM on 5.5.2020  
Last date for receipt of tenders: Upto 3.00 PM on 7.5.2020  
Opening of tenders: Upto 3.30 PM on 7.5.2020

Actual date of maintenance will be commensurate from the date of taking over of the scheme. All other terms and conditions already published remain unaltered.  
DIPRP/1642/TENDER/2020  
Superintending Engineer,  
TWD&D, T.T. Circle, Tirunelveli

**Government of India: Ministry of Railways**  
RESEARCH DESIGN & STANDARDS ORGANISATION,  
MANAK NAGAR, LUCKNOW-226011

E-Global tender (Global bid invitation)  
Notice No. 01/2019 & E-Ot Notice No. 10/2019

**CORRIGENDUM**

The following amendment is notified in the above Tender Notice issued by this office for:

No.	E-Tender number	AMENDED FOR
1.	03199004	Last date of submission/opening of tender 27.04.2020 (Monday) 27.05.2020 (Wednesday)
	Description	TIMS (Track Inspection and Monitoring System)
2.	03205006	Last date of submission/opening of tender 30.04.2020 (Thursday) 01.06.2020 (Monday)
	Description	Procurement of Rail Profile Measurement System & Wheel Profile Measurement System

For latest details and tender conditions and Corrigendum issued in tender, if any, please visit IREPS website www.ireps.gov.in

Executive Director  
Stores/RDSO/Lucknow  
for and on behalf of President of India

**GOVERNMENT OF INDIA**  
**DEPARTMENT OF ATOMIC ENERGY**  
**HEAVY WATER PLANT, TUTICORIN**

**Notice Inviting e-tender No. HWPT/CIVIL/COLONY/02/2020**  
**CORRIGENDUM**

General Manager, HWP (Tuticorin) on behalf of the President of India invites two part item rate tender through e-tendering mode from eligible contractors for the "Housekeeping works at HWP (T) Colony for the year 2020 - 21". Estimated cost: Rs. 19,00,000/-; EMD: Rs. 38,000/-; Dates for download extended upto 11-05-2020 (23.00 hrs.). For more information and tendering, please visit website [www.tenderwizard.com/DAE](http://www.tenderwizard.com/DAE) e-mail [gcivc@tut.hwb.gov.in](mailto:gcivc@tut.hwb.gov.in) tel.0461-2244 590

**TAMIL NADU CO-OPERATIVE SUGAR FEDERATION LTD**  
690, ANNA SALAI, PERIYAR EVR BUILDING, 5<sup>th</sup> FLOOR, NANDANAM, CHENNAI - 600 035. Phone: 044-2433 0088, 2434 4177.  
**E-TENDER NOTICE**

E-tender details	Repair & Refreshing of 30 nos of Conventional and Louts Rollers to Co-operative and Public sector. Sugar Mills for 2020-2021 year.
E-tender Web Portal	<a href="https://tenders.gstv.in">https://tenders.gstv.in</a>
Eligibility	Manufacturer only
Earnest Money Deposit	Rs. 1,50,000/-
Due Date & Time for Submission of tender	05-05-2020 upto 11.00 AM
E-tender opening date & Time	06-05-2020 @ 11.30 AM

For Further details visit Website: <https://tenders.gstv.in> and tender form can be downloaded free of cost.  
Place: Chennai - 35  
Date : 17.04.2020  
DIPRP/1637/TENDER/2020  
**MANAGING DIRECTOR (FAC)**

**प्रचार्य का कार्यालय**  
**अनुग्रह नारायण मनाथ मेडिकल कॉलेज, गया।**

**अति अल्पकालिन विविदा सूचना**

नवेल कोरोना वायरस के प्रकोप के कारण उपवन महामारी की स्थिति को देखते हुए देश में लॉकडाउन सहित आपातकालीन स्थिति और चिकित्सा उपकरणों/उपयोग्य सामग्रियों की आपूर्ति में बाधा पार इस के प्रतिकूल प्रभाव के कारण इस मेडिकल कॉलेज में स्वास्थ्य सुविधाओं में अभावकालीन (COVID19) स्थिति से निपटने के लिए तत्काल आधार पर स्वास्थ्य एवं परिवार कल्याण मंत्रालय भारत सरकार, नई दिल्ली के निर्देशानुसार आईसीएमओमार्फत, नई दिल्ली द्वारा प्रस्तावित अनुग्रह नारायण मनाथ मेडिकल कॉलेज, गया के माईकोबायोलॉजी विभाग अंतर्गत Viral Research and Diagnostic Laboratory (VRDL) की स्थापना हेतु आधारभूत संरचना कार्य एवं मशीन उपकरणों / सामग्रियों की आपूर्ति हेतु विविदा प्रकाशन में निविदा / स्प्रीड डाक द्वारा इच्छुक निर्माताओं या उनके द्वारा प्रतिकूल विक्रेताओं/आपूर्तिकर्ताओं एवं निबंधित निर्माणकर्ताओं / सार्वजनिककर्ताओं को अनुरोध है। प्रथम निविदा प्रकाशन की तिथि से सातवें दिन के अपराह्न 5:00 बजे तक हाई कोपी एवं स्प्रीड (M.S.Excel) कोपी सीडी/डीवीसीडी के साथ निविदा आमंत्रित किया जाता है। निविदा अर्पण के बाद प्राप्त निविदा पर विचार नहीं किया जाएगा।

निविदा प्राप्ति के अंतिम तिथि के उपरान्त दूसरे दिन कृप समिति के समक्ष निविदा कार्यालय अर्पण में खोला जायेगा जिसमें निविदादाता या उनके प्रतिनिधि उपस्थित रह सकते हैं। इसके लिए उन्हें अलग से किसी प्रकार की सूचना नहीं दी जायेगी।

निविदादाता को निविदा के साथ सत्यांक राशि के रूप में ₹50,000/- (पचास हजार रुपये) मात्र प्रत्येक के लिए अलग-अलग (मशीन उपकरणों एवं आधारभूत संरचना को) किसी भी राष्ट्रीयस्तु बैंक का बैंक ड्राफ्ट अथवा एनएसएलको को प्राचाय, अनुग्रह नारायण मनाथ मेडिकल कॉलेज, गया के पदनाम से हो सलन करना अनिवार्य है। इ अर्जुनोदित होने पर जब तक आपूर्ति / कार्य चलता रहेगा सत्यांक राशि वापस नहीं किया जायेगा।

मशीन उपकरण / सामग्री/कार्य की सूची तथा नियम / शर्त की विवरणी महाविद्यालय के Website- [www.anmcc.ac.in](http://www.anmcc.ac.in) पर देखा जा सकता है या ई-मेल आईडी - [princ\\_anmcc@rediffmail.com](mailto:princ_anmcc@rediffmail.com) के माध्यम से प्राप्त किया जा सकता है। किसी भी स्पष्टीकरण या जानकारी के लिए इच्छुक पत्र प्राचाय, अनुग्रह नारायण मनाथ मेडिकल कॉलेज, गया के मोबाइल नंबर- 9470003290 या ईमेल आईडी- [princ\\_anmcc@rediffmail.com](mailto:princ_anmcc@rediffmail.com) पर संपर्क कर सकते हैं।

**नोट- अनुभवी आपूर्तिकर्ता (आधारभूत संरचना कार्य सहित) को प्राथमिकता दिया जायेगा।**

**प्रचार्य**  
अनुग्रह नारायण मनाथ मेडिकल कॉलेज, गया।

**PR-00217 (Health) 2020-21**  
नवेल कोरोना के संर्ष में विरतु जागरूकी एवं सहयोग हेतु  
आयुष्य सन्मार्गी - संसर्गी विरती लक्ष की जागरूकी अथवा सुखम सुखम सुदुर्भाग्य विरती 0412-2217636 पर सम्पर्क किया जा सकता है।  
किसी भी तरह जागरूकी अथवा सुखम सुखम सुदुर्भाग्य विरती 0412-2217636 पर सम्पर्क किया जा सकता है।  
किसी भी तरह जागरूकी अथवा सुखम सुखम सुदुर्भाग्य विरती 0412-2217636 पर सम्पर्क किया जा सकता है।

## Vigilance files case against IUML MLA

**STAFF REPORTER KANNUR**  
The Vigilance Department submitted its first information report against Indian Union Muslim League (IUML) legislator K.M. Shaji in the Thalassery vigilance court on Saturday.

The Vigilance and Anti-Corruption Bureau has registered a case against the MLA on the charge of taking ₹25 lakh from the management of a higher secondary school at Azhikode in Kannur for sanctioning the plus two course in 2014.

The case is based on a complaint submitted by IUML leader Naushad Poothapara to the party state committee.

## Congress rejects Kerala govt. clarification on Sprinklr deal

**SPECIAL CORRESPONDENT THIRUVANANTHAPURAM**  
The Congress has rejected the State government's position that it employed the U.S.-based firm Sprinklr to harness the power of big data analytics to combat the COVID-19 outbreak.

Kerala Pradesh Congress Committee president Mulpally Ramachandran on Saturday accused Chief Minister Pinarayi Vijayan of having exploited the adversities to allow a "blacklisted" foreign firm to siphon off valuable personal medical information of citizens without their informed consent.

Nearly 1.75 lakh Keralites under observation for COVID-19 symptoms had volun-

teered their sensitive personal health information to field workers in good faith. At a stroke, Mr. Vijayan had betrayed their sincerity. He had allowed the IT Secretary to bypass the Cabinet and sign a contract with Sprinklr.

**Confidentiality of data**  
Mr. Vijayan had not ensured the confidentiality of the data. Sprinklr held proprietary rights, and it could sell the data to healthcare or pharmaceutical businesses without the government's knowledge. Mr. Vijayan had stacked the decks in Sprinklr's favour. The government had no legal jurisdiction over the data in the possession of Sprinklr. Only

a U.S. court could adjudicate on any contractual dispute.

The attack came on a day IT Secretary M. Shivsankar appeared on two news channels to make the government's case that the deal was above board.

An entity which could crunch a considerable amount of health data to identify infection patterns to streamline the COVID-19 containment strategy was directly needed. Sprinklr agreed to provide the service without charge. The arrangement did not warrant the prior vetting of the finance and legal departments. The C-DIT would own and analyse the data henceforth, he said.

## Some offices in Karnataka allowed to resume work

**SPECIAL CORRESPONDENT BENGALURU**

Following the Union Home Ministry's guidelines, the Karnataka government on Saturday announced some relaxation measures in the COVID-19 lockdown, including allowing a maximum of one third of the workforce in the information technology and biotechnology sectors "providing essential services" and government offices from Monday.

Prohibitory orders under Section 144 of the Cr.Pc, however, will continue all over the State till May 3. To contain the spread of the pandemic, the government has banned inter-district movement of people and movement of vehicles in other districts of the State till May 3.

After holding a meeting, Chief Minister B.S. Yediyurappa said employees in IT and BT firms providing only essential services can operate their business by allowing one-third of the workforce in their offices from Monday.

"Employees of IT/BT companies should come to offices in hired buses. Other IT/BT firms, those not providing essential service, should encourage employees to work from home," Mr. Yediyurappa said.

Government departments not dealing with essential services would function with a third of the workforce and employees have to come in buses that would be hired exclusively for them.

Wearing masks and practising social distancing have been made mandatory and spitting in public places has been banned.

The Chief Minister appealed to senior citizens and vulnerable persons to remain indoor for the next three months.

## Three die in Andhra Pradesh, Karnataka

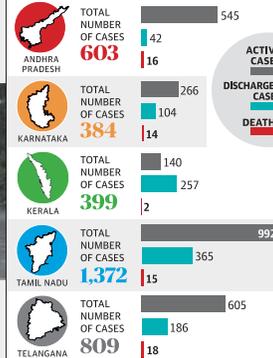
Cab driver dies of heart attack, later found COVID positive

### Fighting the virus

Kerala government is striving hard to contain the spread of COVID-19 and give proper medical care to infected persons



**Out of hospital:** Zareena Yakoob, her daughter Safiya Yakoob and son Hussain Yakoob coming out of the Government Medical College in Ernakulam after treatment, on Saturday. • THULASI KAKKAT



**SPECIAL CORRESPONDENT VIJAYAWADA/HYDERABAD/THIRUVANANTHAPURAM, BENGALURU**

Andhra Pradesh reported two more deaths and 31 new COVID-19 cases from six districts as of Saturday morning.

The overall tally went up to 603 and 16 persons have succumbed to the disease in all, while 42 recovered and were discharged. Also, 545 patients were hospitalised, a Health Department bulletin said.

Krishna district reported 17 fresh cases and one death, taking its tally to 70. A majority of the cases were in densely populated Vijayawada. Kurnool reported six new cases and one more death, while Nellore had three new cases. Prakasam and East Godavari had two fresh cases each, and West Godavari one case. On the other hand, the total number of persons who recovered went up to 42, with seven more patients leaving hospital.

In Visakhapatnam 13 patients had recovered and seven were under treatment.

As per the bulletin, Kurnool reported 132 cases and Guntur 125 cases, followed by Krishna (70), Nellore (67), Prakasam (44), Kadapa (37),

West Godavari (35), Chittoor (28), Anantapur (26), Visakhapatnam (20) and East Godavari (19).

### 43 more cases

There were 43 new cases in Telangana and no fatality on Saturday. The State's total number was 809, of which active cases were 605, while 186 were discharged and the death toll was 18.

### COVID-19

Of the 43 new cases, 31 were from Hyderabad GHMC area, seven from Gadwal, two each from Sircilla and Rangareddy and one from Nalgonda district. With this, GHMC has recorded 448 cases (active and discharged). The active cases also include three pregnant women. While one woman was in 32nd week, two more were in the 18th week.

**Kerala: history of travel**  
Kerala looked afresh at its COVID-19 strategy, as four persons tested positive for on Saturday, while two patients were reported to have recovered. Three of the cases were those who had re-

turned from Dubai, while one had contact with an imported case. Three cases were in Kannur, and one in Kozhikode.

Four more medical colleges now have real time PCR laboratories. Testing at the Ernakulam Government Medical College opened on Saturday with ICMR approval while Kottayam, Kannur and Manjeri medical colleges await clearance, Health Minister K.K. Shylaja said.

Karnataka reported its 14th death, a 42-year-old driver from Vijayapura, who died of heart attack on April 16, and whose samples tested positive for COVID-19 on Saturday. The driver had accompanied two people to Bengaluru and had a heart attack on hearing that they had tested positive.

Overall, 25 new cases were reported on Saturday taking the total number to 384.

The Vijayapura district administration was in a dilemma over the driver's funeral. Jawaid Akhtar, Additional Chief Secretary (Health and Family Welfare), said the administration had to follow the Central government's protocol.

## Frozen frames



**Awaiting visitors:** With the nationwide lockdown to prevent the spread of coronavirus in place, sites often visited by tourists and the public wear a deserted look. (Clockwise from top) A view of the Eve's beach in Kovalam, Kerala; the Vidhana Soudha in Bengaluru; and the Golconda Fort in Hyderabad on Saturday. • S.GOPAKUMAR, V.SREENIVASA MURTHY & AP

## IN BRIEF



**Sabarimala temple closed after monthly rituals**  
PATHANAMTHITTA  
The Ayyappa temple at Sabarimala was closed after the five-day monthly rituals on Saturday. Nobody turned up to undertake the trip to the forest shrine all five days as pilgrimage during the lockdown has been prohibited. The Travancore Devaswom Board permitted only customary rituals.

### Belagavi woman gives birth in autorickshaw

**BELAGAVI**  
A woman ended up giving birth to a baby in an autorickshaw in Belagavi, Karnataka, on Saturday as the hospital she wanted to go to was closed due to the lockdown. Her relatives found an autorickshaw to go to some other hospital, but the woman delivered in the vehicle within minutes of getting inside. She was helped by women from nearby houses at Hattiholi Galli. The woman and baby are safe.

### 'Collect details of those buying drugs for fever'

**HYDERABAD**  
The Telangana government has issued instructions to Municipal Commissioners and Additional Collectors of all districts to ensure that medical shops and pharmacists collect phone numbers of customers who buy medicines for fever, cough and cold, symptoms similar to COVID-19. In a memo, Principal Secretary-Municipal Administration and Urban Development Arvind Kumar said on showing the symptoms, such persons should be made to undergo tests for COVID-19. PTI

## Source of many cases in Vijayawada untraced

Social distancing emphasised



**Colourful message:** Artists doing their bit to create awareness on COVID-19 in Vijayawada on Saturday. • V. RAJU

**STAFF REPORTER VIJAYAWADA**

The Krishna district administration has cautioned the people about the risks of community transmission in Vijayawada and other mandals where COVID-19 cases have been reported, though the source of transmission in about 30 cases reported in the past couple of days couldn't be traced.

Collector A. Md. Intiaz and Commissioner of Police Ch. Dwaraka Tirumala released video messages through which they alerted the public about the rise in the number of cases where persons with no travel history or relation with patients contracted the virus.

"So far, in the district, 69 cases have been reported, and about 59 are from Vijayawada and surrounding areas. Initially the transmission was through foreign returnees and later Delhi returnees, and there are 35 such cases. But in about 30 cases, we were unable to find out where the patients got exposed. This is an alarming development, and everyone should follow social distancing and lockdown norms to contain the spread," the Collector said.

There are 17 containment zones in the city covering 95% of the municipal corporation area, he added. "Nobody should step out of their houses unless it is an emergency until May 3. The transmission of the virus could be because of violation of social distancing norms," he added.

### Meat shops closed

In view of this, the Collector asked the police department to ensure that no meat and seafood shops are opened in the red zones.

Mr. Tirumala Rao said the source of transmission in many cases couldn't be traced. "Some patients say they have only gone to Rythu Bazaars and grocery stores. In one case, the patient visited medical shops and hospitals to supply saline bottles, but where he got exposed to the virus is not known," he said.

"In another recent case, a foreign returnee tested positive after nearly 28 days. His mother too tested positive after two days and later, six of his neighbours tested positive. In that particular colony, there are 10 cases now. This is a highly alarming situation," Mr. Rao said.

## Gandhians on padayatra stranded by lockdown

**N.RAVI KUMAR HYDERABAD**

Padayatras are a way of life for this couple from Tamil Nadu. With a zeal to spread the teachings of Mahatma Gandhi, they have undertaken many, covering thousands of kilometres, seeking to strike a chord with people across the country.

But their latest padayatra - from Erode in Tamil Nadu to Hyderabad - will remain etched in memory for M. Karuppaiah and his wife Chitra, hailing from Madurai and national office-bearers of the All-India Gandhian Movement. They faced unexpected challenges due to the COVID-19 necessitated lockdown but also received help from various quarters.

Mr. Karuppaiah, 49, said they began the padayatra on Republic Day and aimed to reach Hyderabad on March 12. Their plan went awry



**On a mission:** M. Karuppaiah and Chitra are in Hyderabad awaiting the lifting of the lockdown. • G. RAMAKRISHNA

when like-minded people who hosted them in Vijayawada and other places in Andhra Pradesh requested them to spend some days in view of the overwhelming public response.

### Caught off guard

When Mr. Karuppaiah and Ms. Chitra, 51, restarted the padayatra, the lockdown was announced. Since educational institutions and temples where they planned

to stay were closed, well-wishers tried to get them accommodation elsewhere.

With some difficulty, they found a small place to stay for 15 days in a Kali temple on the outskirts of Hyderabad. But their documents and meagre belongings were damaged in rain. Though shaken, the couple is determined to complete their padayatra as part of the 150th birth anniversary celebration of Mahatma Gandhi.

## Huge crack develops on Ambukuthi hills in Kerala

**E.M. MANOJ KALPETTA**

A huge crack has developed on the eastern part of Ambukuthi hills, on which the Edakkal caves are situated. The crack was exposed after a fire devastated the area a few days ago.

Sulthan Bathery Tahsildar A. Sunil Kumar and District Soil Conservation Officer P.U. Das visited the site on Saturday.

Mr. Kumar said the crack had formed along a 60 m stretch on the hill slope. The exact cause could be ascertained only after a study by experts, he added.

Mr. Das said the crack



**Not a good sign:** A crack that developed on the eastern part of Ambukuthi hills in Wayanad. • SPECIAL ARRANGEMENT

could have developed during the heavy rain witnessed last year. The crack would not lead to a landslide during

moderate rain, but the possibility of landslips in the area during heavy rain could not be ruled out, he added.

## WEATHER WATCH

RAINFALL, TEMPERATURE & AIR QUALITY IN SELECT METROS YESTERDAY



TEMPERATURE DATA: IMD, POLLUTION DATA: CPCB, MAP: INSAT/IMD (TAKEN AT 18.00 HRS)

**Forecast for Sunday:** Thunderstorm accompanied with lightning and squall very likely at isolated places over Nagaland, Manipur, Mizoram and Tripura.

CITY	RAIN	MAX	MIN	CITY	RAIN	MAX	MIN	
Ahmedabad	...	39.5	27.3	Kurnool	...	41.3	28.9	
Aizawl	...	25.0	28.7	15.9	Lucknow	...	38.0	23.8
Allahabad	...	43.4	24.6	Madurai	...	39.2	27.5	
Bengaluru	...	35.2	23.8	Mangaluru	...	36.7	26.2	
Bhopal	...	76.4	...	Mumbai	...	33.6	26.0	

## A short Tamil-Brahmi inscription, containing the word Chera ("Kadummi Pudha Chera"), was found at Edakkal. [3]

**An undated Prakrit-Grantha inscription of Kadamba king Vishnu Varma was recovered from the Edakkal Cave. The record, assigned to 5th or 6th century AD, shows the extension of Kadamba authority into Wynaad**

FROM PAGE ONE

## Govt. nod mandatory for FDI from neighbours

"Given the macro situation, it is a measure to protect vulnerable companies, with possibly low valuations, from takeovers. However, while the DPIIT has set out its policy stance, the Non Debt Rules that the Ministry of Finance will publish in this regard is awaited, as that will set out the different scenarios which will trigger the Central Government approval requirement and other considerations regarding foreign investments from our neighbours," said Aarthi Sivanandh who specialises in corporate law at Partner, J Sagar Associates.

China's footprint in the Indian business space has been expanding rapidly, especially since 2014.

A recent report from Brookings India showed that net Chinese investment in India until 2014 stood at \$1.6 billion, mostly coming from state-owned players in the infrastructure space.

Three years later, total investment had increased

five-fold to at least \$8 billion according to Chinese government data, with a shift from a state-driven to market-driven approach.

The total current and planned Chinese investment in India has now crossed \$26 billion, according to estimates in the March 2020 report, titled "Following the Money: China Inc's Growing Stake in India-China Relations".

The single biggest Chinese acquisition has been in the pharmaceutical space, with Shanghai-based Fosun paying \$1.09 billion for a 74% stake in Hyderabad-based Gland Pharma.

However, major Chinese investments in India span a range of sectors. A 2017 survey of Chinese enterprises in India by the Industrial and Commercial Bank of China's Mumbai branch found that 42% were in the manufacturing sector, 25% in infrastructure and others in telecom, petrochemicals, software and IT.

## No new cases in 47 districts for 28 days

Continuing to give a break-up on the cases related to a religious gathering in New Delhi's Nizamuddin area in March this year the Health Ministry noted that out of the 14,732 cases in the country 4,291 (29.8%) cases are related to this single source.

"This has spread to 23 States and UTs. 84% cases in Tamil Nadu, 63% cases in Delhi, 79% cases in Telangana, 59% cases in U.P. and 61% in Andhra Pradesh are related to the event," said Mr. Agarwal.

The Health Ministry also showcased how Kasargod district in Kerala successfully contained COVID-19.

"The district faced many challenges due to foreign travel, geography and large number of expatriates, but the district addressed the challenges well. Out of 168 cases, 113 cases have recovered. With special focus on clinical management, not even one person died. Remaining 55 active cases too are being monitored actively," said Mr. Agarwal.

Speaking about Kerala's strategic approach, he said the State administration appointed a special officer to coordinate and monitor effective containment.

"Along with a 100% house-to-house survey, a very effective campaign called 'Break The Chain' was done and Kasargod used drones for surveillance and GPS for tracking people on home quarantine and did aggressive testing," the Ministry said.

Replying to a question on

hydroxychloroquine trial, Dr. R. Gangakhedkar of the Indian Council of Medical Research (ICMR) said around 480 patients have been enrolled in an 8-week observational study on efficacy of the drug.

"ICMR has launched another study on side-effects of HCQ on health care workers, using data of some health care workers who had started taking HCQ. He informed that AIIMS is conducting studies on assessing both prophylactic and therapeutic impact of HCQ on COVID-19 - i.e. the ability of the drug for both prevention and healing. Some adverse reactions like abdominal pain have been reported in health care workers," he said.

Responding to a question on the efficacy of another drug remdesivir in treatment of COVID-19, Dr. Gangakhedkar said studies show that in 68% of COVID-2019 patients, use of Remdesivir reduces oxygen demand.

He noted that the manufacturer Gilead Sciences says that it is likely to be beneficial adding that "data on the interim analysis being done by them is not yet available".

"If in coming weeks we come to know that remdesivir is beneficial in treating COVID-19, it will either go into patent pooling or otherwise if it becomes available, India too can start doing its trials. Besides, WHO Solidarity Trial, in which India too is participating, has an arm on remdesivir."

## 26 Navy personnel in Mumbai test positive

Since the sailor tested positive, the entire premises had been sealed off. Containment zones and buffer areas have been designated and frequent disinfection was being carried out as per protocol to contain the spread by breaking the chain of transmission, the Navy said.

"Naval assets continue to be mission-deployed in three dimensions, with all the networks and space assets functioning optimally," it added.

**Ninth case in Army**

On the latest case, sources in the Army said contact tracing was being done. All primary contacts at Dehradun were under home quarantine. One officer who travelled with her had tested negative. Rest of the contacts would be tested between day 5 and 14 of contact with her, the sources said.

While other doctors were symptomatic, as a precau-

tory measure, they were being quarantined at their respective stations for 14 days before they started working in hospitals, the sources added.

Of the eight positive COVID-19 cases earlier, two are doctors and one nursing assistant.

Earlier this month, in a video message to the rank and file, Navy chief Adm. Karambir Singh said the challenge was not over yet and it was only going to intensify in the days and weeks ahead.

He also outlined the priorities, one of which was to ensure that operational assets, specifically ships and submarines, remained free from the virus.

"It is a very difficult task because physical distancing on board ships, and especially submarines, is very tough... but physically, we will maintain the required distance of six feet," he had stated.

# Clarify e-commerce rule: Cong.

Government should come forward to rescue traditional merchants, says party

SPECIAL CORRESPONDENT  
NEW DELHI

The Union Home Ministry should clarify if e-commerce companies are allowed to sell only essential items or they can sell non-essential commodities too from April 20, the Congress said on Saturday.

In a videoconference with presspersons on Saturday, senior party leader Ajay Maken highlighted the plight of retail traders during the lockdown.

He said the new guidelines of the Ministry for limited economic activities denied a level playing field for the traditional traders.

"For the essentials items, traders have been allowed to open their shops and sell, but for non-essential items, if only the e-commerce companies are allowed, then the traders are being not given a level playing field," he said.

"What we are asking from the government is first they should clarify their April 15 order and then it should come forward to rescue these traders and ensure that they don't have to pay



AJAY MAKEN, Senior Congress leader

For the essentials items, traders have been allowed to open their shops and sell, but for non-essential items, if only the e-commerce companies are allowed, then the traders are being not given a level playing field

AJAY MAKEN, Senior Congress leader

fixed electricity charges. Some amount of help should be given so that they can pay salaries and the property taxes should also be not collected at commercial rates from the shopkeepers," Mr. Maken added.

As per the 6th economic census of 2013, after agriculture, retail trade was the most dominant economic activity and accounted for 35% of the total economic activities.

"As far as the employment generation is concerned, retail trade accounts for one-fifth of the total employment in India. It gives employment to 2.72 crores families in the entire country. So, it is one of the biggest employment generator, se-

cond only to the manufacturing sector," he noted.

Traders had closed their shops for the past one month and earlier suffered due to demonetisation, e-commerce competition and the GST, he said.

Other State governments should follow the Congress-led Punjab and Rajasthan where fixed charges for electricity for non-domestic connections had been deferred by two months, Mr. Maken said.

**Tewari seeks panel meet**

In a related development, Lok Sabha member and senior party leader Manish Tewari wrote to the Chairman of the Parliamentary Standing Committee on Finance

Jayant Sinha, demanding a meeting of the committee to discuss the situation arising out of COVID-19.

"Even before the lockdown that commenced on the 24th of March 2020, the Indian economy was not in the pink of the health. However, the last 25 days have demonstrated how fragile our economy is and the poor have been the worst sufferers of this tragic spectre," Mr. Tewari wrote, while asking for a meeting post April 20 when some of the restrictions are set to be relaxed.

**Relief package 'peanuts'**

Separately, senior leader M. Veerappa Moily, slammed the Centre for the relief package of Rs 1.72 lakh crore announced earlier.

"The government should have ensured at least a package of 9% of GDP, which works out to Rs 17.5 lakh crore. What the government and RBI has done is only peanuts, which will not allow the economy to stabilise, forget about taking off," he said.

(With inputs from PTI)

## Manmohan to head Cong. group on virus

Randeep Surjewala will be convener

STAFF REPORTER  
NEW DELHI

Former Prime Minister Manmohan Singh will head a consultative group of the Congress on COVID-19, the party said on Saturday.

Party chief Sonia Gandhi formed the 11-member consultative group which includes former party chief Rahul Gandhi, former Union Finance Minister P. Chidambaram, Rajya Sabha member Jairam Ramesh, Lok Sabha member Manish Tewari, party general secretary K.C. Venugopal and its Data and Technology wing chief Praveen Chakravarty.

Randeep Surjewala will be its convener.

Financial journalists-turned-party spokespersons Supriya Shrinete and professor Gourav Vallabh are also its members.

**Daily meetings**

"The consultative group will virtually meet every day to deliberate on matters of current concern and formulate views of the party on va-



Manmohan Singh

rious issues," Mr. Venugopal said in a statement.

Ever since the lockdown began, Congress leaders, including Ms. Gandhi, have been writing to Prime Minister Narendra Modi and the Union government.

Mr. Gandhi said at a press conference on Thursday that though he continued to disagree with Mr. Modi it was time to be united in fighting the virus.

"You might be feeling that this is a very scary experience, we have never been locked up in our house, what is going to happen to us. I want you to know that this country is bigger than any disease," he said.

## Rahul thanks govt. for new FDI policy

SPECIAL CORRESPONDENT  
NEW DELHI

Former Congress chief Rahul Gandhi on Saturday thanked the Union government for "taking note" of his warning and amending the foreign direct investment (FDI) policy to check hostile takeovers of distressed Indian companies amid the COVID-19 pandemic.

"I thank the government for taking note of my warning and amending the FDI norms to make mandatory for government approval in some specific cases," Mr. Gandhi tweeted.

Congress' chief spokesperson Randeep Surjewala took to twitter to give credit to Mr. Gandhi for the government move.

"Glad that govt. has positively responded to @RahulGandhi's suggestion of protecting our corporates from hostile takeovers. The amendment in FDI Policy is welcome and will plug creeping acquisition of any Indian entity. Hope that this constructive engagement shall continue," Mr. Surjewala tweeted.

## Humanity will overcome pandemic, says Modi

Prime Minister praises work done by various Ministries

PRESS TRUST OF INDIA  
NEW DELHI

Humanity will surely overcome the COVID-19 pandemic, Prime Minister Narendra Modi said on Saturday, as he hailed the efforts put in by various Ministries to help people during the lockdown.

"The world is fighting COVID-19 together. Humanity will surely overcome this pandemic," Mr. Modi said in reply to a tweet by the Indian Embassy in Switzerland.

"Indian Tricolour of more than 1,000 meters in size projected on Matterhorn Mountain, Zermatt, Switzerland to express solidarity to all Indians in the fight against COVID-19. A big thank you to @zermatt\_tourism for the gesture," the tweet by the Indian Embassy said.

Mr. Modi also responded to tweets by various Ministries and his Cabinet colleagues on the work they were undertaking.



In solidarity: Switzerland's Matterhorn Mountains illuminated with the Indian tricolour. •PTI/TWITTER/@ZERMATT\_TOURISM

"Proud of the Indian Railways team. They've been continuously helping our citizens in this crucial hour," Mr. Modi said in response to a tweet by Railway Minister Piyush Goyal. He said that while passenger trains had stopped, the Railways had not stopped relief efforts.

Petroleum Minister Dharmendra Pradhan tweeted that he has thanked gas cylinder delivery personnel for carrying out their responsibility in fulfilling people's needs during the lockdown.

Mr. Modi responded with, "Kudos to all those working round the clock, across the nation, to ensure India's energy needs are met."

The Income Tax department said that as a relief to micro, small and medium enterprises (MSMEs), income tax refunds of ₹5,204 crore have been issued in the last 10 days to nearly 8.2 lakh small businesses. Mr. Modi tweeted that the department was committed to helping dynamic small and medium businesses.

## 12 Myanmar traders arrested in Mizoram

They were jailed after quarantine

SPECIAL CORRESPONDENT  
GUWAHATI

The security forces in Mizoram have arrested 12 Myanmar traders for illegally entering the State since the lockdown began on March 25.

Officials said that the traders, arrested under the Foreigners Act of 1946, were in a district jail in Champhai near the border with Myanmar.

They were put in jail after completing a 14-day stay in a designated quarantine centre.

Other foreigners detained before the pandemic struck the country include more than 30 Rohingya women, six members of the Myanmar-based extremist group Arakan Army and a Chinese national, Inspector General of Prisons Maria C.T. Zuali told newsmen in Mizoram capital Aizawl.

The Arakan Army has been in conflict with the Myanmar government since its formation in April 2009. Among its opponents is the Arakan Rohingya Salvation

The Rohingya women detained at a facility in Vairangte are suspected to be victims of human trafficking

MARIA C.T. ZUALI  
Inspector General of Prisons

Army. Ms. Zuali said the Arakan Army members were in a district jail in Lawngtlai while the Chinese traveller who entered the State without valid documents was in the Aizawl central jail.

"The Rohingya women, who are suspected to be victims of human trafficking, are being detained at a facility in Vairangte on the Assam-Mizoram border. Efforts are on to send them to a corrective home before deportation," Ms. Zuali added.

Ms. Zuali said 327 prisoners were released on parole after the Centre sought a decongestion of jails to minimise the risk of COVID-19 infection. Of these, 48 were nearing the completion of their prison term.

## Teltumbde's NIA custody extended

SPECIAL CORRESPONDENT  
MUMBAI

A special court set up to hear cases investigated by the National Investigation Agency (NIA) on Saturday extended the custody of activist Anand Teltumbde till April 25.

Dr. Teltumbde, an engineer and Indian Institute of Management graduate who used to teach at the Indian Institute of Technology in Kharagpur, was booked in the Elgar Parishad case for his alleged links to the banned Communist Party of India (Maoist). He was remanded in the custody of the NIA till April 25 after he surrendered in Mumbai on April 14.

Special Public Prosecutor Prakash Shetty informed the special court of the developments that had occurred while Dr. Teltumbde was in custody. He said the agency needed more time to analyse the electronic data recovered from his computer and other devices. It also wanted to question Dr. Teltumbde about the evidence gathered from the devices and various social media posts.

The court was also informed that Gautam Navlakha was sent to custody for seven days.



Security personnel on the move during an encounter in Sopore, north Kashmir. •FILE PHOTO

## 3 CRPF jawans killed in militant attack

Two others injured in Sopore

SPECIAL CORRESPONDENT  
SRINAGAR

Three CRPF jawans were killed and two injured in a militant attack at Sopore in Baramulla district of Jammu and Kashmir on Saturday.

A CRPF spokesman said the attack took place between 5 p.m. and 5.30 p.m. when the personnel were withdrawing from the checkpoint duty at the Ahad Baba crossing.

Head constable Rajeev Sharma from Bihar, constable C.B. Bhakare from Maharashtra and constable Parmanu Satyapal Singh from Gujarat died of injuries. They belonged to the CRPF's 179 Battalion.

"The driver and another jawan were injured and shifted to hospital," the spo-

kesman said. The Jammu and Kashmir government allowed the families of two slain militants in Shopian to exhume their bodies from a graveyard in Baramulla on Monday, after women protesters cut off electricity in the area.

The two militants were killed in an operation by the security forces at Dairoo-Keegam in Shopian on Friday.

Two families wanted to identify the bodies of the militants who they said were locals. But the police denied them permission, the families said.

Their bodies were buried 110 km away from Shopian, in a hillcock graveyard in Baramulla where most of non-local militants are buried.

## Most online content on child sexual abuse from India

19.87 lakh reports of such material uploaded from country

RAMYA KANNAN  
CHENNAI

In a global compilation of reports of child sexual abuse material (CSAM) found online, India stands right on top of the list, with 11.7% of the total reports or at 19.87 lakh reports, followed by Pakistan, which contributes 6.8% of all reports (11.5 lakh reports). Bangladesh comes in fourth with 5.5 lakh reports and a share of 3.3%.

The National Centre for Missing and Exploited Children (NCMEC) urges people to report CSAM found online across the world annually, on their online platform CyberTipline.

This year, the Centre received a total of 1.68 crore reports. The material thus reported by the members of the public and electronic service providers, principally comprises still pictures and videos depicting children in a clear sexual angle.

Three of the top four countries were in South Asia, raising concerns among child rights activists about the region.

The NCMEC adds that the reports include geographic indicators related to the

upload location of the child sexual abuse material, but country specific numbers may be impacted by proxies and anonymisers.

John Carr, a member of the Executive Board of the UK Council on Child Internet Safety, says, "It has long been suspected that India was very high (as CASM source) but the data wasn't being published before now so I guess nobody on the inside track will be surprised. Their suspicions have merely been confirmed."

Mr. Carr added, "I am not going to venture any guesses as to why India is the world's number 1 but it is astonishing that three out of the four top countries - India, Pakistan and Bangladesh - are all in the same part of the world."

Vidya Reddy of Tulir Centre for Prevention of Child Sexual Abuse, raised concerns about the fact that the reports only account for material that has been uploaded.

"We are not even talking of downloading or browsing. We need to focus on finding out whether this is re-uploading content already circulating on the net, or

whether it is new content being uploaded," Ms Reddy said.

Pointing out that the numbers are consistent with Google searches on sexual content across the world, she said, "We need to look at the South Asian region with great interest and concern, at their interest in using children's pictures for sexual stimulation."

**Lockdown impact**

There is also concern that the lockdowns across the world will lead to an exacerbation of the situation.

Mr. Carr says, "Police and child welfare experts around the world are all expressing great anxieties about the impact of the mass lockdown. Paedophiles who exploit online are seeking to work the situation, looking for bored children. It might be some time before official figures show any increase in arrests or harms to children. That's unavoidable but also, sadly, inevitable."

"The coronavirus pandemic has led to an unprecedented rise in screen time," said Howard Taylor, of Global Partnership to End Violence Executive Director.

**The Central Government extends price support for procurement of wheat, paddy and coarse grains through the FCI and State Agencies. All the food grains conforming to the prescribed specifications are procured by the public procurement agencies at the Minimum Support Price (MSP) plus incentive bonus announced, if any. Procurement is undertaken both in direct and in-direct mode.**

**Under Decentralized Procurement Scheme (DCP), introduced in 1997-98, food grains are procured and distributed by the State Governments themselves. The designated States procure, store and issue food grains under Targeted Public Distribution System (TPDS) and other welfare schemes of the Government.**

**The decentralized system of procurement was introduced to enhance the efficiency of procurement for PDS and to encourage procurement in non-traditional States as well as to save on transit losses and costs.**

**Before the start of each procurement season, Central Government announces uniform specification for quality of wheat, paddy, rice and coarse grains.**

**Quality Control Division of FCI ensures procurement of food grains from procurement centres strictly in accordance with Govt. of India's uniform quality specifications.**

**FCI has also been nominated as an additional nodal Agency for procurement of Pulses and Oilseeds**

## Distribution

**FCI meets the requirements of TPDS through grains procured which are issued at Central Issue Price fixed by Government to fulfill the objective of helping the economically vulnerable sections of society.**

**FCI delivers food grains to State Govt./ State Agencies from its base depots for distribution by the latter through Fair Price Shops.**

**The role of FCI becomes even more important in the backdrop of National Food Security Act, 2013, that commits to distribute grains through TPDS and other welfare schemes, at highly subsidized prices.**

## Public Distribution System

**Public distribution of essential commodities was in existence in India during the inter-war period. However, PDS, with its focus on distribution of food grains in urban scarcity areas, had emanated from the critical food shortages of 1960s.**

**PDS had substantially contributed to the containment of rise in food grain prices and ensured access of food to urban consumers. As the national agricultural production had grown in the aftermath of the Green Revolution, the outreach of PDS was extended to tribal blocks and areas of high incidence of poverty in the 1970s and 1980s.**

**PDS is supplemental in nature and is not intended to make available the entire requirement of any of the commodities distributed under it to a household or a section of the society.**

**PDS is operated under the joint responsibility of the Central and the State Governments. The Central Government, through FCI, has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments.**

**The operational responsibilities including allocation within the State, identification of eligible families, issue of Ration Cards and supervision of the functioning of Fair Price Shops etc., rest with the State Governments. Under the PDS, presently the commodities namely wheat, rice, sugar and kerosene are being allocated to the States/UTs for distribution. Some States/UTs also distribute additional items of mass consumption through the PDS outlets such as pulses, edible oils, iodized salt, spices, etc.**

## Revamped Public Distribution System

**The Revamped Public Distribution System (RPDS) was launched in June, 1992 with a view to strengthen and streamline the PDS as well as to improve its reach in the far-flung, hilly, remote and inaccessible areas where a substantial section of the poor live. It covered 1775 blocks wherein area specific programmes such as the Drought Prone Area Programme (DPAP), Integrated Tribal Development Projects (ITDP), Desert Development Programme (DDP) were being implemented and in certain Designated Hill Areas (DHA) which were identified in consultation with State Governments for special focus.**

## Targeted Public Distribution System

**The Targeted Public Distribution System (TPDS) was launched in 1997 to benefit the poor and to keep the budgetary food subsidies under control to the desired extent following failure of the earlier PDS system.**

**Conceptually, the transition from universal PDS to TPDS was a move in the right direction, as it was designed to include all the poor households and raise the unit subsidy and ration quota considerably for them.**

**TPDS aims at providing food grains to people below the poverty line at highly subsidised prices from the PDS and food grains to people above the poverty line at much higher prices than the poverty line.**

**Thus, the TPDS adopted by the Government of India maintains the universal character of the PDS but adds a special focus on the people below the poverty line.**

**The National Food Security Act, 2013 (NFSA) has been notified which provides for all India coverage of upto 75% of the rural population and up to 50% of the urban population of the country for receiving highly subsidized foodgrains.**

...cannot com- should follow Uttar Pradesh.

**govt.**  
**3 lakh Chinese rapid test kits sent to India**

ing if any posi- in an area. the government RT-PCR tests to el coronavirus s of throat or na- of people with r high-risk indi- might have tact with posi-

stry has noted all data of Rapid est available for surveillance at State, district and national levels, an order has been issued to register in the portal: covid19cc.nic.in/ icmr before conducting rapid antibody test, so that the information can be made available at all levels.

**PRESS TRUST OF INDIA**  
**BEIJING**

Three lakh more Rapid Antibody Test kits used for the quick detection of the novel coronavirus have been dispatched to India from Guangzhou, the Indian envoy here said on Saturday, as India ramped up the global hunt to procure more kits to tackle the rising cases of the infection. The kits were airlifted to Rajasthan and Tamil Nadu, India's ambassador to China Vikram Misri said. Great work on ground by our team, he tweeted. This is in addition to the 6.50 lakh antibody and RNA Extraction Kits China sent earlier.

No. 15011/28/2017/Estt/A2 Dated: 16 April, 2020  
Applications are invited from eligible individuals for filling up of one post of 'System Administrator' in Sardar Vallabhbhai Patel National Police Academy, Hyderabad - 500 052, purely on outsourcing basis for a period of one year or till the regular vacancy is filled up, whichever is earlier.  
2. The maximum age of the applicant as on 01.04.2020 should not exceed 65 years. Pay / qualifications required and application form are available in Academy website <http://www.svpnpa.gov.in/vacancies>. The Duly filled in applications, along with supporting documents including copies of educational qualification certificates and copy of Pension Payment Order issued by the government, should reach the Assistant Director (Estt), SVP National Police Academy, Hyderabad 500 052, on or before 25.05.2020.  
Sd/- (S. Ajeetha Begum), Assistant Director (Estt).

**NATIONAL INSTITUTE FOR EMPOWERMENT OF PERSONS WITH MULTIPLE DISABILITIES (Divyangjan) (NIEPMD)**  
(DEPwD, MSJ&E, Govt. of India)  
ECR, Muttukadu, Kovalam Post, Chennai-603112  
Tel: 044-27472104, 27472113, 27472423  
Toll Free No.: 18004250345  
Website: <https://niepmd.tn.nic.in> E-mail: [niepmd@gmail.com](mailto:niepmd@gmail.com)  
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NIEPMD Invites E-Tenders under two-bid system through <http://eprocure.gov.in/eprocure/app> from contractors / Authorized Dealers / Manufacturing companies having proven track record as per terms & conditions given in tenders. The tender documents can also be downloaded from our website: <https://niepmd.tn.nic.in>  
Last date for e-bidding - 2.00 P.M. 07/05/2020.  
Sd/- Director

allegations against the police were being probed. "After the post mortem is done and on the inspection of the CCTV footage, the allegations made by the family will be investigated," Mr. Mishra said.

all States, following a review of the worldwide testing methodology. "The Rapid Antibody Test gives us an idea about prevalence of disease in a particular area and thus is used for epidemiological studies and surveillance purpose in hot-spots. It can also be used in districts which are not hot-spots to study emerging trends," Joint Secretary in

**Testing times:** A swab sample being taken during a free medical camp in Mumbai on Saturday. \*AP

the Health Ministry Lav Agarwal said on Saturday. He added that data generated by surveillance through rapid testing can be used for

INTERVIEW | RAM VILAS PASWAN

# 'Centre has not stopped States from increasing list of PDS beneficiaries'

Only 15 States and UTs have utilised quota based on the 2011 Census for PDS beneficiaries, says Union Minister for Food and Public Distribution

SOBHANA K NAIR

Ram Vilas Paswan, Union Minister for Food and Public Distribution, while detailing the efforts of his Ministry in distributing foodgrains across the country, blames State governments for the gap in enrolling beneficiaries under the Public Distribution System and failing to embrace the one nation, one ration card scheme.

**What are the steps taken by your Ministry to handle the ongoing crisis?**

I would like to thank all the officials of Food Corporation of India (FCI) from the CMD to the labourers, who have been working round the clock.

We have no shortage of food grains. But there could have been logistical problems. The FCI has met the challenge head on.

Till now 1,404 rail rakes carrying 39.41 LMT food grains have been transport-

ed. We have a stock of 588.9 lakh tonnes of foodgrains. And monthly we need 60 lakh tonnes. And there will be additional procurement now of the rabi crop that is being harvested. We have fixed wheat at ₹21/kg and rice at ₹22/kg for the State governments to procure, which is far lower than the MSP rate.

We have told the State governments to procure as much as they want. Even those who are conducting relief work can approach us and take the food grains

from us. This includes the National Disaster Management Authority or State Disaster Management Authority.

**Many have pointed out that the quota for foodgrains have been fixed as per the 2011 census, which is why the State governments are reluctant to issue fresh ration cards. Are you addressing this problem?**

As per 2011 census, 50% of urban population and 75% rural population have to be covered under Public Distribution System (PDS). As per the census, there should be 81,34,94,000 beneficiaries. It is the State governments' responsibility to enroll beneficiaries.

As per our report on Thursday evening, the State governments could have ad-



**We have a huge population, and the Public Distribution System can be extended only to the needy**

ded 39.89 lakh ration cards going just by the 2011 census figures.

Only 15 States and UTs have utilised their quota. These include Andhra Pradesh, Chhattisgarh, Goa, Haryana, Karnataka, Kerala, M.P., Maharashtra, Megha-

laya, Punjab, Rajasthan, Uttarakhnad, West Bengal, Lakshadweep and Ladakh.

But a few States that lag behind like Bihar can issue 14.5 lakh additional ration cards or Tamil Nadu could have had 7.36 lakh more ration cards and so on. I spoke to Sushil Modi, Deputy CM of Bihar, and he assured me that the State government is stepping in. I am writing to all the State governments to fill in this gap.

The Centre has not stopped the States from increasing the list of beneficiaries. They need to be held accountable for this lapse.

**Your Ministry for long has been talking about the one nation, one ration card system, which would have helped migrant workers get ration wherever they**

**were stranded. What is the status of this project?**

The project has been halted now because of the pandemic. Yes, this project would have helped: say a Bihari migrant who is working in Gujarat, could have availed PDS. This is made possible by e-pos machines and hundred percentage linkage of ration cards with Aadhaar card.

So far, 12 States have embraced the project including Andhra Pradesh, Goa, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, MP, Maharashtra, Rajasthan, Telangana and Tripura. U.P. and Bihar, have not so far installed e-pos machines in all the fair price shops. We have been sending repeated reminders to the State governments. The Union government can

only nudge - it's for the State governments to implement the scheme.

**The ongoing lockdown has severely crippled the economy and from all projections, it will have a longer impact. In such a scenario, would you make PDS universal?**

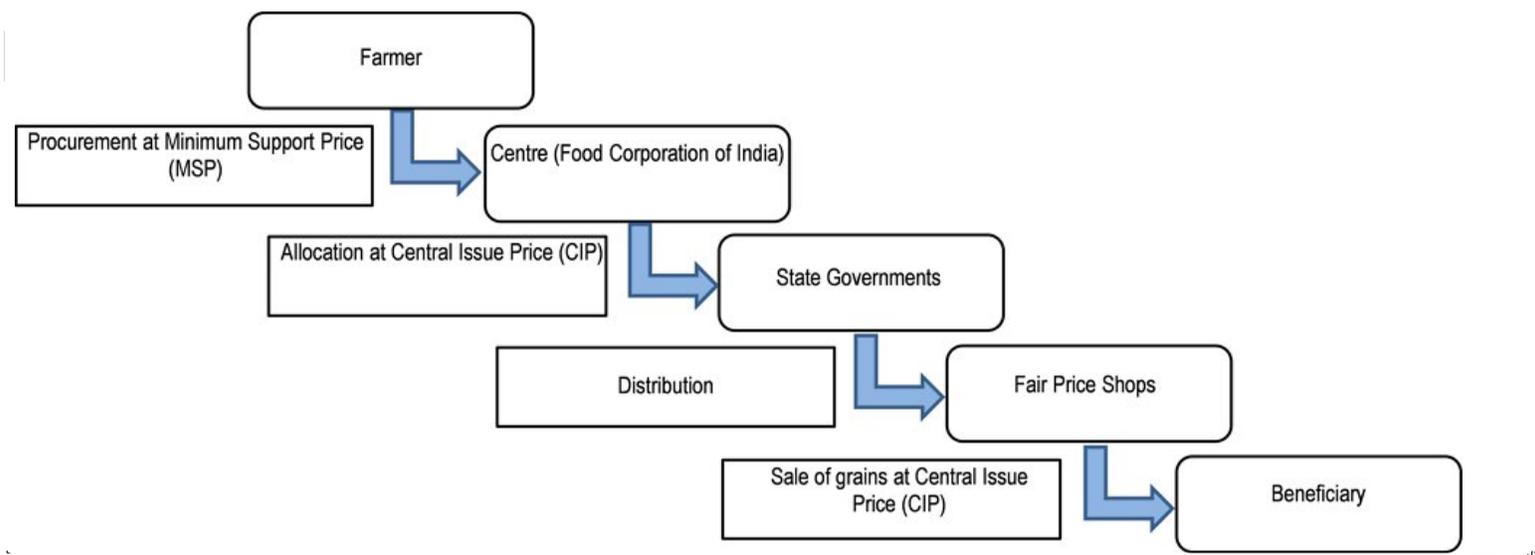
This is a larger policy decision that my Ministry alone can't take. We will have to brainstorm such a proposal with all stakeholders and at all levels. It's ultimately for the Union Cabinet to take a call. Personally, I think it will be akin to opening a Pandora's box. We have a huge population and PDS can be extended only for the needy.

**Lakhs and lakhs of migrants workers are**

**stranded in the cities, shouldn't the government have arranged transport to ferry them back home?**

Every one wants to reach home and rightly so. Those who are hundred of miles away from home will have all sorts of anxieties.

Even if they get food, that alone is not enough, they may need soap, oil... so on. But the government rightly brought the lock down at the hour that it did. Even a few days delay could have been fatal. And transporting the migrant workers is no mean task. We saw what happened in Bandra, Mumbai. Just on the basis of a rumour that a train is plying thousands of workers collecting, forgetting all about social distancing norms and other precautions.



## National Food Security Act

The enactment of the National Food Security Act (NFSA) 2013 on July 5, 2013 marks a paradigm shift in the approach to food security from welfare to a rights based approach.

The Act legally entitled upto 75% of the rural population and 50% of the urban population to receive subsidized food grains under Targeted Public Distribution System.

About two thirds of the population therefore is covered under the Act to receive highly subsidised foodgrains.

The National Food Security Act (NFSA) 2013 is being implemented in all the States/UTs, on an all India basis. Out of maximum coverage of 81.35 crore, around 80 crore persons have been covered under NFSA at present for receiving highly subsidized foodgrains.

The identification of beneficiaries by States/UTs is a continuous process, which involves exclusion of ineligible/fake/duplicate ration cards and also exclusion on account of death, migration etc. and inclusion on account of birth as also that of genuine left-out households.

## SUDOKU

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DIFFICULTY RATING: ★★★★★

Solution to yesterday's Sudoku

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## South Asia remains an outlier in infections

Experts call for a study of the reasons for the slower increase in COVID-19 cases in the region

SUHASINI HAIDAR  
NARESH SINGARAVELU  
NEW DELHI/CHENNAI

Not just India but the SAARC region as a whole is seeing a slower increase in novel coronavirus infections, particularly in terms of critical cases. If the trend persists, this may be worth a deeper study, experts say.

While low testing rates are clearly one reason for the low figures, experts are pointing to the need to study the effects of immunity and the strict lockdown and social distancing measures adopted in India and other South Asian countries - Afghanistan, Bangladesh, Bhutan, Nepal, Pakistan, Sri Lanka, and the Maldives.

"All governments in South Asia have responded rapidly to the crisis, but their task is daunting. Governments have imposed social-distancing measures, introduced relief packages to secure access to food, and provided for delays in payments on taxes, rent, utilities and debt ser-



**Moot point:** People ignoring social distancing norms in Patna. Lockdown and low testing rates are among the reasons cited for the low number of cases in South Asia. •P71

vice," said a "South Asia Economic Focus" study, published by the World Bank this week.

The study predicted a sharp fall in the economic growth rates of all SAARC countries, even as it recorded much lower infection rates in the region.

According to the latest figures, the eight SAARC nations account 1.1% approximately of the world total of 22,65,727 COVID-19 cases. In terms of fatalities, the SAARC total is 0.49% or 768 of the total of 155,145 people who died of the infection.

India has the largest number of cases in the region at 14,651 with Pakistan next at 7,481 while Bhutan has the lowest number with just five cases in the subcontinent. The numbers are particularly low when one considers that South Asia accounts for a fifth (21%) of the world's population, living in dense conditions on 3% of the world's land mass.

"It appears that our neighbourhood has shown very low number of cases and fatalities per million population as well," P.S. Raghavan, Convener of the National Se-

curity Advisory Board, told *The Hindu*. "It is worth studying the causes for this trend in South Asia. Is it efficient handling by the governments, low testing rates or are there other underlying reasons for this," he asked.

Experts worldwide have pointed to the low testing rates in the region as a valid reason to question the idea that South Asia has fewer infections.

### NEWS ANALYSIS

A look at the testing figures by *The Hindu's* data team shows that as opposed to countries such as the U.S., which has tested 10,874 per million people of its population, India has only tested about 247 persons per million. Pakistan (369.5 per million people), Bangladesh (132) and Sri Lanka (220), also record considerably lower testing figures.

Yet a study tweeted by the

NITI Aayog CEO Amitabh Kant pointed out that the number of positive cases from the tests are also much lower in India. While the U.S. showed 19.8% positive cases, France showed 41.8% and Italy showed 15.1% positive cases, according to the NITI Aayog study, India showed about 4.7%.

*The Hindu* tracked the number of positives among tests in Pakistan (9.54%), Bangladesh (10.06%) and Sri Lanka (5.12%), again recording figures much lower than those in Europe and the U.S., although experts point out that as the number of tests increase, the positive percentage might also increase.

The NITI Aayog CEO also pointed to the slower rate of growth in infections. While Italy, the U.S. and India all saw their first COVID-19 cases within 10 days of each other, cases in Italy were "1,300 times" India's daily cases on Day 46, and on Day 65, the U.S. daily cases were 25 times India's cases.

## Plea in SC against using 'foreign' apps

PRESS TRUST OF INDIA  
NEW DELHI

Former RSS ideologue K.N. Govindacharya has moved the Supreme Court raising concerns over the use of foreign-based software and Internet applications for videoconferencing by the judiciary and government departments, claiming it to be a high security risk.

The plea said it would be best for the government and courts to utilise the videoconferencing software provided by the National Informatics Centre (NIC). It said that most courtrooms as well as government departments were using Internet-based applications like WhatsApp, Skype and Zoom for work-related communication and videoconferencing.

It said the transfer of data, especially of the government and the judiciary, outside India might impact national security and affect the sovereignty of the country.

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**Prime Minister Narendra Modi's convened a video conference of leaders of the SAARC to collaborate on tackling COVID-19 coronavirus pandemic.**

**The virtual summit is the first high-level SAARC meet since 2014, and comes after India's pulling out of the 2016 summit following the Uri attack;**

**The virtual summit led to the setting up of a**

**SAARC COVID-19 emergency fund — India will contribute \$10-million Rapid Response Team (of doctors, specialists, testing equipment and attendant infrastructure) to be put at the disposal of the SAARC, About South Asian Association for Regional Cooperation (SAARC)**

**It was established on 8 December 1985.**

**Its member countries are—Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka and Afghanistan (2005)**

**The Headquarters and Secretariat of the Association are at Kathmandu, Nepal.**

**SAARC comprises 3% of the world's area, 21% of the world's population and 3.8% (2018) of the global economy**

**Significance of SAARC for India**

**Neighbourhood first: Primacy to the country's immediate neighbours.**

**Geostrategic significance: Can counter China (OBOR initiative) through engaging our neighbours in development process and economic cooperation.**

**Regional stability: These regional organisations can help in creation of mutual trust (India & Pakistan) and ensure that regional interest over ride bilateral disputes**

**Global leadership role: It offers India a platform to showcase its leadership in the region by taking up extra responsibilities.**

**Game changer for India's Act East Policy: Linking of South Asian economies with South East Asian region will bring further economic integration and prosperity to India particularly in its under-developed Eastern region**

**Potential for India's export: With closer economic integration of economies in the region, India's domestic companies will get access to much bigger market thus boosting their revenues**

## **Challenges of SAARC**

**Broad area of cooperation leads to diversion of energy and resources.**

**Low Intra-regional trade: South Asia is the world's least integrated region; less than 5% of the trade of SAARC countries is within.**

**Inadequate Political Will: India's inclination towards Big powers which leads to neglecting its relationship with its neighbours**

**Bilateral tensions, especially between India and Pakistan, spilling over into SAARC meetings.**

**Perception of India being a Big Brother vis-à-vis its neighbours whereby India enforces its own agenda on small neighbouring countries through these groupings**

**Slow implementation of the projects announced by India – declines India's credibility to deliver on its promises thus pushing Nations to seek help from China or West.**

**Rising China in the region with its overarching Belt & Road initiative (Cheque book Diplomacy of China)**

**Impact of COVID-19 on SAARC**

**Major concern is of an escalation in the virus's spread in the subcontinent.**

**With close to 300 positive cases, South Asia has seen a much lower incidence globally, but given its much higher population density, it is clear that any outbreak will lead to far more casualties.**

**Afghanistan and Pakistan have specific challenges as they share long borders with Iran, which has emerged, after China and Italy, as a major hub of the virus.**

**Bhutan, the Maldives, Nepal and Sri Lanka worry about the impact on tourism, which is a mainstay of their economies.**

**Other concerns are about under-reporting, as fewer people are being tested in much of South Asia**

**Inadequate public health service infrastructure to cope with rising cases, as all SAARC members are developing nations with sub-standard public health infrastructure.**

## **targeted in cyberattacks**

**Attempts to hit IT networks thwarted**

**REUTERS  
PRAGUE**

Prague Airport and a regional Czech hospital said on Saturday they had thwarted cyberattacks on their IT networks, reinforcing warnings by the national cybersecurity watchdog of likely attempts to harm the country's infrastructure.

"Attempted attacks on web pages of the airport were detected in preparatory phases," the airport's spokeswoman said.

A regional hospital in the western Czech city of Karlovy Vary was attacked twice overnight on Saturday and foiled the attempts, which however were not exceptional, a spokesman said.



A healthcare worker in Prague, Czech Republic. **AP**

Several other hospitals in the Czech Republic reported attempted attacks on their computer systems on Friday, and said the attacks were successfully blocked.

The Czech cybersecurity watchdog NUKIB said on Thursday that it expected attacks in the coming days.

**Country is struggling to adjust the balance between privacy and the public good while attempting to reopen society**

**NORIMITSU ONISHI  
CONSTANT MÉHEUT  
PARIS**

As France sought clues last month on how to tame the coronavirus, experts looked at one tool that has been central to the strategy of some Asian nations – digital tracking. Citing threats to "individual liberties", the powerful Interior Minister dismissed it as alien to "French culture".

But three weeks – and a tenfold spike in deaths – later, French culture could be changing, along with those of other Western democracies as they struggle to adjust the balance between personal privacy and the public good while attempting to reopen their societies and economies without setting off another wave of infections.



**Rights not absolute:** Police officers in Paris checking for certificates that people are required to produce when they are outside, in this photo taken last month. **AP**

In Italy, politicians have proposed blood tests to detect antibodies to the virus before licensing people to leave their lockdowns. President Donald Trump may push for hiring hundreds of people to perform contact

tracing as part of his effort to allow Americans to go back to work and school.

And in France, as President Emmanuel Macron extended a nationwide lockdown by at least another month this week, he said his

government was considering using a smartphone tracking app that would inform people if they have come in contact with an infected person.

Such steps are particularly fraught in Europe, the continent with the world's toughest online privacy rules.

### **Wary of the intrusions**

The fight against fascism and communism in the 20th century left societies wary of the intrusions of authoritarian power. That is true from Eastern Europe, through Germany and Italy. France, where the nation's values sprung from revolution against monarchy, is particularly attached to notions of individual rights.

"It has to do with French history and a sensitivity to

freedom that is inherent to French culture," said Cédric O, who is spearheading the development of the app as France's junior Minister in charge of digital affairs.

Even so, recent experience in Asia shows that comprehensive tracing of infection chains, along with aggressive testing, has proved critical to fighting the COVID-19 pandemic, which is calling into question a host of Western assumptions,

whether the use of digital tracking or the wearing of face masks. As the country, like others, struggles to find a way out of a lockdown that is now entering its second month and has kept a population of 67 million confined to their homes and paralysed its economy, options that

once seemed unfathomable have steadily become more palatable.

"We gave up an absolutely fundamental freedom, that of movement, while most of the Asian countries chose instead to be much more coercive on the individuals," said Gilles Babinet, vice president of the French Digital Council, a commission that advises the French government.

Mr. Babinet said there was more to learn from Asian democracies, like South Korea, whose use of intrusive digital tracking has helped it avoid imposing the kind of strict lockdowns experienced in Europe. "You must have a device that is both coercive to those infected and as gentle as possible to the others," Mr. Babinet said. **NY TIMES**

**In a boost to energy security of the country, PM recently dedicated to the nation, 1.33 MMT Visakhapatnam Strategic Petroleum Reserve (SPR) facility of Indian Strategic Petroleum Reserve Limited (ISPRL). The cost of the Project is Rs. 1125 crore. The Facility has the largest underground storage compartment in the country.**

**About SPR programme:**

**To ensure energy security, the Government of India had decided to set up 5 million metric tons (MMT) of strategic crude oil storages at three locations namely, Visakhapatnam, Mangalore and Padur (near Udipi). These strategic storages would be in addition to the existing storages of crude oil and petroleum products with the oil companies and would serve as a cushion during any external supply disruptions.**

**In the 2017-18 budget, it was announced that two more such caverns will be set up Chandikhole in Jajpur district of Odisha and Bikaner in Rajasthan as part of the second phase.**

**The construction of the Strategic Crude Oil Storage facilities is being managed by Indian Strategic Petroleum Reserves Limited (ISPRL), a Special Purpose Vehicle, which is a wholly owned subsidiary of Oil Industry Development Board (OIDB) under the Ministry of Petroleum & Natural Gas.**

**Need for strategic oil reserves:**

**In 1990, as the Gulf war engulfed West Asia, India was in the throes of a major energy crisis. By all accounts India's oil reserves at the time were adequate for only three days. While India managed to avert the crisis then, the threat of energy disruption continues to present a real danger even today.**

**It is unlikely that India's energy needs will dramatically move away from fossil fuels in the near future. Over 80% of these fuels come from imports, a majority of which is sourced from West Asia. This is a major strategic risk and poses a massive financial drain for an embattled economy and its growing current account deficit.**

**To address energy insecurity, the Atal Bihari Vajpayee government mooted the concept of strategic petroleum reserves in 1998. Today, with India consuming upwards of four million barrels of crude every day (January 2015 figures), the case for creating such reserves grows stronger.**

**ISPRL to top up its caverns with cheap crude**

MRPL pumps the crude to caverns

ANIL KUMAR SASTRY  
MANGALURU

To make the best use of the low international crude prices, public sector oil companies, including Mangalore Refinery and Petrochemicals Ltd. (MRPL) and Indian Strategic Petroleum Reserve (ISPRL), have been filling ISPRL's caverns at Mangaluru and Udipi with crude oil.

While ISPRL's Mangaluru cavern could store up to 1.5 million tonnes (MT) of crude, that of Udipi (at Padur) could store up to 2.5 MT. MRPL Managing Director M. Venkatesh said the first consignment of 2 million barrels by MRPL and the second of 1 million barrels by Indian Oil Corporation Ltd., had already been unloaded into the caverns.

Cargoes at lowest prices are lined up to reach the New Mangalore Port during

April and May to completely fill the caverns, the MRPL said in a release. The oil ministry has asked ISPRL to work closely with other oil companies to achieve the target, while MRPL plays its role in filling the caverns.

The series of crude oil cargoes of varying volumes from 1 million barrels to 2 million barrels, being sourced by MRPL, IOCL and Bharat Petroleum Corporation, would be unloaded at the Single Point Mooring (SPM) of MRPL, 17 km away from the shores in the Arabian Sea and within the jurisdiction of NMPT, before the onset of monsoon. The company is also filling its caverns at Visakhapatnam, the release quoted ISPRL as saying. Mr. Venkatesh said MRPL is sustaining the refinery operations at 50% capacity to meet the critical demand of LPG and fuel.

**to ₹6,928 crore**

impact on other income

₹3,784.5 crore for the quarter as compared to ₹1,889.2 crore reported during the same period of the previous year. "Total provisions for the current quarter included credit reserves relating to COVID-19 in the form of contingent provisions of approximately ₹1,550 crore," the bank said.

"The Core Credit Cost ratio was 0.77%, as compared to 0.92% in the quarter ending December 31, 2019 and 0.69% in the quarter ending March 31, 2019," HDFC Bank said. Gross NPAs were at 1.26% of gross advances as on March 31, 2020, as against 1.42% as on December 31, 2019 and 1.36% as on March 31, 2019. Net non-performing

assets were at 0.36% of net advances as on March 31, 2020. RBI has allowed lenders to extend moratorium on term loan repayments for three months, from March to May, and banks were asked to make 10% provision on such loans, spread over two quarters. HDFC Bank said it holds provisions as on March 31, 2020 against the potential impact of COVID-19, which is in excess of the RBI prescribed norms.

"As a result, GNPA and NNPA ratios were lower by 10 bps and 6 bps respectively," it said. The bank also had floating provisions of ₹1,451 crore and contingent provisions of ₹2,996 crore as on March 31, 2020.

SPECIAL CORRESPONDENT  
MUMBAI

The Confederation of Indian Industry (CII) has called for certain modifications in the guidelines issued by the government on resumption of economic activities from April 20, to avoid disruptions in the supply chain.

"While the restart of economic activities takes place, certain items relating to operations across the entire supply chain could be further included to enable smooth operations.

CII has suggested continued stringent lockdown in specified containment zones with the rest of the identified hotspot districts to be open to economic activities with adequate safety measures," Chandrajit Banerjee, Director General, CII, said.

The industry body has suggested that red zone districts and containment zones need to be clearly identified and demarcated and industrial activities be permitted in non-containment zones of red zone districts, if found safe. A list of red districts and containment zones may be published on a real-time basis for information of industry.

"Automotive value chain, including OEMs, components, retail and service workshops, must also be included in the list of permitted industries. Agricultural inputs of fertilizers, pesticides and seeds have been opened up, and there is a need to also relax rules for production of necessary equipment. Similarly, equipment and services for generation, transmission and distribution of power, including renewable energy such as gear boxes and generators may be allowed to function," the industry body said in a statement.

**Ministry's note, a likely reference to Chinese investors**

SANTOSH PAI

The Ministry of Commerce press note amending the FDI policy to make investments from countries which 'share a land border' with India can only be construed as being aimed at Chinese investors. Such restrictions were already applicable to Pakistan and Bangladesh, while Myanmar, Bhutan, Nepal and Sri Lanka are not major investors in India.

The note makes clear its objective is to curb opportunistic takeovers or acquisitions due to the current COVID-19 pandemic. This is a likely reference to the possibility of Chinese investors purchasing undervalued shares of Indian-listed companies. This is indeed a risk that has also been identified by other countries. On April 12, news of an incremental purchase of shares in HDFC made by the People's Bank of China made the headlines.

This press note, however, does not restrict its application to such cases.

A plain reading of the amended policy makes every type of investment by Chinese investors subject to government approval. It neither distinguishes between greenfield and brownfield investments nor listed and unlisted companies.

It also does not distinguish between the different types of investors, such as industry players, financial institutions, or venture capital funds. Such a blanket application could create unintended problems.

For instance, it is likely that unlisted or private companies might find themselves under financial stress due to the COVID-19 pandemic.

An acquisition in such companies can only occur between willing buyers and



**Masking in glory:** An incremental purchase of shares in HDFC by the People's Bank of China made news, recently. •REUTERS

either venture capital funds registered in off-shore tax havens or listed in stock exchanges in the U.S. or Hong Kong.

It will prove to be extremely difficult to attribute nationality to venture capital funds or fix the ultimate beneficial ownership of listed companies down to founders of a certain nationality.

By abolishing the Foreign Investment Promotion Board in 2017, India took the decision of dismantling the last vestige of an FDI regime that sought to block sensitive foreign investments.

What Delhi should have left behind then was a national security exception - along the lines of the Committee on Foreign Investment in the United States (CFIUS) - to deal with genuine threats to national security or black swan events like the COVID-19 pandemic. Instead, issuing an amendment that reverses what has been a highly-advertised new FDI policy position may have unintended consequences in the minds of foreign investors.

(The writer is Member, CII Core Group on China and Partner, Link Legal India. He advises foreign investors including those from China)

Most investors in companies such as Zomato, Swiggy, Bigbasket, Makemytrip, Oyo, Ola and Snapdeal are

**NEWS ANALYSIS**

category where the new rules may pose obstacles.

These are investments where Chinese investors bring fresh capital to establish new factories and generate employment in India. China has been the fastest growing source of FDI since 2014. The positive sentiment generated among industry players in China since then may well be punctured by the need for government approval.

Moreover, the most visible 'Chinese investors' in India, most in the Internet space, may not even come under the definitions of the new rules.

More investors in companies such as Zomato, Swiggy, Bigbasket, Makemytrip, Oyo, Ola and Snapdeal are

# Hydroxychloroquine does not reduce viral load, randomised trial shows

However, patients who got the drug did show quicker alleviation of clinical symptoms

R. PRASAD

Results of a randomised, control trial using hydroxychloroquine drug in 150 COVID-19 patients show that the drug does not reduce the viral load even on day 28. Seventy-five patients got the drug and standard of care while the remaining got only standard of care. Patients were given 1,200 mg of the drug for three days followed by 800 mg daily for two and three weeks in patients with mild/moderate and severe symptoms, respectively.

## First randomised trial

Researchers from the Shanghai Jiao Tong University School of Medicine, Shanghai, who led the team say that in contrast to other trials that have shown good results, the randomised trial did not show that hydroxychloroquine drug was able to suppress viral replication. This is the first trial using hydroxychloroquine where patients have been



**Side effects:** Some patients did experience adverse effects, most commonly, diarrhoea (10%). • AP

randomised to receive either the drug or just standard of care. However, patients who got the drug did show quicker alleviation of clinical symptoms, possibly through anti-inflammatory properties and im-

provement in white blood cell count. The drug did not cause any serious adverse effects in patients. But some patients did experience adverse effects.

The most common adverse event

in patients who got the drug was diarrhoea (10%).

The results were posted in preprint server *MedRxiv*. Preprints are yet to be peer-reviewed and published in scientific journals.

Patients (mean age 46 years; 55% males) were enrolled at 16 government-designated COVID-19 treatment centres in three provinces – Hubei, Henan and Anhui – between February 11 and 29, 2020.

During the trial, specimens were taken from the upper and/or lower respiratory tract on the day of screening and during treatment and post-treatment follow-up.

The authors say that the dosage used in the trial was meant to reach the 50% effective concentrations of hydroxychloroquine against the virus. "It is not likely to have additional anti-viral effects by further escalating dosage," they write.

In the case of COVID-19, systemic inflammation or cytokine storm is

the driver of disease progression and death. Substantial reduction in white blood cell count and increase in inflammatory response have generally been observed in patients who have eventually progressed and died. The researchers observed "moderate increase" in white blood cell count and "significantly greater reduction" in the marker for inflammation. These effects were seen after fifth day of treatment and continued till the end of the treatment.

## Clinical benefits

"These encouraging results suggest clinical benefits of adding hydroxychloroquine into the current standard management to limit inflammatory response, which is the key to prevent systemic inflammation and subsequent multiple organ failure and death," they write. "The shorter time to alleviate the symptoms might be useful for preventing disease progression."

# The COVID-19 virus and its polyproteins

What makes up the virus and how drugs act on it



**SPEAKING OF SCIENCE**

D. BALASUBRAMANIAN

Everyday, we hear about the novel coronavirus, how it is easily infecting and transmitting itself from people to people, and how scientists and medical experts are waging a war against its spread. We also hear how different this is from bacteria, and why treating people with antibacterial drugs may not help with this out. What then is the difference between a virus and a bacterium? Well, bacteria are alive. Each bacterial cell has its own machinery to reproduce itself. Take a bacterial cell, and put it in a solution containing nutrients, it grows itself and multiplies in millions. The genes in the cells (genome, made up of DNA molecules, the information contained in which is transcribed as a message to the messenger molecules called RNA), and the message therein is translated into action molecules called proteins, which are the foot-soldiers that help the growth and multiplication of the bacterium. Coronaviruses do not have DNA as their genome, but RNA; in other words, they can only translate and not transcribe. Thus, they are 'dead', unable to renew and grow themselves; they need help. This they achieve by infecting 'host cells' which they bind to, and multiply by the millions. With no host cell to help, a virus is simply a dead storage box.

## The polyprotein strategy

Upon infection, the entire RNA with its 33,000 bases is translated in one shot as a long tape of amino acid sequences. Since this long chain contains several proteins within it, it is called a "polyprotein" sequence. One needs to analyse this long chain, find the relevant proteins, isolate and study what each of them does in helping infection. (Scientists call the polyprotein a 'single reading frame', containing several 'open reading frames', namely those that contain a start code and end with a stop code, each containing the relevant protein to be expressed by the host cell). This strategy allows the viral genome to be compact, and express the protein when the need arises. This is somewhat like a thrifty individual who keeps his money in a fixed deposit in a bank, and withdraws chosen amounts as the demand arises. For the virus, the demand is to multiply upon infecting the host. No demand, no withdrawal, no infection, no multiplication!

As the recent review by Yu Chen and colleagues from China in the *Journal of Medical Virology* points out (<https://doi.org/10.1002/jmv.25681>), COVID-19 has RNA-based genomes and subgenomes in its polyprotein sequence, that code for the spike protein (S), the membrane protein (M), the envelope protein (E), and the nucleocapsid protein (N), which covers the viral cell nuclear material) - all of which are needed for the architecture of the virus. In addition to these, there are special structural and accessory proteins, called non-structural proteins (NSP), indeed 16 of them, which serve specific purposes for infection and viral multiplication.

## How the drugs work

We thus have a large set of proteins in the virus, against which a number of potential molecules and drugs can be tried to interfere and stop the production of these viral proteins. Indeed, this has been tried to advantage by several recent publications during the last month alone. One of them has attempted to target the translation of the key enzyme RDRP in the virus, whose production was stopped by the drug Remdesivir. Three studies from the US, Germany and China have come up with methods to stop the production of the enzyme (called CL3pro, also called as Mpro) which is needed to make the spike (S protein). And the paper by Yu Chen et al, quoted above lists as many as 16 NSPs in the viral polyprotein, which can be targeted by potential drug molecules. (And Dr Pandurangarao from Boston is quoted as stating that the enzyme nsp12 to be a high-value target).

It is important in this context to cite the longstanding excellent work being done by an Indian researcher, Thangaimalai Pillaiyar (what an auspicious name - homage to the street he was born in the village, he was born in Thiruvannamalai district in Tamilnadu), who is settled as a medicinal chemist working at the University of Bonn, Germany since 2013. In a paper full of insight, which he published in 2015-16, titled: "An overview of SARS-CoV 3CL protease inhibitors: peptidomimetics and small molecule chemotherapy", that appeared in *Journal of Medicinal Chemistry*, 2016, 59 (6595-6628) (10.1021/acs.jmedchem.5b01461). In this paper, he used the X-ray crystal structure of a related virus TGEV (Transmissible Gastroenteritis Virus), found by 3D modelling a key enzyme of the SARS-CoV, called Chymotrypsin-like Cysteine Protease (3CLpro) also called the main protease (Mpro), and found that this enzyme fits into the virus structure in a lock and key manner. The next step after this molecular modelling was to find drugs that can deactivate this binding and thus inhibit the SARS-CoV from infecting. A total of about 160 known drugs were predicted to be of value with varying efficiency. Recall that this prediction and the drug list was suggested by him before the crystal structure (or the cryo-electron microscopy of COVID-19 was known) 3-4 years later! Pillaiyar and coworkers have updated their findings in their recent paper in January 2020, in the journal *Drug Discovery Today* (<https://doi.org/10.1016/j.drudis.2020.01.015>).

India is well versed with expertise in the area of organic and medicinal chemistry since the last 90 years and in manufacturing quality drug molecules, and exporting them for use at home and across the world since the 1970 patents act of India. Our expertise today, in both the public and private sector, includes not just synthesizing made-to-order molecules, but has added new methods involving computer modeling of target proteins from bacteria and viruses, homology modelling, drug design, repurposing of drugs, and other methods. (It is worth noting that Dr. Pillaiyar has active collaboration for quite some time with Sangeetha Meenakshidaram at the Srikrishna College of Engineering and Technology, Coimbatore, and Manoj Manickam at the PSG Institute of Technology and Applied Research, also at Coimbatore). The CSIR has taken upon itself the express task of coming out with molecules and methods to counter the dreaded virus, and we have every hope that they will succeed in the nearest future!

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# U.S. to start antibody testing on virus-hit aircraft carrier

Significantly, 60% of positive tests were among symptom-free sailors

REUTERS

The U.S. Navy said on Friday it will conduct antibody testing of sailors aboard the coronavirus-hit aircraft carrier Theodore Roosevelt to determine whether they were exposed to the virus as it spread through the ship.

Sweeping testing for the coronavirus among the entire crew of the Roosevelt has already yielded a curious result: The majority of the positive cases so far are among sailors who are asymptomatic.

With so many of the crew symptom-free, it is unclear how many of them had been infected and recovered without anyone realising they had contracted the virus. Many of these infections could have finished their cycle before testing of the crew began.

## Serology testing

The extent of the infections aboard the vessel should become more clear with results of the new "outbreak investigation" the Navy announced that will use serology testing developed by the U.S. Centers for Disease Control and Prevention (CDC).

The serology tests look for the presence of specific antibodies that are created by the immune system's attack response to the presence of the virus and remain in the blood for a period of time. "We are seeking crew member volunteers," Navy Surgeon General Rear Admiral Bruce Gillingham told reporters.

The roughly thousand volunteers who are being sought for testing over the next week or so will also be swabbed again for COVID-19, the respiratory disease caused by the virus, as well as asked to answer a short survey, officials said.

The U.S. coronavirus death toll - the highest in the world - surged past 35,000 on Friday. It also claimed the life of a sailor from the Theodore Roosevelt this week.

## Extraordinary move

The Navy's testing of the entire 4,800-member crew of the aircraft carrier - which is about 94% complete - was an extraordinary move in a case that already has led to the firing of the ship's captain and the resignation of the Navy's top civilian official.

It has also given scientific researchers a case study about how the virus spreads asymptotically in a confined environment among mostly younger adults.

That cohort has been somewhat under-represented in the epidemiological data so far.

As of Friday, some 660 sailors - nearly 14% of the crew - had tested positive for the coronavirus. The Navy has said that about 60% of those positive tests were among sailors who were symptom-free.

The Navy said medical staff on the island of Guam, where the ship pulled into port, would take the samples and collect questionnaire results. The actual serology tests will be sent to the CDC in Atlanta for analysis.

## How the virus spreads

The data could further shed light on how the coronavirus spreads undetected, which could help inform the U.S. national response to the pandemic and efforts to restart the economy.

"We will also be sharing that with the White House task force so that that information can be used for the benefit of the nation," Gillingham said.

# IIT Bombay develops IT solutions to help with physical distancing

Systems connecting people to medical help, avoiding queues, are in use

SHUBASHREE DESIKAN

Software can greatly help with the demands of physical distancing necessitated by the COVID-19 pandemic, and IIT Bombay members have developed some interesting solutions. One involves a platform named World Wide Help (WWH) which can be used to connect people seeking medical help with helpers, such as doctors. The other is a system to generate e-tokens that can be deployed by local markets and small vendors to ensure physical distancing.

## Patients and helpers

The WWH platform can be used with an app or a phone. The user simply calls a dedicated number and can input basic data such as the age of the person in need of help and whom they wish to solicit help from. They can supply the phone number, too. This is registered as a task in the app and assigned to a primary helper who is a junior doctor or medicare professional. Further, the task may be re-designated by the primary helper to a senior doctor, who is the second level of helper. Or the primary helper may settle the issue through a phone call.

The platform has seen a few deployments in the last two years (for providing agricultural advice, nutrition advice, career counselling advice and so on). "It is mature, but each deployment requires its own customisation... the bottom of the pyramid do not have the resources or may not have the digital literacy for this. Hence a low-cost, phone-based solution with humans in the loop to make information access more easy for this population is in order," says Kameswari Chebrolu who along with M.Tech students in the Department of Computer Science built up WWH.

The technology aspect was not as challenging as the need-assessment and promotion of the platform. Ma-



**Avoiding delay:** The e-token comes in handy to avoid long periods of waiting in queues or alternately, forming crowds. • E. LAKSHMI NARAYANAN

and Shishu Poshan, a helpline that provides nutrition and breast-feeding support for mothers and infants has been using this platform already. Now the group is in talks with King Edward Memorial hospital, Mumbai, to put it to use.

"A few other features we are currently looking to integrate it with Whatsapp and support for video conferencing," says Dr Chebrolu.

## Vegetable market

Every Tuesday and Friday, between 2.00 pm and 8.00 pm, the consumer society vegetable market opens at IIT Bombay. As is expected, people may need to crowd the market to pick up their fruits and vegetables.

To avoid this crowding, along with the email that informs the residents of the opening of the market, a link is sent.

Clicking on this link generates an e-token for the user. This email is sent to approximately 1,000 households in the campus. The e-token is a number that informs the users of their places in the queue. By checking a link provided in the email, the user can check the status of their token - if it is close to their turn, they

can move to the market and pick up what they want.

"We also wanted to adapt this to people who were not comfortable with emails, such as senior citizens," says Bhaskar Raman, from the Computer Science department, who developed this system. "Hence, we made it so that the e-tokens are always even in number. Those who are challenged by the system can call and pick up a physical token which is an odd number. They can at least do this till they learn how the system," he adds.

This system is also being used in IIT Bhubaneswar where some students who were unable to go back during the lockdown have to be organised to collect food from canteens, he explained.

Dr. Raman is in talks with Prof. K. V. Subrahmanyam of Chennai Mathematical Institute, and the two, along with their students, plan to develop an app that will generalise this for use by small vendors and shopkeepers.

"Because of the lockdown, people want to order online, hence small vendors may tend to lose out, and this app can avoid that," he explains.

# Substantial coronavirus spread seen before symptoms show up

Within 77 infector-infectee pairs, 44% of secondary cases had been infected when the person was yet to show symptoms

R. PRASAD

In a study published recently, researchers found that people infected with novel coronavirus (SARS-CoV-2) start shedding the virus and therefore transmitting it to others before symptoms show up. The infectiousness begins at least two days before the person exhibits symptoms. The study says that substantial proportion of transmission probably occurs even before first symptoms appear in the infected person.

The work was done by a team led by Gabriel M. Leung from the School of Public Health at the University of Hong Kong and the results were published in the journal *Nature Medicine*.

Studying 77 infector-infectee pairs - pairs of people who passed on the infection and those who got infected - from publicly available sources, the researchers estimate that 44% of secondary cases

were infected when the person was yet to show symptoms.

The researchers used information on the timing of symptom onsets in transmission pairs to infer the infectiousness profile of people with COVID-19 and found "substantial transmission potential" before symptom onset. Since most cases were isolated soon after they showed symptoms, the possibility of virus spread after symptoms showed up was prevented.

## Tracing contacts

The study suggests that efforts to track down contacts of people with coronavirus infection should include people who have come in contact with the infected person not just after symptoms show up but at least two-three days before the person exhibited symptoms.

In the case of the 2003



**Caution:** Infectiousness begins at least two days before exhibiting symptoms. • M. VEDHAN

SARS, infectiousness increased seven-10 days after symptom onset. Hence, virus spread can be reduced once the infected person is quarantined soon after symptoms show up. In contrast, influenza is characterised by increased infectiousness shortly around or even before symptom onset. This makes it difficult to contain the spread by isolating people who have come in contact with the infected person after

the person exhibited symptoms.

## Two clusters

According to a preprint posted on *MedRxiv* server on March 8, the pre-symptomatic transmission was high in two clusters - Tianjin in China which is a shopping mall cluster consisting of 45 cases, and Grace Assembly of God cluster in Singapore consisting of 25 cases. In the case of the Singapore cluster the pre-symptomatic transmission was 48%, while it was 62% for the Tianjin cluster.

Explaining the high prevalence of pre-symptomatic transmission in these two clusters, Prof. Leung writes in *Nature Medicine*: "Places with active case finding would tend to have a higher proportion of presymptomatic transmission, mainly due to quick quarantine of close contacts and isolation, thus reducing the probability

of secondary spread later on in the course of illness." According to the authors, where immediate contact tracing and quarantine is not possible, a lower proportion of pre-symptomatic transmission will be seen.

## Viral loads

The researchers collected samples (nose swabs) from 94 coronavirus patients who were admitted to the Guangzhou Eighth People's Hospital in China from January 21 to February 14. They detected high viral loads soon after symptoms showed up, which then declined by day 21. They say based on analysis the viral shedding may begin two-three days prior to symptoms appearance and then decrease gradually.

When one person can infect 2.5 people, contact tracing and quarantine alone are "less likely to be successful" if more than 30% of transmis-



GETTY IMAGES/ISTOCKPHOTO

## The U.S. freeze on WHO

How will the American President's suspension of funds to the World Health Organization in the middle of a pandemic impact its work?

SRIRAM LAKSHMAN

**The story so far:** As the toll from the COVID-19 pandemic rose across much of the world, the United States President Donald Trump became more strident in his criticism of the role of the World Health Organization (WHO). On April 7, Mr. Trump tweeted that WHO "really blew it" and that the organisation was "very China centric", this despite it being largely funded by the U.S. On Tuesday, Mr. Trump said he was halting funding to WHO pending a review. He accused WHO of mismanaging the COVID-19 crisis and said it had failed to vet information and share it in a timely and transparent manner. He told a news conference at the White House, "... I am directing my administration to halt funding while a review is conducted to assess the World Health Organization's role in severely mismanaging and covering up the spread of the coronavirus."

### When and why was WHO set up?

It is important to understand the context in which WHO functions to understand the current situation around its funding. WHO, a United Nations agency created in 1948, is headquartered in Geneva, and was founded to coordinate and direct the UN's global health effort. It has no authority

over its 194-member countries and, as is typical for UN agencies, depends on member contributions to carry out its work. Also, as is often the case with UN agencies, WHO is not immune to political motivations and an inertia that often comes with large bureaucracies. Yet, in this instance, critics and several public health academics have said that Mr. Trump's attack of the organisation is misplaced.

### Was WHO slow in alerting the world about COVID-19?

It took till about the middle of January for WHO to suggest human-to-human transmission of the virus, toeing the China line for the first few weeks of the year, as per reports.

Even then, in the first two weeks of the year and two weeks after it was notified of the virus, WHO had qualified its statement by saying there was "no clear evidence" of such transmission. *The Washington Post* reported. The U.S. was formally notified by China on January 3 of the coronavirus outbreak. Additionally, as early as January 10 and 11, WHO had put out guidance notes on the virus, according to *The Guardian*.

China locked down the city of Wuhan on January 23. On January 23, WHO Director General Tedros Adhanom Ghebreyesus warned that while the emergency was for China and not for the world, it had the potential to become global in scale. The body's experts were divided on whether or not there was a global emergency at the time, as per reports, and it took until January 30 for them to conclude deliberations and declare a global emergency.

Yet, nearly a month later, on February 25, Mr. Trump tweeted that the coronavirus in the U.S. was "very much under control". It was only on March 13 that he declared a national emergency over the coronavirus.

### How much does the U.S. give WHO?

The U.S. is the WHO's largest contributor. The organisation's funding is of two types – assessments or member dues and voluntary contributions. The total funds for the 2020-2021 biennium included \$957 million in assessments and \$4.9 billion in voluntary contributions.

Over the last decade, the U.S.'s assessed contributions have been in the \$107-\$119 million range while voluntary contributions have been in the \$102-\$402 million range, according to the Kaiser Family Foundation, a health-focused non-profit.

For the 2018 and 2019 biennium, the U.S. contributed about 20% of WHO's budget, according to a National Public Radio (NPR) report. This money went as assessment fees (\$237 million) or pledges towards programmes (over \$656 million) from voluntary contributions. The major share of the U.S. programmatic funding went towards polio eradication (\$158 million), increasing access to essential health and human services (\$100 million) and vaccine-preventable disease (\$44 million), according to the NPR.

### Will the U.S.'s stand affect WHO's functioning?

The short answer is, yes, a funding freeze is highly likely to negatively impact WHO's functioning for a short while at least, given the significant contribution the U.S. makes. However, we do not yet know what the impact will be and for how long.

Additionally, it is unclear if Mr. Trump has the authority to withhold funding that has already been committed. Congressional Democrats have said that he does not have this authority and is criticising WHO as a means to deflect criticism of how he has handled the crisis. The U.S. has around 700,000 known cases of COVID-19 over 35,000 deaths due to the disease.

Dr. Tedros has asked countries to stop politicising the virus. He also said WHO regrets the U.S. decision and is reviewing the impact of American funds being withdrawn. WHO, he said, would work with its partners to fill any financial gaps that arise so the "work continues uninterrupted".

# Is the lockdown helping India?

Why is it important to carry on testing? Why is it necessary to pursue contact tracing and quarantine? What is the state of health-care facilities?

JACOB KOSHY

**The story so far:** It has been over three weeks since Prime Minister Narendra Modi announced the world's biggest lockdown, in India, to fight COVID-19, the pandemic that has claimed over 1.5 lakh lives worldwide. Epidemiologists have said that the impact of the lockdown in slowing down infections would take at least three weeks to show. This is because the incubation period of the virus could extend to two weeks and any residual sources of imported infections, from before airports were sealed, would at most show up in a week.

### What was the reason for a long lockdown period?

The World Health Organization (WHO) declared COVID-19 a pandemic on March 11 but until March 13, India's official position was that it "wasn't a health emergency and there was no need to panic". India, with 81 cases, was evacuating Indians from abroad and had restricted international entry through only 19 of its 37 land immigration checkpoints. By March 15, it was evident to health experts and epidemiologists that the virus, SARS-CoV-2, has properties that distinguishes itself from other coronaviruses and even influenza viruses. It is highly transmissible and can evade the immune system for longer and therefore spreads quickly even without the infected being visibly sick. The virus is able to penetrate deeper into the lower airways. Therefore, to the elderly and the aged, those with pre-existing conditions such as diabetes and cardiovascular disease, it poses a heightened risk of acute pneumonia.

On March 24, Mr. Modi said: "I fold my hands to say – please stay where you are," adding that "all leading experts say 21 days is the minimum we require to break the coronavirus transmission cycle. If we are not able to handle these 21 days, the country and your family will go back 2 years and many families will be destroyed. I am saying this not as the Prime Minister but as your family member." The night of his address, India recorded 564 cases – a six-fold jump in less than two weeks; there were 11 deaths. Government and health officials feel that a complete lockdown and cessation of travel will keep those who are infected isolated and restrict infections to contained clusters. This would avoid community transmission when it becomes impossible to trace the source of infections and quarantining is of no use. Such a situation would quickly overwhelm hospitals as seen in Italy, Spain, Iran and the United States. With among the lowest per capita availability of hospital beds and health-care workers, health experts say if there are too many cases, it will be catastrophic for India.

### What do the numbers reveal?

The lockdown has coincided with an increase in testing and the Indian Council of Medical Research (ICMR) has widened the pool of people of suspected cases who need to get tested. Earlier, only those with a travel history and displaying symptoms were being tested. Now, even those who show flu-like illnesses and are in a hotspot are likely to be tested and quarantined. Since the lockdown, confirmed cases have risen 25 times to over 14,000; deaths too have risen 40 times.

Every weekly rise in cases has seen an increase by a factor of 3.7, 2.5 and 2.0, respectively, until April 16. Testing grew in those same weeks by a factor of 2.4, 2.1 and 1.1 times, respectively. A slower growth in testing thus appears to be corresponding to a slower rise in confirmed cases.

### Should India test more aggressively?

Increased testing does not necessarily mean a rise in

# Will convalescent plasma help COVID-19 patients?

Why is this strategy that has worked with several other diseases of interest now? And how are trials progressing?

RAMYA KANNAN

**The story so far:** As the months progress, the world seems still maddeningly short of definitive treatment or vaccine options against COVID-19. However, as the number of people with active COVID-19 infections has increased globally, scientists are "close" to deciding on some promising drug and vaccine candidates and clinical trials are on at multiple centres to test the safety and efficacy of these options. Among the many scientific terms that seem to have entered common parlance with COVID-19 is convalescent plasma. While we may be, in an optimistic scenario, a few weeks or months away from drugs or vaccines, clearly some front-runners have emerged, including remdesivir (originally designed to target the Ebola virus) and convalescent plasma. Convalescent plasma is a time-tested strategy that has worked successfully with several other diseases, and doctors struggling to bring relief to COVID-19 patients have turned towards it – it is blood derived from patients who have recovered from COVID-19 – on the assumption that their body contains antibodies it used to fight the virus.

### What is convalescent plasma? How does it work?

As Dr. Michael Joyner, professor, Mayo Clinic, explains on the institution's website: People who have recovered from COVID-19 have antibodies to the disease in their blood. Doctors call this convalescent plasma. Researchers hope that convalescent plasma can be given to people with severe COVID-19 to boost their ability to fight the virus. The blood – about 800 ml or so – is collected from the donor through the regular withdrawal process, tested for other pathogens, and if safe, the plasma component is extracted and subsequently used for transfusion on to patients. Everyone who has suffered from a disease possibly carries what are called neutralising antibodies that when extracted via plasma and transfused on to others with the infection can help their immune system fight it off. Whether it works or not depends on whether the disease produced a lot of antibodies in people or not, explains Dr. Priya Sampathkumar, infectious diseases consultant and medical director, infection prevention and control, Mayo Clinic, U.S. For some diseases, the body needs more cellular immunity to fight the infection, while for others, the body needs more antibodies. Most diseases, however, require a combination of both these mechanisms, Dr. Sampathkumar points out.

Since trials are going on, there is no standardised protocol on how much of convalescent plasma or how often it must be used. Even before we knew what sort of



Art with a purpose: A scene in Vijayawada, Andhra Pradesh, during the lockdown. + V. RAJU

India's high dependence on imported kits means that testing cannot be equally ramped up across the country. The Indian Council of Medical Research has said that it has enough testing kits 'for the next eight weeks'

been infected but do not show symptoms, but can infect others. Testing must be increased and contacts traced so that asymptomatics are also under the radar. Only this week India has effectively unveiled a new set of strategies – the use of rapid antibody tests and the concept of pooled testing to estimate the extent of undetected infections in hotspots which are places with a large number or large increase in cases. These are useful but relatively crude measures and can still lead to several asymptomatic people going undetected, according to health officials.

### Is the lockdown being followed?

While India's lockdown has been among the harshest in the world, there have been several instances of people gathering in large numbers. In fact, the makeshift relief camps that States have set up for migrant labour, the high average density of population are all aggravating factors for the spread of clusters as is seen in Mumbai.

Finally, India's high dependence on imported testing kits and the chemicals needed to analyse them means that testing cannot be equally ramped up across the country. The ICMR has said that it has enough testing kits "for the next eight weeks" but this does not account for the variable testing capacity of various States. The extension of the lockdown for another three weeks, until May 3, may buy time but the government needs to clarify its goals. Does it expect the number of hotspot districts of which there are 170 as of this week to come down? Is it to bring down the number of infections by a particular percentage or is it to achieve a more manageable doubling time? This refers to the time it takes for cases to

# Will convalescent plasma help COVID-19 patients?

Why is this strategy that has worked with several other diseases of interest now? And how are trials progressing?



REUTERS

antibody levels have to be administered, doctors began using this technique because there did not seem to be anything else that worked. The understanding why some people have more antibodies and some have less, whether those who were asymptomatic have antibodies at all, and in what strength, are issues that will have to be answered over the course of the trials.

But, she says, these are important questions that need answers, because giving whole plasma to an individual may even overload the system since it might be a large volume. There are no commercially available assays in the market that could measure the antibody level in the plasma. However, research is on at Mayo Clinic for an assay that would take at least a few weeks, to conduct such a test, according to Dr. Sampathkumar. Once that is done, experts would have to figure out the standard minimum dose of antibodies that will kickstart the immune response in the recipient against COVID-19 infection. Rapid serological antibody tests have only recently become available for testing in some nations.

### How far are we from using it and what are the challenges?

Dr. Sampathkumar says for all these studies to get off the ground, researchers would need enough donors who have recovered fully and can be tested for other pathogens as well. People should be willing to donate plasma, and good tests should emerge to estimate how many antibodies they have. While studies are required to show the timing and dosage, there is broad consensus that early administration will be ideal. Dr. Joyner says attempts are on to understand the issue via the large cohort of patients being observed. His colleague, Dr. Sampathkumar, explains, early on in the disease, there is a lot of virus in the system and the antibodies will bind

double, which has increased from four days in the last week of March to seven days as of this week. The longer this stretch is, the more time hospitals will have to treat and release COVID-19 patients, refurbish and safely dedicate manpower for clinical management.

### What about deaths?

Post-April 8, India has seen at least 25 deaths a day, or about 1-2% of the confirmed cases. While this proportion is in line with global trends, they are likely reflective of cases that were confirmed in one to two weeks before the lockdown.

On the other hand, from April 3 the recovery rate of those confirmed has increased from 70% on April 3 to 80% on April 17, which also corresponds to a dip in the death rate. In all, 80% of those infected in India are believed to be below 60.

### Some States have managed to flatten the curve. What does that mean?

New cases in Kerala, on a daily count, have dropped to single digits; the number of recoveries exceeds those being hospitalised in Tamil Nadu. Telangana and Andhra Pradesh are also showing signs of a dip. These are signs that these States have been able to manage infections effectively through stringent contact tracing and curtailing asymptomatic persons from spreading infection. They also reflect the importance of having moved early to stymie the spread.

However, a region is said to have stabilised only if no fresh cases are reported for 28 days – and no State is close to that scenario yet. The rise in infections is also due to the disproportionate influence of clusters. Mumbai and Delhi show that even with high rates of testing, infections will keep rising if quarantining and contact tracing are effective. Indore in Madhya Pradesh shows that laxity in enforcing quarantine and testing last month could have seeded several clusters that will be difficult to contain. Moreover, the demands that a total lockdown make on the economy and the extent to which it suppresses normal life can mean that a staggered relaxation of the lockdown is likely. But health officials warn that this may lead to infected people travelling to new places. India may have to continue dealing with frequent outbreaks for a while, they feel, rather than expect to decisively stamp out the disease during an extended lockdown.

with the virus eliminating it. If this is not done at this stage, then the virus sets off a cascade of inflammation in the body. If the patient has reached that stage, the plasma may not be helpful. And yet, at least two studies from China, the results of which were published in peer-reviewed journals, showed that in severe patients in the intensive care unit, the level of neutralising antibodies increased rapidly or remained high after convalescent plasma transfusion and the clinical symptoms also showed significant amelioration.

Trials are also required to examine the effect of other anti-virals or anti-inflammatory drugs on convalescent plasma, and see if there is an additive effect or take-away from the benefits, she adds.

Dr. Joyner speculates that there will likely be concentrated immune globulin products in a few months, and these will likely supplant plasma as a way to deliver passive immunity via antibodies to both patients with active disease and to temporarily prevent disease.

Since it rests on blood donation, people from the more common blood groups, for instance, O+ve, will have easier access to plasma. Naturally, the pool for rare blood groups is going to be smaller. However, experts have been laying emphasis on the need for people who have recovered to voluntarily come forward and donate plasma to help with research and other patients.

### What is the future?

Trials will conclude in a few weeks/months for definitive conclusions to emerge. The Indian Council of Medical Research has approved Delhi and Kerala to undertake clinical trials, and Tamil Nadu has also applied for permission to conduct trials in the State.

If trials clear convalescent plasma and approvals are given for a clinical rollout, it can be employed in hospital settings widely to help patients.

If that were to come to pass, the government would also do well to bring in regulations to ensure that plasma donors are not exploited under any circumstances. Creating a broad-based pool of donors would also be advisable, following the Mayo Clinic model, to cover rare blood types as well.

# From diplomacy to drama on Twitter

Amid its spat with Sri Lankans on Twitter, China Embassy's handle was briefly suspended

**COLOMBO**



Twitter is rarely short of drama. Except that last week, Sri Lanka's Twitter bubble saw some of it originate from an unlikely source – the official handle of the Chinese Embassy here.

It all began with a letter dated April 8, from the Embassy, addressed to the chairman of the privately-run Wijeya Newspapers group. In the letter, which was also released to the media, mission spokesperson Luo Chong took a strong objection to three pieces on COVID-19 published in two of the group's publications – *Daily Mirror* and *Sunday Times*.

One of the articles was an interview, headlined "Sri Lanka must ensure China is held accountable", with an American Lawyer who has

filed a lawsuit against Chinese authorities, whom he blames for the global pandemic. The second, titled "China accused of negligence", was an interview with the head of a local consumer rights organisation. The third, the Embassy's letter said, was a column that referred to COVID-19 as "Wuhan COVID".

The Chinese mission accused the articles of lacking "basic facts, knowledge and compassion", and said they were "full of" prejudice, racism and hate speech. The six-page letter urged media in general and the 40-year-old Wijeya Newspapers in particular to play a "more responsible and constructive role in this war".

Both the content and tone of the letter drew quick reactions on social media. "So Chinese diplomats now advise #lka media how to run newspapers? Spox of China Emb in Cmb writes open letter to Chair of Wijeya

Newspapers about "3 irresponsible articles" in @Dailymirror SL & @TimesOnlineLK. What do Chinese have to know of #PressFreedom?" tweeted Nalaka Gunawardene, a writer and media analyst. In a thread on April 9, Mr. Gunawardene said though he had critiqued the newspapers for their "lapses and biases", he stood by their right to carry op-eds with critical viewpoints.

**Media freedom**

In its reply to the Embassy, the *Daily Mirror* stood its ground and "reiterated" that it provides a forum for diverse viewpoints and that the articles referenced by the mission were carried as per the journalistic tradition of respecting expression of different opinions.

Meanwhile, many others also challenged the Chinese Embassy on its position. "So, you can present your position. But other people can also present a different position – unlike in China," tweeted @indica, a blogger.



While Twitter users taking on official tweets is not uncommon, official handles responding to those tweets is. Surprisingly, the mission decided to respond to several critics individually. "Does #PressFreedom allow any baseless hatred speech be pu-

blished and the media has no responsibility for its publication? No #PressFreedom for China and China can't present its position? Discussion about the pandemic should focus on #COVID19 itself, isn't it?" @ChinaEmbSL said in a response.

Even as the spat between a resident foreign mission and citizens of the host country raised eyebrows, in an intriguing move, Twitter suspended the Chinese Embassy handle on April 13. Evidently, the Chinese mission's views didn't go well with Sri Lankans. But it wasn't clear why Twitter chose to suspend the mission's handle – it was arguably combative, not abusive. According to Twitter's suspension policy, the decision to suspend Twitter accounts are commonly driven by three reasons – spam or fake; accounts at security risk or hacked handles, and those with "abusive" tweets.

The following day, the Embassy tweeted that Twitter had suspended its account without any specific reason. "The Embassy made solemn re-

presentation twice, requesting to clarify and correct. This morning, Twitter replied for a 'systematic mistake', apologised and unsuspended our account," the handle said, adding freedom of speech must be honoured without "double standards".

Sri Lanka responded to the development from the highest levels. "We welcome the reinstating of the Official Twitter Account of the Chinese Embassy in Colombo @ChinaEmbSL," Foreign Relations Minister Dinesh Gunawardene tweeted.

After a week of twists and turns, the Embassy's Twitter handle is now back to sharing official updates regularly. On Friday, it tweeted on Wuhan's revised number of COVID-19 cases and fatalities, and about Chinese aid to help Sri Lanka contain the coronavirus.

The handle may be back in business, but it hasn't been able to escape difficult questions from Sri Lankans. "So now Twitter has unbanned you. Can you now unban Twitter in China?" @indica asked in a tweet.



Meera Srinivasan is The Hindu's Colombo correspondent

# Amabie, the 'spirit' that went viral

A pictorial representation of a 19th century 'spirit' has emerged as Japan's COVID-19 mascot

**TOKYO**



As COVID-19 continues its global rampage, countries around the world are developing signature motifs of resistance. In Italy, it is balcony singing. In India, it is the "Go Corona" chant. In Japan, it is a three-legged mer-person with scaly skin, long hair and a beak that looks like the artistic offspring of a marriage between Picasso and Dalí: the amabie.

The amabie is a pictorial representation of a 19th century yokai or mythological spirit that has emerged as the social media mascot for the novel coronavirus, trending on Twitter and flooding Facebook feeds. Everyone from primary school children to the nation's top manga ar-

tists are busy drawing and sharing its images. Even the Japanese Health Ministry has hitched a ride on the trend's fishbait, using the amabie as part of its poster campaigns to spread awareness about the epidemic.

The story of the half-human, half-fish amabie spirit was first featured in a woodblock-printed news sheet in April 1846. The creature was said to have appeared in the sea off the western coast of Japan's Kyushu island. It spoke to a government official who had been attracted by a shiny blob in the waters, giving the bewildered bureaucrat some good news and some bad news. The following years would bring bountiful harvests, it said, but also a bounty of epidemics. The yokai then instructed the official to draw and distribute its image for the protection of the people, before disappearing.



Occasional sightings of the amabie were subsequently reported for a few decades after its initial "discovery", but as time went by, the yokai disappeared from the popular imagination. Then, on March 6 this year, Kyoto University Library posted a

picture of the original news sheet from its digital archives on its Twitter account. The mythological spirit resurfaced into a world of hashtags at just the right moment: school closures had been announced, employees asked to telework, and a general anxiety about the coronavirus combined with boredom. The result: an amabie renaissance. A #amabie-search reveals thousands of drawings of the creature from the humorous to the macabre, in addition to creative outpourings, including amabie made from spaghetti and people in amabie cosplay.

**History of pandemics**

Japan has been struck by pandemics including small pox, dysentery and typhoid through most of its recorded history and these continued to ravage the population well into the 20th century. Although modern medicine and drastically improved hygiene and sanitation curbed the bulk of these in the post-World War era, their historical memory lingers as

evidenced by the current response to COVID-19. Across the country, Shinto shrines and Buddhist temples are holding services, invoking ancient prayers to ward off the coronavirus. In a 21st century twist, some even allow devotees to join online in zoom video-conferences. Dusty guardian statues are being taken out of storage and set up outside universities and libraries.

The current popularity of the amabie can thus partly be explained as an example of the continuing influence of folklore in Japanese society. But there is another aspect to its "rise" as well: the penchant for *kaawaii* (cute) mascots. Japan is inundated with large-eyed, cuddly caricatures that serve as the mascots for everything from sports teams and government departments to corporations and their products. These can be downright bizarre. For example, pharmaceutical company Ichiji-ku, a manufacturer of laxatives, has a mascot called Kan-chan that looks like an adorable pink penguin with

an enema on top of its head.

Last year, in what now feels like a prescient move, Japan's Quarantine Information Office had debuted a mascot called "Quaran" (short for quarantine). It looks like a cross between humpty dumpty and tinkerbelle and sports goggles that ostensibly help it spot infectious diseases, prohibited food imports and other violations of Japanese customs law.

There is also the mascot of Tokyo's Shinjuku district's Food Sanitation Association's safe hand-washing campaign, called Shinjuku Awawa – a sentient superhero soap bubble dressed in a red cape and booties that combats germs and poor hygiene. But, until the amabie resurfaced from the historical archive, COVID-19 had been conspicuously mascot-less. Its return riding the waves of social media is therefore unsurprising, but also useful. The yokai is providing solace, entertainment and talismanic value to an embattled and somewhat bored nation as people stay at home and disinfect.



Pallavi Aiyar is a journalist based in Tokyo

# The fight Putin shies away from

The President has stayed away from unpopular decisions, leaving the virus fight to Governors

**MOSCOW**



With over 3,000 new cases of COVID-19 added daily for the past one week and parts of the economy locked down, Russia has found itself in the middle of an escalating economic and social crisis. The country has reported 36,800 infections so far and 313 deaths. Unemployment rate is projected to double and GDP to fall by not less than 5%. The coronavirus hit the Russian economy right in the middle of another crisis – the collapse of the oil price.

In his latest address to the nation, President Vladimir Putin announced long-awaited relief measures for businesses this week. He promised a funding of 200 billion rubles (around \$2.6 billion) to the regional

governments, and said small and medium enterprises would be getting funds from the government to pay off salaries in April and May. The announcement came amidst mounting criticism from the corporate sector that the government's responses to the crisis were not enough.

The measures announced by Russian government over the past few weeks amount to 2.8% of the GDP, compared to 37% in Germany, 20% in Italy and 12% in the U.S. Many feel Russia, having over \$550 billion in reserves and relatively low debt, could be more proactive in supporting businesses.

About 30% of businesses may not survive the compulsory shutdown, Roman Trotsenko, CEO of AEON Corporation, said during an online conference. Alexey Zaharov, founder of online service firm superjob.ru, said up to 80% of small and medium-

sized businesses could declare bankruptcy while the unemployment rate will jump from below 5% to 9%.

Mr. Putin's handling of the crisis suggests that there's a method in the Kremlin's response. The President appears to be unwilling to take responsibility for containing the virus. He has stayed away from announcing the unpopular decisions which could affect his approval rating at a time when the government is planning to put constitutional amendments on vote. The amendments, proposed by Mr. Putin earlier this year and already cleared by Parliament and the Constitutional Court, would allow him to contest elections again, and to potentially remain in power till 2036.

Mr. Putin has masterfully transferred the responsibility for containing the outbreak to Prime Minister Mikhail Mishustin and the heads of regional governments, including Moscow Mayor Sergey Sobyanin. It is now up to them to enforce the unpopular restrictions on the public

and roll out sophisticated surveillance systems. On the other side, the President comes on TV to announce good news such as economic relief measures. The crisis has also allowed him to get rid of the regional Governors who the Kremlin was not comfortable with. On April 2, immediately after Mr. Putin's address to the nation in which he spoke about the responsibilities of Governors in Russia's battle against the pandemic, three Governors resigned. State media reported that they resigned because of their failures in containing the virus, but all of them were at odds with the Kremlin.

**Internal troubles**

The COVID-19 crisis has also exposed some of the Kremlin's internal troubles brought by the conflict between old and new political elites. According to media reports, Moscow Mayor Sergey Sobyanin's views on quarantine and its implementation did not find any support in the Kremlin until last week, when the daily count



of new infections had crossed few thousands. On April 15, when Mr. Putin was delivering his "good news" to the corporate sector, Moscow saw the ugly outcomes of the rapidly introduced pass system. A pass is now required for the public to travel in

the city and it can be obtained via a government website. On the very first day, thousands of Moscovites, who still have to travel to work, found themselves in suffocating queues – without any possibility of physical distancing – at the entrance of metro stations as police officers were manually checking the passes.

None of these incidents highlighting that the shortcomings of the measures put in place by local governments have found a mention in Mr. Putin's speeches. He leaves it to the regional leaders to answer the public. It can be recalled that Mr. Putin has done exactly the same during 2018 pension reform by making then Prime Minister Dmitry Medvedev to take responsibility for the unpopular decision.

The strategy seems to be working. Despite the crisis and its economic costs, Mr. Putin's approval ratings are on the rise. According to Russian Public Opinion Research Center, his rating rose by 4% in late March, after many months of decline.



Ksenia Kondratieva is a journalist based in Moscow

# Amazon alert! The virus has breached the rainforest

Illegal miners and loggers are invading the forest, plundering its riches and infecting the tribes

**SAO PAULO**



In a short video, as the camera moves in a hospital, it shows 10 bodies in mortuary bags or under white covers lying on beds in the same room with and 11 patients; and a few bodies are kept on the floor in the corridor next to stretchers with patients. The video of Joao Lucio Hospital, the only medical facility with Intensive Care Units (ICUs) in Manaus, the capital of Amazon State, went viral on Thursday. But the Governor of the State, where 1,700 persons are infected with coronavirus and 124 have died so far, kept quiet. The government had stopped disclosing the occupancy rate of its ICUs last week.

The healthcare system of Amazon is on the verge of collapse as ambulances

offload new patients to hospitals every day. Working 18 hours a day, the State's doctors are stretched beyond their limits. Last year, 549 doctors quit their jobs as they were not being paid. "The government takes three, four, five months to pay salaries. The doctors end up going to work in other cities where they will be paid on time. Now, doctors are needed and we don't have them," says José Sobrinho, president of Regional Medical Council.

Though Manaus is now the epicentre of the outbreak, the real tragedy is unfolding in its rainforest where many tribes, some of them uncontacted, are in the danger of contracting the deadly virus. This month, a 15-year-old Yanomami boy fell to COVID-19, confirming the fears that the virus has breached the thick forest. With the world's attention focused on the virus, illegal miners,



loggers and smugglers have invaded the forest, plundering its riches and infecting the tribes with the virus. "Most tribes are vulnerable to this virus. Even common cold can kill them within 24 hours. As forests are being invaded, many people will die before

they get any medical assistance. We don't have resources to save them," says a doctor from a Manaus hospital, speaking on condition of anonymity.

**Biggest State**

Amazon is the biggest State in this country spread over 1.57 million sq. km with a population of just 3.4 million. Of 305 tribes in Brazil, most are based in Amazon and neighbouring States. "The general health of most people in isolated tribes is very good. But when an infectious disease from outside reaches them, it is potentially lethal," says the doctor.

When the Portuguese landed in Brazil in 1500 AD, it was inhabited by millions of indigenous people belonging to hundreds of tribes. A vast majority of them perished as they got infected by diseases such as measles brought by the Europeans, who tried to enslave them for work.

Researchers fear history repeating itself as miners and loggers try to force the tribes to carry out their ille-

gal work. Marcia Oliveira, a well-known academic in the region, fears that several tribes can be "eliminated" as happened in the "Haximu Massacre", when encroachers slaughtered an entire community in 1993. "There is no doubt that an out-of-control movement of gold miners, loggers and missionaries puts the indigenous peoples at risk of getting the coronavirus and [they could] face a genocide," says Ms. Oliveira, a professor at the Federal University of Roraima. But even as the State fails to check the movement of gangs, which have become emboldened since the 2019 rise to power of Jair Bolsonaro, who has repeatedly talked of "opening the Amazon for business" and "civilising" the tribes, the indigenous groups are practising self-isolation to protect their communities.

"Keeping away from strangers is the key in their fight against diseases 'brought by the Whites'. It is their ancestral learning as it has affected them since the colonisation," says

the academic. The tribes may be taking all precautions but it may not be enough as the government fails on two fronts – stopping the Amazon plunderers and strengthening the country's stressed healthcare system. The fight against coronavirus got a huge setback on Thursday as Mr. Bolsonaro fired Health Minister Luiz Mandetta.

In Dr. Mandetta's place, the President named Nelson Teich, an oncologist with no experience in public health. Within hours of his appointment, a 2019 video appeared on social media showing Mr. Teich's views about public health system. "If I have an old person with a chronic disease and a teenager with the same problem, I will spend the same amount of money in their treatment. The teenager will have a lifetime ahead. The elderly person may be at the end of their life. What should be the choice?" Mr. Teich asked in the video shot at a medical congress.

Mr. Bolsonaro's choice is making Brazil shudder.



Shobhan Saxena is a journalist based in Sao Paulo

## IN BRIEF


**Geraint Thomas raises £300,000 with turbo bike challenge**

**LONDON**  
Former Tour de France champion Geraint Thomas has raised £300,000 for Great Britain's National Health Service after a 36-hour indoor cycling stint. The Welshman rode a trio of 12-hour rides over three days on a turbo bike in the garage of his home in Cardiff in a bid to raise funds to tackle the coronavirus outbreak. The 12-hour rides were to emulate a typical shift of an NHS worker. "No exaggeration, the last two hours were the hardest I have ever had on the bike," Thomas told the BBC on Saturday. "I could barely sit down." AFP

# Sharath credits German stint for upswing

If they hire a player, they ensure he improves as much as their countrymen do, says the India No. 1

**K. KEERTHIVASAN  
CHENNAI**

India's top-ranked paddler Sharath Kamal said training in Germany with four different clubs in the top division of the Bundesliga from 2010 to 2016 was the best phase of his career as his ranking and game improved many-fold.

Speaking to coaches from Sports Authority of India and the Table Tennis Federation of India (TTFI) panel on Saturday in the 'Online Coach Development Programme, where he shared his experiences of playing on the European circuit, the 37-year-old said his stint in Germany helped his career take an upswing (after a mild slump in 2011-12).

**Surge in graph**

"I stayed in Germany and came to India only for a few National tournaments. At that time, my graph went up and having played in Europe



**Varied experience:** The exposure to different styles in Europe has benefited Sharath Kamal immensely. • FILE PHOTO: G. RAMAKRISHNA

[in Sweden, Spain and Germany], there was an overall development in my game," Sharath said.

On European clubs, the 2006 Commonwealth

Games singles champion said, "The coaches are very professional. They treat everyone as equals. They didn't see me as one who is training here [and will go on] to beat

them. In Europe, if they hire a player, they ensure he improves as much as their countrymen do."

Sharath said everything is systematic [in Europe]. "Our

season starts at the end of July and ends in September whereas they have round-the-year competition in different divisions.

"There is constant match practice, you get to play with different players with different styles. The infrastructure and ecosystem are top-class. And their calendar is out much in advance."

**Professional**

In India, things started to change only after the 2008 Beijing Olympics, said Sharath, ranked 31 in the world. "It all became professional in 2008 when a lot of people [support staff] started working for an athlete."

On how Indian coaches could achieve global standards, he said, "We have the talent but not the right exposure."

"What Indian players get, the same thing should happen to [our] coaches."

# Cricket Australia faces cash crunch: reports

It plans to lay off almost 80% of staff

**REUTERS  
SYDNEY**

Cricket Australia chief executive Kevin Roberts has told staff that the governing body faces a financial crisis and would not have been able to pay its bills at the end of August without layoffs, local media reported on Saturday.

CA announced plans to lay off almost 80% of staff on Thursday, putting them on 20% pay until June 30 when it is hoped more will be known about how long government curbs will last.

**Financial reserves hit**  
*The Australian and The Age* newspapers have reported that CA's financial reserves had

been hit by a slump in the world's stock markets caused by the COVID-19 pandemic.

No one at Cricket Australia was immediately available for comment on Saturday.

While, according to *The Australian*, national team coach Justin Langer was informed on Friday that he was now a part-time employee, the players have not yet concluded negotiations over any wage losses they might suffer.

The players retained a revenue share model with Cricket Australia in their last negotiations over pay in 2017 and test captain Tim Paine said last month that he and his team mates were braced for cuts.

# HI online sessions from Monday

**SPECIAL CORRESPONDENT  
NEW DELHI**

Hockey India would begin its online coaching development sessions from Monday as part of the Sports Authority of India (SAI) initiative.

While the basic course would be conducted by junior women's coach Erik Wonink and feature non-accredited coaches without requiring any prior qualification, the intermediate sessions would be for SAI-accredited coaches who have successfully passed the Hockey India Level-I Certification (or above).

The intermediate sessions would be conducted by the foreign coaching staff of the senior men's and women's teams including chief coaches Graham Reid and Sjoerd Marijne.

# BCCI creates Team Mask Force



Screen-grabs of Smriti and Kohli from the video. • BCCITV

**PRESS TRUST OF INDIA  
NEW DELHI**

Featuring India's most revered cricketers like Sachin Tendulkar and Virat Kohli, the Board of Control for Cricket in India (BCCI) has created a new video under the title Team Mask Force to promote wearing masks in public places and help the country battle the COVID-19 pandemic.

The video has messages from Board president Sourav Ganguly, Smriti Mandhana, Rohit Sharma, Harbhajan Singh,



Harmanpreet Kaur, Virender Sehwag, Rahul Dravid and Mithali Raj. "TeamIndia is now #TeamMaskForce! Join #IndiaFightsCorona and download @mygovindia's @SetuAarogya mobile application Mobile phone," the BCCI tweeted.

"Being part of the India team is a matter of great pride. "But today we are going to create a bigger team, Team Mask Force," Indian captain Kohli says in the video.

# I-League called off

Mohun Bagan declared champion

**AMITABHA DAS SHARMA  
KOLKATA**

The All India Football Federation (AIFF) on Saturday decided to formally call off the I-League and declared Mohun Bagan the champion. There were 23 matches still to be played when the COVID-19 pandemic struck. With the lockdown in the country extended till May 3, the AIFF League committee convened its members through a video conference.

Bagan had assured itself of the title, taking an unsailable lead (39 points from 19 games), before the league was suspended on March 14.

**Equal share**

As for the other 10 clubs, the league committee recommended that the remaining prize-money (apart from the champion's) be equally divided among them. The committee also recommended that there be no

legation in the 2019-20 season. The league committee's decisions have to be ratified by the AIFF executive committee.

The other decisions taken were: 1. For the second division league, the committee decided to wait for the approval of the executive committee and the Asian Football Confederation to have a tournament of shorter duration next season. The teams that will qualify for the Hero I-League 2020-21 season will be decided based on that.

2. With nearly 500 matches yet to be completed in various youth leagues, the committee decided to conclude all youth leagues – the sub-junior league, the junior league, the Elite league and the under-17 Khelo India girls' league – for the current season.

3. Extension of deadline for AIFF Academy Accreditation recommended.

# 'Srinath an unsung hero'

Shaun Pollock all praise for Marshall and Steyn too

**PRESS TRUST OF INDIA  
JOHANNESBURG**

Javagal Srinath spearheaded India's pace attack in the '90s with aplomb, but former South Africa seamer Shaun Pollock believes the Indian never got the credit he deserved.

Srinath played 67 Tests and 229 ODIs between 1991 and 2003, taking 236 and 315 wickets respectively. "I thought India's Javagal Srinath didn't get the credit he deserved," Pollock said during a Sky Sports podcast discussion with former West Indies fast bowler Michael Holding and England's Stuart Broad.

"In my era, you had great combinations like Wasim Akram and Waqar Younis for Pakistan and Curtly Ambrose and Courtney Walsh for the West Indies. Australia had Glenn McGrath and Brett Lee. You now have James Anderson and Stuart



Javagal Srinath. • FILE PHOTO



Shaun Pollock. • FILE PHOTO

Broad in this era," he said. Pollock, who snapped up over 400 Test wickets and amassed more than 3,700 Test runs in 108 Tests, said one bowler who left an indelible mark on him early in his career was West Indian pace great Malcolm Marshall. "Marshall was next level and I was lucky enough to

meet him early in my career as it made me think about fast bowling in a completely different way," he said.

Pollock has also been most impressed by fellow countryman Dale Steyn. "He cranked it up on flat wickets and had such a good action and variations. He is something special and his stats back it up."

# AITA to abolish 'life' posts

**PRESS TRUST OF INDIA  
NEW DELHI**

The All India Tennis Association (AITA) has agreed to abolish honorary posts of life president, life vice-president and life Counsellor on the direction of the Sports Ministry, which termed the creation of such posts as violation of the National Sports Code.

The decision meant that senior sports administrator Anil Khanna and former external affairs ministers S.M. Krishna and Yashwant Sinha cannot remain with the federation as life presidents.

The ministry's decision also affects eight people including former Davis Cup captains Jaideep Mukheja and Naresh Kumar, who held the post of life VPs.

T.D. Franics held the post of life counsellor.

# COVID-19: Tokyo's homeless seek shelter in Olympic Village

**PRESS TRUST OF INDIA  
TOKYO**

A group representing the homeless is asking to use the Athletes' Village for next year's Tokyo Olympics as a shelter during the coronavirus pandemic.

An online petition addressed to Tokyo Olympic organisers and the city government has drawn tens of thousands of signatures for permission to occupy the massive housing complex going up alongside Tokyo Bay.

The village was to be home to 11,000 Olympic athletes and 4,400 Paralympic athletes.

It is largely complete and empty with the Olympic opening postponed by the virus outbreak until July 23, 2021.

"We don't know how long



**Cry for help:** An online petition addressed to the Tokyo Olympics organisers has sought permission for the homeless to occupy the Athletes' Village. • AFP

this downturn will last, and so we have to change how we think," said Ren Ohnishi, chairperson of the Moyai Support Center for Independent Living.

"That includes how we work, how we deal with

housing, how we give aid to those who need it."

Tokyo Olympics organisers declined comment, and the Tokyo metropolitan government also had no immediate comment on the petition.

# How athletes stay fit in a lockdown

Former India trainer Shanker Basu talks about challenges of working out at home

**RAYAN ROZARIO  
COIMBATORE**

The situation outside is grim, and that is making life indoors challenging for athletes whose routines have been disrupted.

But Shanker Basu, the former head strength and conditioning coach of the Indian cricket team, tells *The Hindu* that "athletes are a different kettle of fish".

"They are wired very differently and their elusive goals in life will not allow them to alter their vision. They will look at this [lockdown] as a period where they [can] tick certain boxes which was not possible otherwise."

Basu has suggestions for athletes looking to improve their health and immunity during this tough phase: "Strength exercises that target your thighs, hips and



Basu. • SPECIAL ARRANGEMENT

trunk, along with some form of cardiovascular exercise that can be based on what

you have at home as equipment. "Nutrition and a set routine must be complementary to the exercise patterns. And that should be your commandment during this period," he adds.

**Innovative workouts**

Will innovative workouts help? "Yes and no. At the end of the day, most athletes know their routines and bodies well. Innovative workouts have a place and time, but the basic bread-and-butter type of workouts will see them through this period," he says.

A sprinter in his heyday, Basu has trained people from different walks of life. "I don't travel like before; I am based in my own town [Chennai]. Having said that, it gives me an opportunity to work with different types of sports and pursue new edu-

cational goals which keeps me very busy."

Does he design workouts that can be followed online? "Yes, I do, and even otherwise, I have been doing such routines for certain types of athletes for the last 10 years," says Basu, who is now the strength and conditioning coach of Royal Challengers Bangalore.

How about RCB's cricketers? "All the players are given a schedule and most of them have access to personal home gyms. They will do everything in their capacity to stay fit."

**Significant role**

Basu's pursuit of excellence has played a significant role in transforming the attitudes of Indian athletes towards fitness, and he is willing to offer advice to anyone seeking it during this period.

# Festivals, turbans and rice beer are all part of an exhaustive cultural heritage list

Culture Ministry publishes a draft list of more than 100 practices and seeks public comment about intangible elements that enrich India's social history

**DAMINI NATH  
NEW DELHI**

Manipur's tradition of making rice beer, the practice of tying turbans in Rajasthan and several different dances, forms of music and festivals from across the country were among the 106 items listed as intangible cultural heritage in a draft released by the Union Culture Ministry on Saturday.

Releasing the list, Culture minister Prahlad Singh Patel said 13 traditions of Indian intangible cultural heritage were already recognised by UNESCO and the national

list was an attempt to further awareness and protection to more such elements. The initiative is a part of the ministry's Vision 2024 programme. In the list released on the ministry's website, a total of 106 practices from different States are mentioned, though some are repeated as they occur in more than one State and five elements are common to the whole country.

As per the 2003 UNESCO Convention for Safeguarding of Intangible Cultural Heritage, the list has five broad categories – oral



**Sparkling collection:** Turbans on display at a museum in Jodhpur. • REUTERS

traditions, performing arts, social practices, knowledge and practices related to nature and traditional

craftsmanship, the Culture ministry observed in a statement. This list was a "work in progress and may

be considered a draft version", the ministry added. There was, however, no deadline for the public to send in contributions, suggestions or amendments, an official said, declining to be identified.

**Traditions**

Among the traditions seen across the country are the devotional music of Qawwali and the music of the oldest instrument in the country, the Veena. The Kumbh Mela and Ramilla traditions of different States have also been included.

The list includes the

traditional folk festival of Pachoti in Assam, where the birth of a baby, particularly a male infant as the tradition "relates to the birth of Krishna", is celebrated with relatives and neighbours, according to the ministry.

The oral traditions of the transgender community called Kinnar Kanhgeet and compositions of Ameer Khusto are among the entries from Delhi.

Gujarat's Patola silk textiles from Patan with its geometric and figurative patterns also made it to the list. The practice of tying a turban or safa across

Rajasthan was included.

From Jammu and Kashmir, the Kalam Bhat or Qalambast gharana of Sufiana music in Budgam district and from Ladakh, the Buddhist chanting across both Leh and Kargil districts were on the list of intangible cultural heritage. The making of khor, a rice beer, by the Tangkhul community in Manipur as well as other crafts associated with it, like making gourd vessels and wicker baskets, were also on the list.

Kerala's martial art form, Kalaripayattu, and the

practice of making designs at the entrance of homes and temples called kolam in Kerala, Andhra Pradesh, Tamil Nadu and Andhra Pradesh were also included in the list.

**Puppet theatre**

Different forms of shadow puppet theatre – Chamadyacha Bahulya in Maharashtra, Tolu Bommalata in Andhra Pradesh and Tamil Nadu, Togalu Gombeyatta in Karnataka, Tolpava Kuthu in Kerala and Ravanchhaya in Odisha – have also been included.

# Magazine



**WIDE ANGLE**

It's taken an invisible virus to make the Assamese do the unthinkable — skip their grand Rongali Bihu celebration **p6**



**LITERARY REVIEW**

Anita Roy's latest novel treats children like equals, confronting death and destruction calmly **p4**



**BOOKEND**

A pandemic is a rude fellow. It tells you everything you knew about yourself, but were too cowardly to face **p7**



**OFF-CENTRE**

Can a madrasa housing dozens of poor kids magically become larger when a lockdown is announced? **p8**

COVER

# Locked Out

A lockdown protects the well-off, but it pushes to the brink those who face bigger threats every day — from hunger, homelessness or poor health **p3**

**Trapped** A woman looks through a gate in a COVID-19 hotspot in New Delhi.  
— SUSHIL KUMAR VERMA

**It will rain at least**

The southwest monsoon is likely to be normal this year, the India Meteorological Department (IMD) said. In its long-range forecast for the June to September monsoon season, IMD said that quantitatively, rainfall is expected to be 100% of the long period average. While the date of onset over Kerala continues to be June 1, the department gave new dates of arrival and withdrawal of the monsoon, which could be delayed in several States.

last week



**No ball**

Finally, after much palaver and panic, the BCCI saw fit to suspend its precious Indian Premier League's 2020 edition until further notice. Scheduled to be held between March 29 and May 24, the start date was initially only pushed forward to April 15 even as the Olympics itself was cancelled. With India's lockdown extended, the BCCI couldn't dither any longer. Both players and franchises face major losses.



**After 1930, it's 2020**

Dubbing the global situation the Great Lockdown, the IMF predicted the worst economic downturn since the Great Depression. It stepped up by offering debt service relief of about \$500 million to 25 of its poorest member states, including Afghanistan, Chad and Haiti. Meanwhile, G20 leaders agreed to suspend \$20 billion in debt payments from 76 countries for a year.



**Lockdown lockup**

Following the Supreme Court's insistence, scholar-activist Anand Teltumbde and civil rights campaigner Gautam Navlakha (in pic) surrendered to the National Investigation Agency (NIA) for their alleged involvement in the Bhima-Koregaon violence of 2018. They join nine other activists imprisoned in the same case. A court remanded Teltumbde to NIA custody for four days.



**Longest animal?**

Among 30 new marine species that scientists found in an exploration off Australia's coast was a 150ft siphonophore — a translucent and stringy deep sea creature — possibly the longest animal discovered on earth. "It was just amazing to see this huge organism spread out like a spiral UFO," said Nerida Wilson, the scientist who led the expedition.



**Pandemic polls**

In a move that was looked at askance by a locked-down globe, masked South Koreans queued up three feet apart to vote in the legislative elections on April 15, with turnout at 66.2%, the highest since 1992. President Moon Jae-in's Democratic Party — buoyed by his successful handling of the pandemic — and its allies won 180 of 300 seats.



**Viral trial**

April 14, which a large part of India celebrates as New Year's Day, brought no relief, with the nationwide coronavirus lockdown being extended till May 3. The Ministry of Home Affairs issued an elaborate set of guidelines, but some restrictions are to be relaxed after April 20. Agriculture, e-commerce, industries outside city limits, and MGNREGA jobs were allowed in regions that have successfully contained the spread of the virus.



**Find a scapegoat**

U.S. President Donald Trump announced he would halt funding to the World Health Organization (WHO), which he accused of "severely mismanaging and covering up the spread of the coronavirus." The U.S., which gave WHO more than \$400 million in 2019, is the organisation's single biggest funder. American Medical Association President Patrice Harris said the decision was "a dangerous move."



**Slippery patch**

OPEC+, a group of major oil producers that includes Saudi Arabia and Russia, reached a historic agreement to slash oil production by 9.7 million barrels a day over May and June, in an effort to shore up a market severely impacted by the pandemic. Prices rose briefly after the announcement but fell again, as the production cut is insufficient to offset the 30-million-barrels-a-day shortfall in global demand.



**Growing pains**

India's GDP growth forecast for FY21 took a beating with the International Monetary Fund cutting it to 1.9% from a 5.8% estimate in January. Although this is expected to bounce back to 7.4% in FY22, other agencies like Barclays predicted 0% growth for India for calendar year 2020, factoring in a \$234.4 billion economic loss or 8.1% of GDP. The IMF also revised India's FY20 growth to 4.2%, down from an estimate of 4.8% in January.

# Science shines through the pandemic

It is heart-warming to notice the improved scientific temper across all social and geopolitical strata

Rishi Kanna

The world has been brought to a standstill by a pandemic, and the future appears unclear. Naturally, humans have interpreted the infection in a wide variety of ways.

The animist believes it is the wrath of the flora and fauna which have been subdued by technological and industrial advances. Their habitat has been infiltrated by the avarice of humans. The nature lover feels that non-human creatures have had the last laugh and are sneering at the now "caged" people forced into isolation.

Despite the troubled times that we are in, the vegans seem to be on cloud nine, as they believe that the rest of the world may at last heed their cries. They have placed their two cents on the origin of COVID-19 to eating meat. They reason that the continued onslaught on animals to satisfy gluttony has resulted in the spread of the novel coronavirus. Unfortunately, this theory has garnered some support from the xenophobes who blame the Chinese for the pandemic.

#### Divine intervention

Many god-fearing individuals believe that the epidemic is a divine curse, giving several reasons. First, the disease has affected only the human

Despite a better knowledge of diseases, people postulate different reasons for unexpected outbreaks



ILLUSTRATION: J.A. PREMANKUMAR

race, leaving others safe. Second, it is global and not restricted to any particular geographic zone. Third, there is no cure at sight and the only way to protect yourself is to go into isolation and learn the importance of family and prayers without entertainment or luxury.

Astrologers endorse the belief that awkward planetary positions have spread the bug. They say the epidemic will continue till the planets reach a favourable alignment. Sections of philosophers are confident that the pandemic is holding a mirror at us to introspect on the consumeristic and materialistic ways of our life, the luxury and pleasure-seeking mindsets and the increasing reliance on electronic gadgets and rapid industrialisation.

They believe that the virus has made us more empathetic and minimalistic and return to our roots.

Such wide-ranging thought processes that attempt to colour a disease from various viewpoints are not new.

#### Simple triad

While science follows the simple triad of pathogen, host and disease at the three corners of a triangle, humans continue to promulgate alternative theories. In the olden days, those with psychiatric illnesses were shackled on the days of the full moon since it was believed that the patients' mental state changed with the phases of the moon. This gave birth to the term lunatic. Plague is caused by a bacillus, but medieval Europeans believed that the Black Death was a divine punishment. The dead were cursed to have incurred retribution for sins such as rapacity, blasphemy, sacrilege, promiscuity and worldliness. Despite the im-

proved comprehension of diseases, humankind postulates different reasons for unexpected outbreaks. HIV infection and AIDS were believed by many as god's punishment for adultery and homosexuality. Though multiple modes of HIV transmission are well elucidated by science, the affected are still stigmatised.

Despite varying perspectives about COVID-19, it is heart-warming to notice the improved scientific temper across all social and geopolitical strata. Many people follow scientific ways to curb the spread of infection by using masks and hand sanitisers and physical distancing.

Society's increasing reliance on medical science, epidemiological research and health care data is an encouraging sign that this pandemic can be fought off.

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## The world brought to heel

Governments are investing billions of dollars to fight the pandemic, but the question is how does a virus cause such global disarray?

Asif Shah

The catastrophe caused by the novel coronavirus reminds us of the Black Death that devastated Europe and wiped out half its population in the 14th century.

COVID-19 is the latest in a series of pandemics that send shivers across the world. The paradox is that it united a contradictory world but divided people. It does not discriminate between believer and atheist and white and black. It is unseen yet powerful, living yet unseen, far yet close. It is an untold story of everything from science to god, medicine to economics, and culture to religion.

The world was largely unprepared for the pandemic and is still dangerously incompetent in fighting it. Virologists, pharmacologists and biologists, everyone is clueless.

Some take it as divine punishment, while others blame the Chinese for their eating habits. The bad news is that a huge chunk of population may die, but the good news is that modern civilisation is more sophisticated and advanced to fend off a fatal blow.

The greatest challenge, however, is to fight the financial and economic impact because it is the markets that are places of opportunity, feed trillions and buy our services, ideas and patents.

Unlike the financial crises of 2008, the crises now are quite different as central banks need to look beyond filling pockets with money



because such a step would not generate demand when markets are inaccessible. The broken demand-supply chain is ruining markets, but the actual shock could be much bigger than grim statistics.

#### Domino effect

What kind of game plan is needed to get through this deep pothole? How about the survival of industries dependent on the global supply chain? Globalisation has twisted the supply chain so deeply that if there are issues specifically in an exporting country like China or the U.S., it would be felt massively across the globe. How the impact on the workforce, particularly hourly and daily wagers, would be dealt with? Where does India stand in this global crisis and how shall it become a \$5 trillion economy by 2024?

Precisely, it may be another worst economic nightmare of the

21st century that will not test the competence of doctors and scientists but will also assess the endeavours of the political and corporate leadership. The downturn in spending and investment will drive businesses to slow down production and eventually retrench people. Markets will turn out to be deserted places, and suicides may radically increase. It does not matter if a country is in the early or later stages of the epidemic; what matters is how it is responding?

The U.S. Center for Disease and Control has already warned about the diseases and dangers caused by rodents. The world is investing billions of dollars to fight the pandemic, but again the question to be asked is how does a virus cause global disarray? Let's give it serious thought before a new black swan can stretch the world mercilessly.

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## Lockdown and the millennial mother

Trupti Dandekar Humnekar

Millennial mothers looked at the lockdown as an opportunity to spend quality time with their children. But now, they have to manage work from home and do household chores without any help around. It's a challenge to these women who pride themselves as independent, multi-tasking managers of home and office.

When mother is home, a whole world of opportunity opens up for children – favourite dishes on the table, help in art, craft and studies, learning new skills, and reading stories and watching movies together. But with the lockdown, she is on a roller coaster trying to balance work and home.

Millennial mothers are said to be supermoms who can delegate work at the right time to the right people. They do not feel guilty for not cooking for family or being with their children all day. They can transform home and work with equal efficiency.

Mothers born during the 1980s and 1990s have seen the highest transitions in their life from the changes in social structures to technological upgrade and economic uplift. These women have seen the world and want to show its opportunities to their children. They give a multidisciplinary and global exposure to their children.

But during the lockdown, the creativity and excellence of these women are under challenge. They are not getting much appreciation for household work that they are used to, even when they have to manage office. All these ups and downs have created a piquant situation for the millennial women.

Work, studies, hobbies, shopping, entertainment all have boiled down to the computer or mobile phone. The world has shrunk to the house, children and family. It's a wonderful time to stay home away from pollution and traffic, but the recession, future targets and work from home create stress.

It's a mixed feeling of peace, happiness, stress and depression. I hope the world goes back to normal soon and life starts once again with the same rush and excitement.

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## Collateral gains from a catastrophe

Some of our bad habits have taken a hard knock from the virus

K.V. Murali Mohan

Every catastrophe leaves behind something to cheer, they say. Can the novel coronavirus be an exception? The virus is changing the way we live in many respects, even refining some of our inappropriate habits.

For instance, while counting currency notes or turning the pages of a book, many have the instinct to lick a finger and flick – an unhealthy habit that many of us had developed. It took the virus to put a full stop to the habit.

The virus has also added some civic sense inside public washrooms. Loud retching and open spitting and blowing of the nose have been the norm at washroom sinks. Little do we bother about the discomfort caused to others.

Thanks to the corona scare, sensible actions are now in place. It could be also due to the fall in footfall, but one only hopes that the



good sense sustains. The Railways has removed the curtains from upper class coaches following the virus scare. The curtains were being used as towels to wipe hands, polish shoes and other unintended purposes, contaminating them.

Then, *Namaste* has regained respect with world leaders endorsing it. A *Namaste* is characterised by humility and honour. To look modern, we dumped it and embraced the hand shake, fist bump and high five. When touch points are looked at askance, the "no-contact" *Namaste* caught on. U.S. President Do-

nald Trump has rightly said that India is ahead of the curve in combating the novel coronavirus as they greet with *Namaste*.

Washing hands and feet before entering home is another healthy habit that is making a comeback. Again it took an evil's knock for it to get back into our lives.

Across cities, parties are being rescheduled. Unavoidable ones, such as weddings, happen with restricted audience – say, 50 in some cities.

Grand weddings have become a norm with parents putting all their life savings into the ceremonies and even taking loans. The virus scare has set an example for how parties can be conducted in a reasonable and responsible manner.

The virus is an enemy of humanity, but if we can learn good things during the pandemic, it will be all to the good.

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## FEEDBACK

Letters to the Magazine can be e-mailed separately to mag.letters@thehindu.co.in

### Cover story

The cover story ('In our wildest dreams'; Apr. 12) is reminiscent of George Orwell's *Animal Farm*, where the animals desperately try to send Man out of the farm so that they can roam freely in their habitat. Now that the pandemic has made humans stay indoors, Orwell's vision is turning true.

The rhetorical question asking if animals are reclaiming the planet is truly Orwellian, if not utopian.

E.S. CHANDRASEKARAN

The cover story with its photos of animals and birds was a feast for the eyes and strained mind during this lockdown.

A.M.N. PANDIAN

The cover story was thought provoking. It got me thinking about whether the parrots I see outside my hostel room and the symphony of birds that now wakes me every morning will continue after the pandemic.

As happy as nature seems, once we resume our routine, mighty humanity will again deprive other creatures of their rightful habitat. I hope we will be more sensitive to all species and opt for a more cohabitable lifestyle.

PARVATHI SREERAJ

The cover story by Harini Nagendra clearly tells us that the damage we've done can't be healed in such a short time. I too am able to see the mountains from my home nowadays, and I enjoy watching the birds, and I fret at any vehicles I see. But as soon as the lockdown ends, I'll forget all this and return to the life we are so accustomed to, selfish and not caring about anything else. I hope at least this time we will try to strike a beautiful balance so that the world isn't just about human supremacy but a harmonious coexistence of different beings. So that, at the end of day, we may enjoy a sunset as much as we enjoy a movie or a book.

AMANDEEP SINGH

### Supporting survivors

The interview with Prasanna Gettu, co-founder of the International Foundation for Crime Prevention and Victim Care, sheds light on the yeoman efforts being taken by her

RAJESH SANKARANARAYANAN



organisation in enabling women who have been victims of abuse to pick up the threads of their lives again. (60 Minutes: 'Not all survivors of violence can stitch bags for a living'; Apr. 12) One tends to agree with her that all survivors of violence deserve the freedom of choice to shape their own destinies.

C.V. ARAVIND

**Human evil**  
The article was interesting ('Did god just roll the dice?'; Apr. 12) but the creator has never been a source of destruction. Different religions have different concepts to explain natural calamities, but one can easily see that the hidden reason for these are humans. Humans are the main source of their own destruction.

ANOSH NISHITH SADAT

Capt. Gopinath's piece on god playing dice reminds us that at times of crisis god is remembered more. Nature is seen as god by ancient belief systems, and the abuse of it by humans results in nature's fury. Even the schoolgirl Greta Thunberg understands this. Today's miseries are of our own making and there is no point trying to shift the blame onto god. We rolled the wrong dice ourselves.

B. SUNDAR RAMAN

**Still charming**  
Even as the thud each morning when *The Hindu* is dropped on the porch warms my heart, its emaciated look makes me sad. At least the *Magazine* retains its charm with satire ('Karna - 0, India - 1'; Apr. 12), wit ('Couple's cleaning time'; Apr. 12), and wisdom ('Everywoman's narrative'; Apr. 12). I am happy that Mrs. M has decided to go easy on Mr. M at last!

RAJESH SANKARANARAYANAN



### More on the Web

thehindu.com/opinion/open-page



### The brighter side of the lockdown

Use this time to enjoy the present, rediscover passions, connect with nature, and value coexistence

K. MURLIDAR

### Gags that teach us to decode life

A Chaplinesque lesson on repetitive mistakes in the time of a pandemic

SURYA PRAKASHVERMA

### Quarantine wisdom

It's the time to pick up that paint brush, knitting needle and guitar languishing in the garage.

SHANKAR GOPALKRISHNAN

This page consists of reader submissions. Contributions of up to a length of 700 words may be e-mailed to openpage@thehindu.co.in. Please provide a postal address and a brief background of the writer. The mail must certify that it is original writing, exclusive to this page. The *Hindu* views plagiarism as a serious offence. Given the large volume of submissions, we regret that we are unable to acknowledge receipt or entertain queries about submissions. If a piece is not published for eight weeks please consider that it is not being used. The publication of a piece on this page is not to be considered an endorsement by *The Hindu* of the views contained therein.



FROM THE MARGINS

**Daily grind** (Clockwise from left) A rickshaw puller waits endlessly, while women lug home groceries distributed by volunteers in Kolkata; a municipal worker clears garbage bins in Southend, U.K.; a volunteer distributes food packets at a favela in Sao Paulo in Brazil; women wait outside a ration shop in Prayagraj; and a COVID-19 sample collection kiosk in Chennai. • AFP, PTI, BLOOMBERG, GETTY IMAGES & B. VELANKANNI RAJ

# Many masks of a lockdown

The ways in which a 'non-discriminatory' virus can very quickly evolve into a disease of the poor

Krithika Srinivasan

Communicable diseases, we know, affect socio-economically disadvantaged communities disproportionately. But how do these inequalities emerge? We now have a live example in COVID-19.

Until recently, the virus has been non-selective in whom it affects: it could be people in the global North, the non-poor everywhere, people who are not used to being vulnerable to contagious diseases. These are also the people who influence state responses – scientists, policy-makers, commentators. And so lockdown and social distancing were rapidly established as the one-size-fits-all response to COVID-19 globally – despite the variations in the impact of the disease and the serious social consequences of such measures.

While these measures protect people by reducing and slowing down transmission, what has also become quickly apparent everywhere is that they benefit only a minority of the population – those who have salaried jobs, savings, fridges large enough to stock groceries, and homes spacious enough to stay indoors without confinement causing health problems.

Whom they cannot protect are those who face bigger everyday health threats – hunger, homelessness, the risks of more dangerous diseases. If anything, a lockdown adversely affects the vast majority of people for whom this novel coronavirus is a smaller risk when compared to more serious and immediate issues such as hunger, domestic violence or eviction. And when 'home' is a room in a slum with community toilets, or when lockdown refugees are transported in buses or housed in makeshift camps, there is clearly greater crowding than if they were outdoors: it might well be that lockdown then exacerbates the spread of the virus among them.

Even in the U.K., where social security systems are stronger, more than 2 million people are estimated to fall through the cracks: sex workers, gig economy workers, the newly self-employed, lone parents in small flats with little savings and no childcare support, women and children subject to domestic violence, and those with other physical or mental ailments.

In the dominant response to COVID-19, there is clearly a deeply uneven distribution

of risks and benefits. And this includes inequalities in the impact of the disease. Indeed, there is already evidence from major cities in the U.S. and the U.K. that minority ethnic groups are disproportionately impacted by, and die of, COVID-19 – because they are more likely to be employed in essential services, or live in conditions that don't allow for social distancing, and are less likely to have access to healthcare.

### Political pathogen

And so what was initially a 'non-discriminatory' virus is very quickly evolving into a disease of the poor because of the response of lockdown and social distancing. Lockdown flattens the curve, but in the process skews the curve in terms of who is affected. It helps prevent situations where hospitals have to make ethically-charged decisions about whom to prioritise for beds and ventilators – but it does so by displacing ethical questions onto 'inadequate social security systems' and amorphous government and private sector processes.

Some argue that social distancing and lockdown have to be in place until there is a vaccine or until healthcare systems

are strengthened. But both vaccine and systemic improvements will again be more readily accessible to the middle and upper classes, as is already the case with testing and hospital-based care for COVID-19. So, when the lockdown is finally lifted, COVID-19 will become firmly established as a disease of the poor, like so many other infectious diseases already are.

This is how a pathogen becomes political. This is how health inequalities are created. But this isn't new; there's ample research on health inequalities. Yet, as social distancing and lockdown started being replicated across the world as the only appropriate response to COVID-19, there was almost no resistance in the U.K. and the U.S.

On the contrary, there was near-total compliance and those who raised uncomfortable questions were dismissed and shamed. In India, some sections of the media, academia and the Left have actively challenged the lockdown approach from the start, but

in the U.K., critical questioning began only after the third week.

The strength of science lies in its openness about uncertainty, and the ability to challenge assumptions and hypotheses. However, with COVID-19, modelling predictions that support lockdown have been presented and accepted as the singular truth. Other equally plausible interpretations querying the lockdown rationale have been condemned or ignored. Countries like South Korea, Taiwan, Sweden and Germany, which have adopted different approaches to COVID-19, have been set aside as anomalies or, in some cases, even had their data on mortality rates questioned.

In India, where transmission and mortality rates have so far been very low relative to population size and density, the dominant narrative is that this is an indicator of inadequate monitoring and reporting, or because the country is yet to experience a peak. There is a reluctance to engage with other explanations.

### Some lives only

Why has the lockdown solution become so entrenched? Is it because the debate became inaccurately framed as a conflict between the economy and human lives, when in fact, as one writer pointed out, it is actually a conflict between some lives and other lives? Or does it have to do with the pathogen and disease itself? Is it because those of us in the middle and upper classes are not accustomed to the risk of catching and dying of communicable diseases?

Epidemiological transitions have meant that communicable diseases have become strongly associated with poverty. To be then suddenly faced with a contagious disease that can kill and that cannot be avoided with better nutrition and living conditions must be deeply unsettling. Money and social privilege have temporarily lost their protective function – the list of high-profile people affected by COVID-19 includes Idris Elba, Prince Charles and Boris Johnson.

This situation is further complicated because it appears that many infected people are asymptomatic but can nevertheless transmit the virus. So, suddenly, everyone is at risk and everyone poses a risk – even if being infected does not always lead to disease, and even if having the disease is unlikely to cause death. It is not really possible to develop a public health strategy that selectively protects only those who are vulnerable – because we don't know who is likely to be vulnerable.

Perhaps this explains why COVID-19 has generated so much fear among the wealthy and the middle classes even though its impacts and death toll pale in comparison to diseases of the poor such as diarrhoeal disease and tuberculosis, each of which kills around 1.3 million people every year. Perhaps this explains the lack of resistance to the 'There Is No Alternative' to lockdown narrative.

Some of its strongest advocates, such as hedge fund billionaires, are from sections of society that have always spoken against state investment in public health. Lockdown has made visceral sense to those of us who by virtue of belonging to the middle or upper classes have not really known – until now – what it means to have one's health vulnerable to factors outside one's perceived control.

With COVID-19, we have become acutely aware that our health is tied to others, and to what the state does or does not do. We want the state to take 'strong' measures that protect us from the rest of society, the rest of humanity. The poor have always known this – that their health is not within their control; that the choice is between drinking no water at all and drinking contaminated water. But their lives have not mattered enough to generate the kind of state-led action that COVID-19 has.

### Personal stakes

Perhaps this is why, barring some exceptions, those who have spent their lives investigating health inequalities now seem oblivious to how only one data interpretation has been favoured in the media and by thought-leaders, and others rejected as anti-science. Perhaps we have suddenly lost our capacity for critical reflection because this is an issue in which we have personal stakes. After all, lockdown benefits 'people like us', a minority of humankind, even as it actively harms the rest.

The irony is that those who benefit from lockdown do so only because there are others who aren't going into lockdown and who continue to face the risk of infection. In our deeply interconnected societies, every minute aspect of our everyday lives – from food and water to electricity, phone and internet connections, sewage systems and waste management services, and medical supply chains – depends on the work of other people who, more often than not, are those in low-income occupations. We may cheer them from the safety of our homes on Thursdays or Sundays, but we lose no time in also shaming them for their 'irresponsible behaviour' for being out on the roads or in public spaces.

So, what is the alternative? How can we address COVID-19 in ways that don't further marginalise and harm already vulnerable people?

The first step is to overcome the 'There Is No Alternative' loop. Looking beyond lockdown will enable more careful engagement with the evolving science on the disease, the experiences of countries that have considered alternative approaches, and the regional variations in the prevalence and impact of the disease.

Crucially, we must foreground fundamental ethical issues. At this juncture, it is simply not enough to call for better social security measures – all that does is to displace blame and responsibility in time and space. We must instead ask hard and immediate questions about whether it is right to expect the poor to shoulder the burden of measures that don't really protect them, and worse, can actively harm them.

More specifically, we could examine a strategy that is based on voluntary measures: trust people to decide whether the risks of contracting COVID-19 are higher than the risks of starvation or being beaten to death or dying of some other disease; back it up with the necessary social security interventions so that they have real choices. This is crucial, because no matter how serious a threat the novel coronavirus might pose, there are people everywhere who face and have always faced far greater threats to their lives, health and well-being. We need to think beyond pathogen and infection and act for health.

Last week, I was at a grocery store in Edinburgh when a woman came in to do her shopping wearing a mask, visor and gloves. The elderly shop assistant of South Asian origin smiled kindly at her and said in broken English: "You are very afraid? We are all going to 'go up' one day, you know?" This to me captures the essence of the huge social divide that characterises the dominant response to COVID-19.

The writer is a lecturer in Human Geography at the University of Edinburgh.



Is the debate inaccurately framed as a conflict between the economy and human lives, when, in fact, it is between some lives and other lives?



IN CONVERSATION

# 'What unites us is our mortality'

U.K.-based Indian author Anita Roy describes her latest novel, *Gravepyres School for the Recently Deceased*, as a book about death that is the polar opposite of morbid

• RAMESH SHARMA



way to talk to children about it in a way that dealt with the mystery, the wonder, the grief of that extraordinary fact.

It seems to me that many more writers for children and young adults are tackling 'dark' and difficult subjects than perhaps they were in the past. Or maybe it's just that these are more foregrounded and explicit? I'm not sure. One thing I do know, though, is that it is hugely important how stories like this end. Adults might know that there are no 'happily ever afters', but children need them.

Even (or perhaps especially) if a book is dealing with difficult issues – such as death – the child must be left with a feeling of hope, of something ultimately positive: it fosters a kind of moral compass in a growing soul in a young body. At the most obvious level, baddies get their comeuppance, the goodies win. But at a more subtle, emotional level, I think it also delivers a sense of closure, of having gone through something and been changed by it, and come out the other side, whole and intact.

I needed to find a way to end Jose's story that didn't fudge the issue of death's finality, just because my readers would be mostly children. What I hope is that readers will find the ending a bit heartbreaking but genuinely uplifting. It's a book about death that is the polar opposite of morbid.

**The afterlife depicted in the novel is a harmonious mix of English, Arabic, Hispanic, Indian, French characters. Is the kingdom of death an ideal republic?**

■ Yes! It kind of is. After all, what unites us all is our mortality: it's the great leveller. I guess, also, I wanted it to reflect the multiple cultures that we all carry around inside us. Today's kids juggle so many different languages, jokes, references – it doesn't make any sense to me to try and separate them out.

For me, *Gravepyres* is a genuinely 'multicultural' book reflecting the way that most urban kids live in a multilingual universe. Indian children, I think, are very comfortable with a whole range of different accents, styles, languages and assumptions, maybe more so than children in the West.

Also, as the daughter of an English mother and an Indian father, I've always had this rich mix of cultures in my blood. I guess that naturally comes out in how I write. And what makes me laugh.

**"No-brain, meat-poisoning, concrete-loving uglifiers" – I found this definition of human beings by vultures rather apt. Do you think children will understand what you are getting at here?**

■ They might not get the reference to 'meat-poisoning' – that's something that would make perfect sense to a vulture, given the history of diclofenac. But that's okay. I think that there are things in the book that adults will 'get', and that might by-pass children, or that children will enjoy rediscovering when they're a bit older... you never know!

But as for El Condor's general sentiment: oh, they'll get it alright. They only need to look around. The younger generation is far more ecologically and environmentally aware than perhaps we give them credit for – and that's thanks in large part to all the work done by so many people across the world, from Extinction Rebellion to Greta Thunberg to David Attenborough to all the teachers and parents who talk about climate change and biodiversity loss to their kids. It's become mainstream now in a way it wasn't just a few years ago.

And at this point in history, no one can afford not to. The number of people who have died due to Covid-19 is rising. Families across the world are having to have difficult conversations, about mortality and death, loss and grief. Perhaps in this light, sleight of hand, this strange story might open that conversation up, and make it a little easier.

**The vultures are pivotal here – Perveen Pestonji Peckerwala and El Condor Pasa, the talking vultures, are endearing characters. Are they meant to make children know and love this avian species that we have pushed to the verge of extinction?**

■ I love the fact that the Latin name for New World vultures is Cathartes, from the Greek *kathartes* meaning 'purifier', from whence the word 'catharsis'. Vultures have a really bad image: they're seen as 'preying on the unfortunate', as harbingers of death and disaster, as 'dirty' and evil birds, but actually they are purifiers. In cultures the world over, vultures hold a very special place as messengers between the worlds of the living and the dead – and that's their role in my story too.

I love vultures: they are amazing, powerful birds. When I got to actually feed and fly them a couple of years back at the Hawk Conservancy Trust in Andover, U.K., I fell in love with them even more.

I hope that Perveen and El Condor will inspire youngsters to see these beautiful and critically endangered birds in a different light.

Anusua Mukherjee

You can safely expect the unexpected if you are reading any of Anita Roy's books for children. With their sassy 'no-kidding' attitude they treat children like equals, talking with them rather than down to them. Her latest, *Gravepyres School for the Recently Deceased*, is sort of Alice in Wonderland meets Harry Potter, but set in the afterlife, the kingdom of the dead. In this email interview, Roy discusses her novel's themes: nature, the role of humans in the natural world, and mortality:

**In *Gravepyres*, you are confronting and asking your readers to confront their mortality. What is your concept of children's fiction? Does it need to 'grow up', deal with lived realities, rather than shelter children in an unchanging bubblegum world?**

■ Confronting your own mortality is one of the hardest and most important things anyone can do, at any stage of their life. It's not something to be undertaken lightly – but I wanted, with this story, to find a light



In cultures the world over, vultures hold a very special place as messengers between the worlds of the living and the dead – and that's their role in my story too



Living influence Hippocrates fridge magnets on display. • GETTY IMAGES/ISTOCK

LEATHER BOUND

## Observe, detect, eliminate

Ever wondered how the word 'pandemic' entered modern medicine? We owe it to Hippocrates, the ancient Greek physician

The poem, 'Musaddas of Hali', opens with someone asking the famous physician, Buqrat, to enumerate the fatal diseases. He says that there is none for which there is no cure, except one – the apathy of communities. It is a must-read poem, available in translation. However, we are not discussing the poem here but the physician referred to in the opening lines.

Buqrat is the name by which the Arabs knew Hippocrates, the doctor of medicine who lived around the time of Plato and Socrates, and the Buddha – that is to say, about 400 years before Christ. Modern medicine is actually very modern. Till two centuries ago, even Europe had no idea how the body really worked, how diseases were caused and what cured them.

Treatment was not very different, in say the 1700s, from what it was a thousand years before it. Hippocrates' theory of the four humors was widely accepted as science and passed down over two millennia.

Scientific outlook

The humors were blood, black bile, yellow bile and phlegm: the body was healthy when these four were in balance. When physicians bled people to cure them, they were trying to restore the bodily balance as per the Hippocratic formula.

It is because his theories survived this long that his impact can still be felt even though the 'science' he advocated has been outmoded. To Hippocrates we also owe the word, 'crisis'. It literally means the moment of progression in the disease when the patient would either die or recover (the word, 'critical', in its medical sense, is derived from 'crisis'). Modern medicine has many Greek words – 'chronic', 'epidemic', 'endemic', 'gynec' (woman), 'cardia' (heart), 'ophthalmos' (eye), 'ped' (child) – because of Hippocrates.

Hippocrates is said to be the first individual in Europe to separate medicine from religion. Before him, the ill were sought to be cured by propitiating the gods through offerings. Hippocrates brought the scientific outlook to medicine and, of course, to morality. The Hippocratic oath requires doctors to

practise ethically and abstain from euthanasia (which is also a Greek word).

The works that have been left behind by Hippocrates, or at least those that are attributed to him, have titles like 'On ancient medicine', 'On fistulae', 'On haemorrhoids', 'On injuries of the head', 'On ulcers', and so on. This suggests his scientific manner of acquiring knowledge and his classification of ailments based on how they affected individuals.

Tonic for the soul

Here in an excerpt from his series on phrenitis, an inflammation of the brain: "Case 4: In Cyzicus, a woman who had brought forth twin daughters, after a difficult labor, and in whom the lochial discharge was insufficient, at first was seized with an acute fever, attended with chills; heaviness of the head and neck, with pain; insomnolency from the commencement; she was silent, sullen, and disobedient; urine

thin, and devoid of color; thirst, nausea for the most part; bowels irregularly disordered, and again constipated. On the sixth, towards night, talked much incoherently; had no sleep. About the eleventh day was seized with wild delirium, and again became collected; urine black, thin, and again deficient; and of an oily appearance; copious, thin, and disordered evacuations from the bowels. On the fourteenth, frequent convulsions; extremities cold; not in anywise collected; suppression of urine. On the sixteenth loss of speech. On the seventeenth, she died. Phrenitis."

We can see here his attention to detail, which lies at the root of the modern method of systematic observation leading to diagnosis. And so while his cure are now behind us, much of Hippocrates' method still remains.

As with most things related to ancient Greece, his works were lost and would have remained lost if it had not been for the Arabs, who revived the tradition of Greek medicine. Foremost among them, though he was Iranian in origin, was Ibn Sina, and it was through his work that the Hippocratic tradition was carried on for seven centuries, almost till the beginning of modern medicine.

It is to him that we Indians owe the cooling drink, Rook Afza, the tonic for the soul. And we are familiar with 'Yunani', a corruption of 'Ionian', meaning Greek and acknowledging its antecedents.



Aakar Patel is a columnist and translator of Urdu and Gujarati non-fiction works.

SHORT STORIES

## Creatures of blood and bone

The children in these stories are dauntingly real, and you feel their pain

Pragati K.B.

Reading the 14 stories in this collection can be an exercise in gathering beautiful anthropomorphic metaphors.

Sample this: "The road, well-fed and shapely, pushes its way into the village at one end and comes out the village at the other." And this: "Shyamnanda Road going all the way, suddenly changing its mind, had taken on the alias of Bakulbagan some time ago." The book, translated into English from Bengali by Rani Ray, abounds with such parallels.

There is a story for everyone in this collection: a languishing artist, a failed writer, an anxious mother, a dutiful son, an abandoned child. Anita Agnihotri crafts universal characters that evoke raw emotions, even if the settings are unfamiliar.

In a letter to Jawaharlal Nehru, Maulana Azad called translation a "kind of blood transfusion", that makes "a clear kinship between men of different cultures, countries and ages". I felt this kinship in the form of a lump in my throat as I read about little Polu trying to reach his wailing mother with a stick taken out of a broom on the day of his father's funeral, or Bhagyi reasoning simply that those who had parents slept on cots, while those like her who didn't, slept below. Agnihotri's children are dauntingly real, and you feel their pain.

Agnihotri's non-linear narratives work for the most part. She does not introduce her characters but makes the reader piece together the personalities and circumstances. Physical spaces in these stories are more than spatial settings – they refreshen events and reflect emotional states. For instance, a dilapidated auditorium mirrors failed aspirations, the oppressive heat from a sculptor's furnace melts pent-up emotions, a kerosene lamp throws up shadows of an eerie past and the "watery skirt of a brimming Bhargavi" speaks of a thriving trade. The author cleverly plants these clues as premonitions to the impending climax, which is served hot, cold or warm.



**A Day in the Life of Mangal Taram**  
Anita Agnihotri, trs Rani Ray  
Niyogi Books  
₹395

THRILLER

## The Calcutta cult

A plot that loses its way in the preoccupation with a fictionalised right-wing organisation

Ankush Saikia

Young girls are being killed and their hearts removed, and the bodies left lying all over Calcutta. Inspector Pradeep Batabyal and ACP Ashutosh are soon on the trail, but they are not the only police team involved.

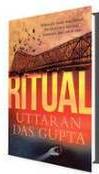
The inspector, who is the narrator as well, has secrets of his own to contend with, while the ACP faces opposition from his superiors. The ACP is also having an affair with a married woman whose house has a shrine dedicated to a yogi who is the leader of a religious organisation called Vasant Sena.

Trying to get across a message can be the surest way to kill a good story, and in a crime novel what is paramount

is the plot itself. Like Dibakar Banerjee's movie, *Detective Byomkesh Bakshy*, which seemed to lose track of the mystery in its attempt to recreate wartime Calcutta, *Ritual* tends to gloss over the complications of the plot in its preoccupation with what we are told is a sinister right-wing organisation, the Vasant Sena.

The Sena is obviously modelled on the real-life Ananda Marga, a cult-like organisation founded by Prabhat Ranjan Sarkar in 1955, and which became well known after the 1995 Purulia arms drop case. There is even a reference to

the infamous Bijon Setu massacre in Calcutta in 1982, a fallout of the tussle between the Marga and the ruling Marxists. *Ritual* could have done with more on the politics of the conflict between the Left and the Marga/Sena. The narrative-style story, with its multiple strands, often tends to put the action at a distance.



**Ritual**  
Uttaran Das Gupta  
Pan Macmillan  
India  
₹350

The book moves along at a fair clip though, and Uttaran Das Gupta, who is also a poet, is good at recreating the atmosphere of a rain-soaked decaying city steeped in history. *Ritual* is a welcome addition to the Byomkesh Bakshi and Feluda detective series, at least for readers outside Bengal.

The reviewer is the author of *The Girl from Nongrim Hills*.

BROWSER

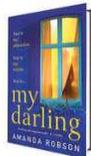
Afterlife

Julia Alvarez  
Algonquin Books  
**Price not mentioned**  
Antonia Vega, an immigrant writer, is devastated by her husband's death. Then she finds a pregnant, undocumented teenager on her doorstep. Antonia has always sought direction in literature but now she finds that the world demands more of her than words.



My Darling

Amanda Robson  
HarperCollins UK  
**₹726.38 (Kindle price)**  
In this domestic thriller, a woman watches the new couple who move in next door. She starts mistreating the wife when she blacks out after an evening at their place. Then she hatches a plan to make them both pay.



The Mercies

Kiran Millwood Hargrave  
Picador  
**₹699**  
Lifetimes of hardship have toughened the women of the Arctic town of Vardo in Norway. Absalom Cornet, who had conducted witch trials in Scotland, arrives in Vardo with his wife, Ursula. While Ursula encounters independent women for the first time there, Absalom sees only a goddess place.



The Numbers Game

Danielle Steel  
Macmillan  
**₹575 (Kindle price)**  
Eileen had set aside her career dreams to raise a family with her husband, Paul. When she discovers that Paul is having an affair, she begins to question her sacrifice. Ultimately, both Paul's girlfriend and Eileen decide to chase their own dreams, discovering new worlds.



TRAVEL

# Looking back in time

A probe into an ancestor's history sweeps across the subcontinent before finding closure in Kathmandu

K.C. Vijaya Kumar

A journey back in time can either gift nostalgia or stir ghastly skeletons within ageing cupboards. It is an exercise fraught with risk but Kief Hillsbery, keen to trace a distant uncle, removed by multiple generations, is a strong individual.

Armed with curiosity and a deft pen, Hillsbery launches a quest for knowledge and closure. He wants to be fully aware of what his long lost ancestor Nigel Halleck did in the era of the Raj. Nigel, a clerk with the East India Company, lived in British India from 1841 and after eight years vanished into Nepal. The family never heard from him after that.

Into the past

Undaunted by the cobwebs of time and fresh boundaries that cleaved South Asia, Hillsbery persisted and the result is *The Tiger & the Ruby*, a book that leaps between the 1840s, and the 1980s and '90s when Hillsbery searched for clues, read his family tree and criss-crossed the Indian subcontinent.

The narrative oscillates between flashbacks and the present while Hillsbery reconstructs a personal history, banking on frayed letters that Nigel wrote to his relatives and the gifts he sent across. It is an arduous task but Hillsbery never flinches. And just as he learns about Nigel with a set of clues besides probing oral histories across Afghanistan, Pakistan, India and Nepal, the author not only paints a picture of his uncle but also about the various facets of the Empire where the sun never set.

The questions come thick and fast. Was Nigel a renegade, a spy, a jewel thief or a double-agent? Or was he just a simple man shocked with the excesses of the ruling class and sought to distance himself from administrative ennui? Hillsbery finds his answers and those life-truths enhance the halo around Nigel.

British tentacles

In the early part of the book, there is a Thomas Macaulay quote about the East India Company: "It is the strangest of all governments but it is designed for the strangest of all empires." Into this beguiling land, Nigel seeks his modest fortunes, gets aboard a steamer, takes a break in Egypt and eventually Calcutta looms large: "Newer than New York, richer than Rome, more populous than either, revealing itself in a sweeping panorama that took your breath away."

Thus started Nigel's career that allowed him to travel from Dhaka to undivided Punjab. He made notes, kept accounts and became part of the British tentacles that spread far and wide. Nigel struck a set of friendships, ranging from the munshi, who taught him Indian languages, to royalty, be it in Kabul or Kathmandu.

The 'bloodletting or barbarism' of those ancient days did not faze Nigel, and Hillsbery makes a startling discovery of matters of the heart that eventually sealed the deal for his uncle. Nepal was the last post because isn't the heart an organ of fire and what better way to live than to listen to it? If you love history and sepia-tinted memories, this book could prove ideal.

MEDICINE

# Once in a century pathogens and a coronavirus

A lucid account of how the world has travelled from the 'Spanish Flu' to COVID-19 and what this latest virus does to the immune system

Jacob Koshy

Sometimes, merely re-arranging a word can convey its import – for instance, pandemic's etymological roots are Greek but its anagram can also be 'Med Panic'. It's understandable why those afflicted by the disease are afraid and that is why the doctor – other than being a fount of expertise and experience – also has the responsibility to allay fears and help individuals and families heal. But what happens when doctors themselves are in disarray?

The modern history of viral contagions shows that pandemics are those catastrophes when health care professionals are overwhelmed while doing their job. As they also

try to save themselves, they become unwitting amplifiers of disease and turn into objects of fear – as numerous videos of doctors and healthcare workers being harassed attest to. This, however, is precisely the time when one must trust medicine, the best system we have so far in tackling disease. While there appears to be no respite from COVID-19, two doctors and a clinical psychologist have come together to provide a lucid and exhaustive account of the virus, SARS-COV-2, which causes COVID-19, responsible for the global blight.

Mode of action

For non-specialists looking to understand how the world travelled from the 'Spanish Flu' of 1918 to COVID-19,

*The Coronavirus* by Dr. Swapneil Parikh, Mahera Desai and Dr. Rajesh Parikh is a racy account of the rise and fall of the Asian Flu of 1957, The Hongkong Flu Pandemic of 1968, a segue into the early origins of HIV and of course, the SARS outbreak of 2002-03 among others.

There's an excellent explanation of the virus's mechanism of action, and how it manages to dive deep into the lower respiratory tract, multiplies silently until its 'discovery' by the immune system. It's in the degree of the response, when the immune system itself hispanic mode that it launches a frenzied attack which, in more ways than one, can result in overkill.

This severe respiratory disease can end up being detrimental to the

aged, those with diabetes or cardiovascular disease, or have a history of smoking.

What's in a name?

There's illuminating background on David Tyrrell, an English virologist who investigated the common cold. Between 1964-66 Tyrrell and his colleagues discovered – and led others – to discover a slew of viruses that appeared to be responsible for the cold and, intriguingly, he did this by culturing viruses and infecting – under controlled conditions – healthy volunteers.

The viruses so found appeared to have a 'crown' and so, they were christened 'coronaviruses'.

Tyrrell laid the ground for work on coronaviruses that specifically in-

fecting other mammals and those specific to birds and bats. He also found, early on, a virus that infected humans and was made of a combination of a bird bronchitis virus and a mouse hepatitis virus.

The most evocative parts of the book are anecdotes on doctors, who then as now, sometimes battle ridicule and oppression when they unravel an aspect of disease.

Anecdotes on doctors

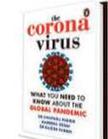
There's Ignaz Semmelweis, a Hungarian obstetrician, who found a measurable dip in two clinics, where women were delivering their babies, by the simple act of doctors washing their hands. In spite of demonstrating this at multiple hospitals he was ridiculed – colleagues couldn't bring

themselves to believe that they may be harbouring and transferring germs from other operations because they didn't believe in hand-washing.

This was before the discovery of germs and that they purveyed disease. Semmelweis died in a lunatic asylum, of a bacterial infection.

Cut to 2020 and there's a chapter on Dr. Li Wenliang, who had first told the world via WeChat of the discovery of possibly a new kind of coronavirus.

Li faced public humiliation for this and was made to apologise for leaking this information. While treating a patient who had caught the infection from a Hunan wet market, Li himself fell sick and died. He was only 34 years old.



**The Coronavirus: What You Need to Know about the Global Pandemic**  
Dr. Swapneil Parikh, Mahera Desai, Dr. Rajesh Parikh  
Ebury Press/PRH  
₹188

ECONOMY

# Hurdles to India's growth

NTI Aayog's former vice-chairman Arvind Panagariya critiques the economic policies of premiers from Nehru to Modi, and pushes for strong reforms

Puja Mehra

Arvind Panagariya was the vice-chairman of NTI Aayog from January 2015 to August 2017, the crucial initial years in which the Narendra Modi government's economic policy agenda took shape. He was hand-picked by the Prime Minister for building a new institution to replace the Nehruvian vestige, the Planning Commission.

When an insider who has been the senior-most economist in government writes a book, readers expect sharp insights into personalities and the working of the system. Panagariya's new book, *India Unlimited: Reclaiming the Lost Glory*, disappoints on this count. It does not deepen our understanding of India's political economy.

Believers in socialism

The book's main argument is an oversimplification: Economic policies of Pandit Nehru, Indira Gandhi and decades later Sonia Gandhi, all believers in socialism, gave the economy its growth-obstructing characteristics, and the people and the political class a distaste for markets. Decades after Nehru and Indira Gandhi's deaths, their socialist beliefs still hold sway over even Indians, the bureaucracy and the Bharatiya Janata Party.

The evidence and analysis for making this case is rather thin. A footnote stands out in particular. It documents scepticism towards pro-market reforms the author encountered in an engagement with students of St. Stephen's College, Delhi.

The author writes that while BJP leaders still draw inspiration from socialist ideas, Modi, an exception in a nation populated by socialism devotees, is reforms-minded and appreciates the role of markets. If his thinking has not guided his government's policies, it's because the bureaucracy is sold out to socialist beliefs and there is no luxury of moving around non-performing officers. To break the mould, stock solutions for reforming the bureaucracy are offered: specialised training, introduction of competition to the top civil service and greater number of non-IAS hires.

**India Unlimited: Reclaiming the Lost Glory**  
Arvind Panagariya  
HarperCollins  
₹799

**Praise for Rao**  
Modi receives lavish, unqualified praise through the book. P.V. Narasimha Rao and A.B. Vajpayee get similar treatment. They are great liberalisers that broke ranks with the socialists to reform the economy with assistance from able teams of bureaucrats. Roles played by other individuals are not acknowledged. Manmohan Singh, whose government awarded the Padma Bhushan

to the author in 2012, Arun Shourie and Yashwant Sinha – absolutely no one has impressed the author. A soft corner for Rao is discernible; the Congress party's coldness towards him finds mention repetitively.

Unanswered questions

Of the many questions that the book leaves unanswered, the most striking is: Why have world renowned free-market economists decamped Modi's government, even as IAS officers with Ph.D.s in economics from Ivy League colleges and a record of pushing reforms in previous governments are being repatriated to their respective States?

One of the avoidable inaccuracies is the book's insistence that the Finance Ministry and the Reserve Bank of India (RBI) were negligent of the Non-Performing Assets (NPA) problem until 2017. A speech (available on the RBI's website) in Delhi on June 22, 2016 by then RBI Governor Raghuram Rajan clearly delineates the NPA problem and discusses the steps taken by the central bank since April 2015 to address it.

Where the book succeeds is policy critiques. Prime Minister Modi's policies are not spared – from the reversal of trade liberalisation, return to protectionism and import substitution to the preference for a "strong rupee". The misguided use of the Goods and Services Tax (GST) to pursue the equality objective is discussed. But again, Modi gets no part of the blame for the muddled thinking in his government, although

Nehru, Indira Gandhi and Sonia Gandhi are continuously hauled over coals.

The author lucidly explains unintended consequences of well-meaning policies crafted under pressure from lobbies and costs the infrastructure deficit places on the economy. The progress at "snail's pace" of projects such as the Delhi-Mumbai industrial corridor is highlighted. The strongest sections are the ones on trade policies.

Common minimum wage

The opening section lays out the book's central objective: to present reforms for reclaiming India's "lost glory". To the current discourse on the topic, it brings much-needed perspective that often escapes lay people. India's large share – about a third – of the world GDP from AD 1 to AD 1000 is only to be expected, given the principal driver of GDP was the relatively large population.

The policy briefs prescribed range from increasing the target level of inflation for monetary policy, moving rural Indians from farms to factories, rehabilitation and redevelopment of urban slums, setting a common minimum wage applicable for all kinds of skills, to privatisation of public sector banks and other government-run enterprises. Social and public institutions have a marginal role to play in the scheme proposed.

The reviewer is the author of *The Lost Decade (2008-18)*.



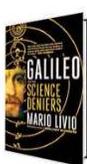
Mobilizing the Marginalized

**Amit Ahuja**  
Oxford University Press  
₹550  
With research across Maharashtra, Tamil Nadu, U.P. and Bihar, Ahuja argues that for the marginalised, social mobilisation undermines the bloc voting their ethnic parties rely on for success. He presents evidence that a marginalised group gains from dividing support among parties.



Galileo and the Science Deniers

**Mario Livio**  
Simon & Schuster  
₹599  
A historical biography on the life of Galileo Galilei gives a glimpse into the life of "a man who was intellectually radical and well ahead of his time." Through Galileo's life, Livio argues that the distinction that we make between the sciences and the humanities is damaging.



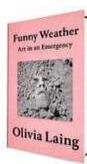
2062: The World that AI Made

**Toby Walsh**  
Speaking Tiger  
₹499  
In the book, the author has painted a compelling picture of how AI has progressed so far and also discusses how it is likely to keep expanding and improving – which he analyses as a shift from the dominance of the homo sapiens to the homo digitalis.



Funny Weather: Art in an Emergency

**Olivia Laing**  
Pan Macmillan  
₹599  
In this collection of essays, Laing makes a case for why art matters, especially in the turbulent 21st century. She interviews Hilary Mantel and Ali Smith, writes letters to musicians, explores loneliness and technology, and women and alcohol.



FIELD NOTES

Spring festivals like Bihu and Mopin have come and gone, but everywhere there's an eerie silence. Lockdown scenes from the Northeast

# No new year's day to celebrate

**G**uwahati: It's taken an invisible invader to make the Assamese do the unthinkable – skip the grand Rongali Bihu celebration of April. Even in the worst years of insurgency and agitation, celebrations used to be low-key but alive. The *Bihutoli* or Bihu festival has been an annual fixture at Guwahati's iconic Latasil field since 1952 and as Kailash Sarma, member of the Latasil Bihu Committee, says, "Work on erecting the stage would have started from mid-March." With no workmen hammering away, the silence in Latasil is eerie. Just a month ago, the field was abuzz with protestors agitating against the Citizenship Amendment Act (CAA) and questioning the National Register of Citizens (NRC). Guwahati, in fact, has been under intermittent curfew since December. On March 21, when the nationwide lockdown was announced, the fears about COVID-19 seemed to edge out the tension over CAA and NRC. Now, they exist in tandem, feeding into each other.

The 19.06 lakh people out of 3.3 crore applicants who were excluded from the NRC list were supposed to get rejection slips so that they could appeal at the Foreigners' Tribunals within 120 days. Jochhon Ali, a farmer from Goraimari, 75 km east of Guwahati, is still waiting for his slip as are many others.

The process was delayed first in February, when the Assam government started replacing some 55,000 officers who had been handling the NRC exercise. Then the pandemic came, pushing the date



**New normal** (Clockwise from left) Commute by elephant: scene from a Guwahati street; policemen wearing masks made of the traditional Assamese gamosa during Bihu; migrant workers take part in Easter service at a relief camp in Shillong.

• RITU RAJ KONWAR & SILVESTER PHANBUH

further. "The next phase will be taken up when the situation improves," says Hitesh Dev Sarma, State NRC Coordinator.

Adding to the unease of people like Ali is the economic crisis. The marketing of paddy, the major crop for some 27 lakh farmer families, has been affected because villages have erected bamboo barricades, not letting outsiders in or inhabitants out.

Officers say the lockdown, if prolonged, could change the sowing-harvesting cycle of the winter crop. Vegetable farmers are worst off, hit when transitioning from winter to summer crops.

A bigger worry for farmers, a majority of them Muslims, is a possible economic boycott because of the widespread perception that Tablighi Jamaat participants brought the virus into Assam. "It has given them a new stick to beat Muslims with," says Aman Wadud, a lawyer who works pro bono on NRC appeals.

Meanwhile, Assam's already ailing tea industry is reeling; the lockdown came at the peak of the first flush. "This translates into a 10-15% production loss, not to speak of a long-term cumulative impact on the 800-odd large estates," says Sanjay Jain of Assam Company India Ltd, the oldest tea estate group here.

Gopal Krishna Khound, president of Assam Small Tea Growers Association, echoes this, "Tea is the backbone of Assam's rural economy, sustaining 1.8 lakh small tea growers and 10 lakh workers. At this time, we would have been pruning



and cleaning the bushes, which would have sprouted new leaves for the second flush. The second flush yields the best harvest, and fetches the best price. If work is not resumed soon, we will be set back by at least six months." A few estates opened on April 11 with 50% workforce, and some others have followed suit after Bihu.

Assam is the conduit for supplies to the Northeast. The other States are on tenterhooks, but Subhanan Chanda, spokesperson of Northeast Frontier Railway, says they are ensuring that the region doesn't suffer from shortages.

"From March 23 to April 4, for instance, the Indian Railways brought in 1,342 wagons of sugar, 958 wagons of salt and 378 tanks of edible oil," he says.

But distribution has not been smooth, with Arunachal Pradesh and Meghalaya alleging that trucks are often obstructed at the borders or diverted. Right now, reassurances are all they have.

**Shillong**  
The Jawaharlal Nehru Stadium complex in Shillong is synonymous with raucous football matches, rock concerts and festive celebrations. These days it is home to some 400



migrant labourers, chiefly from the nearby Garo Hills and Assam, left stranded after the lockdown. Many such makeshift camps have come up all over town. College student Tengrik Sangma, 21, is one of the volunteers working at the stadium camp. "I help with translations and in distributing meals. We are also cataloguing their addresses to help during repatriation."

Sangma and his team also organise activities. For instance, following the Meghalaya Chief Minister Conrad Sangma's appeal to the citizens to take part in a State-wide prayer on Easter evening, the boys' hostel building in the stadium grounds erupted in boisterous song and applause. Everyone took part in an impromptu orchestra organised by the volunteers.

In another relief camp in the old NIFT campus not far from the stadium, a few young men play volleyball while policemen stand guard at the gate. Kumar, a migrant worker from the Rabha community of Assam, is staying here. "I work as a waiter in a restaurant. After we closed down, I tried to get back home but, well, here I am now."

Just as the State looked forward to the initial lockdown phase to end, the first COVID-19 positive case was reported on April 13, and more have come up since. Shillong would have been bustling with tourists at this time of year with its blue, sunny skies, sudden showers and nippy evenings. While nature has dressed up as usual, hotels, lodges and cafés are shut and the streets deserted. This emptiness is almost becoming

the new normal. Even before COVID-19, the anti-CAA protests had put a dampener on the city, and February's border violence had reverberated in Shillong as well.

People are now getting used to the cycle of full lockdown days alternating with 'shopping' days, when long queues snake down the narrow streets.

**Itanagar**  
The recipe is quite simple, but there is art to making amin, the risotto-like signature rice dish of the Ghalo people of Arunachal Pradesh. It's a must-have during the annual agricultural festival of Mopin, which marks the beginning of the sowing season. This year though, things are different.

The lockdown has resulted in food supplies falling short. Essentials like groceries and vegetables are available, but regulated shopping hours and panic-buying means that by noon most shops are empty. As a result, many families have gone without amin this year or have made modifications to the traditional dish.

A key ingredient in amin is chicken, diced into small pieces. "We used soya chunks instead," says Itanagar-based artist, Kenjum Angu. Marli Kamki, a former student leader, is thankful that he could at least get his bottle of poka, the traditional beer made from rice, roasted rice husk and yeast.

Most supplies to Itanagar and surrounding towns come from Assam. After the first COVID-19 positive case was reported there, the Arunachal government barred the entry of vehicles, which meant vegetables could not come from Assam. On April 3, the deputy commissioner of Itanagar and adjoining towns also banned the import of fresh vegetables.

So, Itanagar is staring at shortages, with several grocers saying they are selling stocks purchased earlier. "We might soon be surviving just on potatoes," says a woman who runs a general store.

In Arunachal Pradesh's interiors, hunting is still a tribal custom. On February 27, the State forest department issued a directive banning the hunting and selling of wild animals and birds after rumours that COVID-19 may have come from bats. With civets often hunted for meat by tribes, the threat of cross-species infection was feared. This ban is also affecting traditional tribal diets.

Rahul Karmakar from Guwahati, Silvester Phanbuh from Shillong and Ranju Dodum from Itanagar.

GREEN HUMOUR BY ROHAN CHAKRAVARTY



www.greenhumour.com / rohanchakravarty@gmail.com



• GETTY IMAGES/ISTOCK

PASSING BITE

# An epidemic of lies

Historically, most of our leaders have had a carefully stingy relationship with the truth

**A**t the time of an epidemic or pandemic, we try and protect ourselves by keeping away from the germ or virus that is spreading. We take precautions and attempt to keep within reach of available vaccines. And then we hope for the best.

Our minds and all our time today have been taken up by COVID-19, which is a physical virus. But what are we to do about the quickfire spread of a virus that is mental, psychological, and that directly attacks our moral health?

**Banana republic bizarreness**  
When people look back and examine this period, it's quite likely they will say that the COVID-19 virus attacked India at a time when we were already

reeling under a deadly epidemic of lies generated and spread by the very institutions meant to protect the republic and its people. Future historians will be able to trace the 'community spread' of this epidemic and map its dreadful progress step by step.

For instance, the police in India have always been open to using brutal force against anybody vulnerable, never mind legality or fairness. For decades, governments have misused their control over the police and security forces, and other arms of the state have helped to slide this collusion under the carpet.

From time to time, police forces have also enthusiastically framed and jailed people falsely when they are deemed enemies of the state. Now,

over the last few years, the unholy nexus between law enforcement and communal bias has become an openly celebrated marriage blessed by an increasingly partisan judiciary.

Today, we see a great triumph of this banana republic bizarreness as Sudha Bharadwaj completes a whole

**When people look back at this period, it's quite likely they will say that the virus attacked India at a time when we were already reeling under a deadly epidemic of lies generated and spread by the very institutions meant to protect the republic and its people**

year in jail, and we see Anand Teltumbde and Gautam Navlakha being taken into custody under the same Unlawful Activities (Prevention) Act. We, the public, are simply asked to have faith in the far-fetched police accusations against these notable public activists.

**Children's story**  
The children's story we are being told to believe goes like this: 1) We can't show you any real proof, but we believe these activists are not only Maoist sympathisers but enablers; 2) Because we are in police uniform, you must believe us when we say that Maoists, who in 50 years of activity have never once had the courage of their rhetoric to attack any religious fundamentalist group, Hindutva or Islamist, and who have rarely overreached themselves strategically, are now planning an attack on the most heavily protected man on the subcontinent, the Prime Minister.

Historically, most of our leaders have had a carefully stingy relationship with the truth and with the public sharing of it. Now, that tenuous relationship has completely collapsed, with brazenly fictitious political proclamations being propped up by a totally servile media.

In a real democracy, even an unstable megalomaniac like Donald Trump can't get away from facing an assiduously interrogative press. In India, the man who leads our government has not faced a real press conference even once.

And so we have a Prime Minister who refuses to answer any questions from non-poodles. In the one-way conversations he enjoys, he lofts rhetorical 'questions' at himself and then hits them out of the park.

In this environment, it is important to remember that the one overarching definition of the citizen could be he or she who asks questions all the time. To search for the truth and to see it and retain it – in this time of the Lie Epidemic – that is our only inoculation.

Ruchir Joshi is a filmmaker and columnist



CULTURE MULCH

# In the end, who will we be?

For, nervousness is a ferment for all kinds of marvellous possibilities

Here I am, writing to you in the midst of what the celebrated ethnologist Marcel Mauss called a "total social fact", something that activates society at all levels. Yes, we have had those around for a while now – war, poverty, inequality – but none quite so compelling in their social networking skills. If you don't believe me, do any one of the following: open your newspaper, your Instagram account or Facebook page, your WhatsApp messages. Yes, it is true, it is impossible right now to write about anything other than the coronavirus pandemic, but surely we can try.

Right after the lockdown, I was asked, as many in my profession were, to move my teaching online. Right around this time, a meme that went something like this started floating on the Internet: "My professor who has trouble controlling the AutoPlay at the end of YouTube videos is now going to teach online; this should be good".

Needless to add, it wasn't good. I pause too much, I speak in long sentences as if I were on stage, and I seem to maintain the same sing-song cadence throughout the course of an hour and some.

I then participate in long, email discussions on the best software to use, look at tutorials on camera angles, and fiddle with my computer to see if it's managing to offer any symmetrical representation at all of my distinctly asymmetrical visage. I am even currently enrolled in an online course called HOPE (Human Odyssey to Political Existentialism) where I have already realised that the instructor's presentation skills are only marginally better than mine.

**Deep and narrow**

But I'm digging deep, as doubtless we all are. And the reason I realise that I'm not particularly great at this online teaching business is because it lets me pretend that everything is the same as before, we just have to soldier on.

I also realise that I'm stuck in the particularities of a remarkably narrow life. And like many



GETTY IMAGES

others, I'm struggling to navigate that old question, the universal versus the particular.

Should I immerse myself in the numbers of the world, the recovered versus the recovering, the state of the world economy? How then do I also make sure to not turn away from the many marginalised who are being brutally subjected to the violence of an unaffordable, socially distanced lockdown?

Do I perhaps only do what I do best, which is conduct a gender, caste and class analysis of suffering in a pandemic? And finally, how do I not continue to feel a little churlish at the enormous amounts of attention I pay to cooking myself two meals a day? The answer? All of the above. For this

time around, there isn't a choice. This is the nature of a total social fact.

A pandemic is a ruffe fellow. It tells you everything you always knew about yourself and the world, but were too cowardly to face. It is, in classic anthropological lore, a trickster, a "boundary-crosser". It mocks rules, it questions authority, it makes fools of us all. It is also often a symbol of an effort to overcome oppression. It heralds a possible breakdown of the symbolic social order. It makes everybody nervous.

And such nervousness is a ferment for all kinds of marvellous possibilities. For in relation to a total social fact, Mauss also tells us that human social life is formed when science and magic exist simultaneously.

**Online community**

In the past few weeks, for every day of the week except Sunday, I have sent out a writing prompt to a small community online, asking that they produce 500 words a day in response to a set of simple boundaries. At the end of each day, I have written 500 words and read an average of 2,500 more. I have participated in people's pasts, presents, joys, sorrows, and melancholias, and they in mine. The community has grown and shrunk and grown again.

Our collective imagination of the time, darkly overridden as it is with fear, anxiety, and helplessness for ourselves as well as for others, has nevertheless also been fuelled by other affects, by hope, happiness, laughter, ingenuity, and the will to capture the moment of our living in this time and place. Our writing is a collective act of witnessing. And when this moment passes, as it will, for this is the only thing that all of history tells us, we all are collectively seeking to ask: Who will we be?



Mathangi Krishnamurthy teaches anthropology for a living, and is otherwise invested in names, places, animals, and things.

**GOREN BRIDGE**

<b>NORTH</b>			
♠ Q 8 4			
♥ A 10 9 7 4			
♦ A 10 4 2			
♣ J			
<b>WEST</b>			
♠ J 6 3 2			
♥ 8 5			
♦ K 5 3			
♣ 6 5 4 2			
<b>EAST</b>			
♠ A			
♥ Q J 3			
♦ Q J 9 8 7 6			
♣ 8 7 3			
<b>SOUTH</b>			
♠ K 10 9 7 5			
♥ K 6 2			
♦ Void			
♣ A K Q 10 9			

The bidding:  
 EAST SOUTH WEST NORTH  
 20 2A 30 40P  
 Pass 4S Pass 4NT  
 Pass 5S Pass 6A  
 All pass  
 \*Good raise to four spades  
 Opening lead: Three of ♠

## More hand evaluation

Neither vulnerable, East deals

Bob Jones

Today's deal is from a team match played in India between a team from Kuwait and a team from Bangladesh. The Bangladeshi pair did well to reach slam after the opening pre-empt. Could they make it?

South won the opening diamond lead with dummy's ace and discarded a heart from his hand. A low

spade from the table fetched the ace from East. The diamond continuation was ruffed with the 10 of spades and declarer had to decide how to play the trump suit. East would not have played his ace on the first round of the suit unless it was singleton or from ace-jack doubleton. South went with the percentages and led a low spade to dummy's eight. After that, it was a simple matter to draw the rest of the trumps and claim his contract. Well done!



At the other table, the Bangladeshi player sitting East judged his hand worth an opening one bid. His opening one-diamond bid was doubled by South. North's jump to four hearts ended the auction. The swing on this deal was caused by the judgments of several players around both tables, but it started with different hand evaluations of the East hand. What would you have done?

**QUIZ**

## Easy like Sunday morning

Be less curious about people and more curious about ideas: Marie Curie

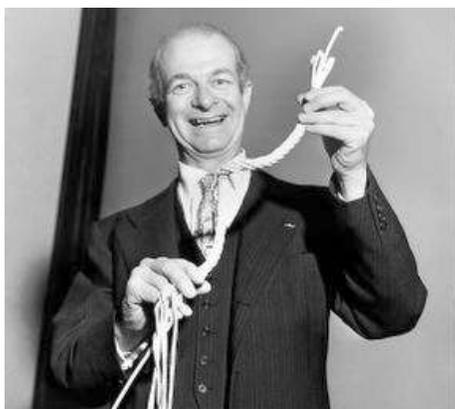
Berty Ashley

1 Born on April 19, 1912, Glenn T. Seaborg was an American chemist who was awarded a Nobel Prize in Chemistry for his role in helping discover 10 elements. He was a scientist at Berkeley and was advisor on nuclear policies to 10 U.S. Presidents. Yuri Oganessian, Russian physicist, was the director of the JINR Laboratory. They played a vital role in the world of chemistry towards populating the periodic table. How uniquely have they been rewarded?

2 This metal is the only registered antibacterial metal (9.9% of Gram-negative and Gram-positive bacteria die within two hours of coming into contact with this metal) and is also one of the only two non-silvery metals in the world. One of these is gold. What is the other, which is also an excellent conductor of heat and electricity?

3 Bee stings can be soothed by applying milk of magnesia or bicarbonate of soda. This involves a very basic concept in Chemistry. What reaction does this involve and what does this tell us about bee stings?

4 This chemical causes stored fat to migrate into the bloodstream and leaves higher reserves of glycogen in the liver and muscles. This means that athletes would be able to burn fat for the bulk of their performance and be able to use the glycogen only when they most need it, extending their performance. Due to its properties, this substance was banned from the Olympics between 1984 and 2004. However, it was finally removed. One of the reasons was the substance is commonly found in many food and drink items and was likely to lead to false charges of doping. What is this?



Game for one Linus Pauling won the Nobel Prize twice and didn't have to share it with anyone. • FLICKR

5 This item is known to have survived, unspoil for millennia. Archaeologists have discovered containers of this substance in pyramids and found them to be perfectly edible. The long-life of this product is because of many factors: the high sugar content and high acidity discourages a lot of bacteria. Finally, in the process through which it is created, hydrogen peroxide, an antiseptic, is produced. This is why many civilisations have used it as medicine as well. What is this amazing product?

6 In 1856, 18-year-old student William Perkin was given a task by his professor to synthesise quinine. He failed at doing so but when cleaning the flask with alcohol he discovered a purplish blue substance which he called aniline. He patented it and sold it under a different name

8 Jean-Frédéric Joliot and \_\_\_\_\_ were husband and wife who won the 1935 Nobel Prize in Chemistry

for their work on artificially producing radioactive isotopes. That is, they took substances that were not radioactive and produced radioactive isotopes by bombarding them with alpha particles. Who was Jean-Frédéric's wife and why was it natural that this was their field of work?

9 Linus Pauling is known to be the only person in the world, as of 2019, to have won two Nobel Prizes by himself. He won the Nobel Prize in Chemistry for discoveries that had implications in multiple fields, including playing a key role in the discovery of DNA. His second Nobel, which was not awarded for science, was related to a very important activity. What was this Nobel and why was it awarded to Pauling?

10 This person studied Chemistry at Oxford and worked as a research chemist for four years, while also studying to become a Barrister. He created history when elected as Prime Minister. He was also the first (and as of 2020, the only) PM of their country to have an undergraduate degree in Science. Who is this who specialised in X-ray crystallography?

A molecular biologist from Madurai, our quizmaster enjoys trivia and music, and is working on a rock ballad called "Coffee is a Drink, Kaapi is an Emotion". @bertyashley

- 1. Dmitri Mendeleev had elements named after them while they were living.
- 2. Bhopal gas tragedy.
- 3. Acid-base neutralisation reaction; Bee sting; acid.
- 4. Carotene.
- 5. Penicillin.
- 6. The first synthetic dye, Mauve.
- 7. DNA.
- 8. Irene Curie, the daughter of Marie and Pierre Curie.
- 9. The Nobel Peace Prize, for his pacifist efforts during the Cold War.
- 10. Margaret Thatcher.

LETTER FROM A CONCERNED READER

## Dream sequence only

Respected Madam/ Sir,

What is Mr. Mathrubootham doing during Corona house arrest? You are thinking this only no? How this old man is managing? No yoga class. No ras malai. No friends group evening tiffin. No evening walks. No irritating Dr. Shankararamon for entertainment purposes. Nothing nothing nothing. How he is managing?

Madam/ Sir, shall I tell you? For first one week managing means cleaning and cleaning and cleaning. Husband and wife is cleaning whole house once, then once more, then three times. Then after that sofa set itself is crying with tears in eyes, as if Rohini Hattangadi in mother role, and saying please stop this torture, how many times you will hit cushion in the balcony again and again as if police station.

Then one week nonstop fighting in the house. Sometimes Mrs. Mathrubootham will say something stupid and I will get angry and say something, then she will be angry. Then I will apologise and we will watch some nice DVD and relax. Other times I will say something stupid and Mrs. M will get angry, then rest of the day I will relax in balcony. Including meals.

Then after that? After that Madam/ Sir, your friend Mr. Mathrubootham is sitting at home whole day and seeing dreams and dreams of outside world. I am thinking one day lockdown will finish and then I am able to go to market. In my mind, market is like Black Thunder Water Park. Vegetable shop. Aha wonderful. Grocery shop. Oh beautiful. Walking on the road day and night no issues. I will sit in the living room and imagine. How it will be to sit in Ganga Sweets?

Thrills are coming in the body. First, I will put pant and shirt. Then I will put shoes. Then I will wear mask. Open the door. Slow motion scene only. I will step

outside door. Whether any policeman is stopping? Never. Then I will get into the lift. Other people are inside. They are also wearing mask. We will say hello and hi as if youths going to nightclub. Then I will step out on the road. And walk with swinging hands. Sun is in the sky. Clouds are below the sun. Birds are below that flying. Autorickshaw fellows are driving nearby and they are waving and saying hello! I am also waving.

From nearby fruit shop smell of banana is coming. Aha. Oho. Suddenly sunlight is hitting on the face. In the distance I can see Ganga Sweets. It is coming. It is getting closer and closer.

I can almost touch the door handle. And then ecstasy of all ecstasies my hand is touching door handle as if Arjun is kissing Manisha Koirala in Muthavan song. My hand is pushing the door open.

Wind from air-conditioner is blowing in my face. I am walking inside like the lady in Head and Shoulders advertisement. Employees are all smiling under mask.

I walk towards the table and sit. Still slow-motion only. (Madam/ Sir, everything is in slow-motion till further notice.)

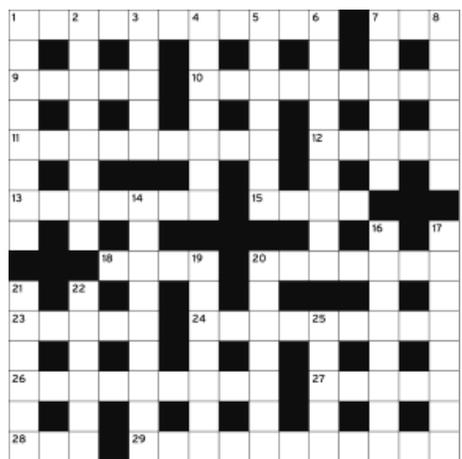
Then, inside the glass cabinet, I can see one thousand ras malais. Waiter is bringing and bringing and bringing. I am holding the spoon in one hand. Through the window, sunlight is coming and hitting me on the face. Autorickshaws are coming and going. Sky is blue. Birds are singing.

Sun on the face. Ras malai in the mouth. Sky in the sky.

What more Mr. Mathrubootham will do during quarantine. These days Madam/ Sir, this is how I am passing the time. Fully dream scene only.

Yours in total imagination, J. Mathrubootham

THE SUNDAY CROSSWORD NO. 3096



- Across**
- 1 Perusing change, daydream ultimately internalised by comic character (6,5)
  - 7 Where a slope is regularly seen? (3)
  - 9 Bishop in fancy car, finding borderland of Hell (5)
  - 10 Routine I'm rewriting for Radio 4 show (2,3,4)
  - 11 Violent protest about von der Leyen etc being privileged (3-6)
  - 12 Noise of geese not hard; Everyman accepted, producing noise of pigs (5)
  - 13 Yearned for title, 'knight' included (7)
  - 15 'Sincere' earl corrupted (4)
  - 18 Ignore extremes in Holy Land's measure (4)
  - 20 Cockney's come to us on a horse, they say (it's another animal) (3,4)
  - 23 Don't just throw away waste, avoiding fine (5)
  - 24 Staggered around drunkenly, etc, and returned to office (2-7)
  - 26 Both parents touring North Australia, energy fading in heat, getting protection from sun (6,3)
  - 27 Run into Brexit in wood (5)
  - 28 Step back, idiot (3)
  - 29 Lousy granular brass tracks (5-5)
- Down**
- 1 Rich, healthy stew (4-2-2)
  - 2 The French politician to put online support for Enlightenment (4,4)
  - 3 Wear down the Queen with dedicatory verse (5)
  - 4 Confused mediator ignoring old hotel employee (6,1)
  - 5 Walk unsteadily with end of skewer stuck in foot (7)
  - 6 'Much beer ordered for lad?' 'Aye' (4,2,3)
  - 7 Inseam tailored in city near Lille (6)
  - 8 A sleep, for a change - I'd like that (6,3)
  - 14 Number one coming down to 20? (6,3)
  - 15 Soundly thrashed, English batsman visibly embarrassed (8)
  - 17 Dickens' protagonist entered into dreary monotonous labour (8)
  - 19 Hearing indication you're being talked about? (7)
  - 20 Perhaps rocket wanting gravity to attempt return to atmosphere (2-5)
  - 21 With essential ingredient missing, recipes made dodgy French food (6)
  - 22 Puritan zealously rejected a root crop (6)
  - 25 King Ethelred garrotted (to some extent) (5)

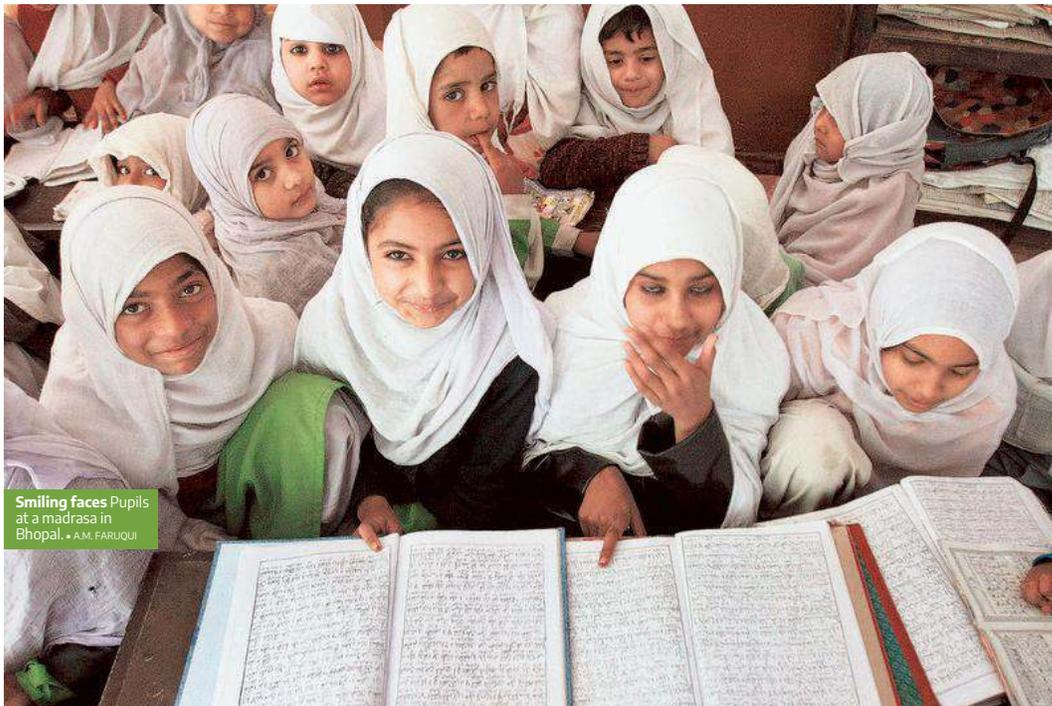
Solution No. 3095



OFF-CENTRE

# Please, sir, I want more space

How can a poor madrasa magically conjure up many more rooms in the midst of a lockdown?



**Smiling faces** Pupils at a madrasa in Bhopal. • A.M. FARUQUI

**Annie Zaidi**

I hadn't gone out looking for a madrasa. I had gone looking for the dreams and self-concept of Muslim women and girls. As it happened, I found a group of women activists and philanthropists, and among them, a gentleman who had come looking for donations for foundlings and orphans. He also ran a madrasa for girls and, on impulse, I asked permission to come and interview them.

I had never stepped into a madrasa before and had certain preconceived

notions about what happens there. My ideas about madrasas were of little boys sitting cross-legged in rows, white-capped, and learning almost always by rote. I lacked the imagination to go beyond, and assumed I'd find a little girl version of the same image.

What I found is difficult to translate and compress into a few words. The little girls filed into a room downstairs, ushered in and watched over by their teachers and seniors. They sat in chairs, on a takht, wherever there was room. Uncertain, diffident, probably wondering what I wanted.

Starting with the older students, I asked each one to tell me her name, a line or two about herself, where she'd come from, what she studied, and what she hoped to be when she grew up. And name by name, the stereotype crumbled.

**Just a girl!**

All the girls were resident students and many had lived there for years. Many had already spent more of their short lives here than they had with their parents in their villages. The majority had come from villages and kasbas in Uttar Pradesh but some

were from Bihar, and one child (perhaps six or seven years old; she wasn't too sure) had come from as far away as Nepal.

To say that they had come to study and live there is obviously not accurate. Children never get to choose.

Whether they are sent to posh boarding schools with horses to ride and swimming pools, or an orphanage, or a madrasa where they are guaranteed precious little except simple meals and a roof over their heads — adults decide. When I asked the girls what their parents did for a living, it also became amply clear that the adults

also had very little choice. Most of them worked in the informal economy, in jobs that don't pay much.

Some of the girls had gone to a village government school for a couple of years before being sent away to the madrasa. A lot of the older girls were reticent about discussing the circumstances that kept them here. The little ones probably didn't know how to describe those circumstances. Many had older sisters or cousins also living here.

**Safe house**

It was soon evident that the girls were here because it was seen as a relatively safe, respectable space for them to live in and gather what education they could.

There was no real fee — perhaps families who could afford it gave something, but lessons and meals were obviously funded through community philanthropy.

They were taught language, mathematics and geography along with readings of the Quran. A few of the girls said Urdu literature was their favourite subject, others maths.

When I asked what they wanted to be when they grew up, all of them had an answer and it wasn't 'housewife'. Most girls said *alima*, which is Urdu for a learned woman or teacher. A couple of them dared to whisper 'doctor'. Later, it struck me that so many said they wanted to be an *alima* because the only working women they had seen growing up were teachers. Many of their seniors had studied in the same institution and stayed on to teach.

I walked away that afternoon with a heavy heart. When I looked around the building, I saw an open terrace where laundry was drying, and large rooms shared by several girls. This was not very different from the hostel I lived in as an undergraduate. It was just much poorer.

In college, I lived in a hostel administered by nuns. It was very strict.

We were not allowed to step out without written permission nor receive visitors other than families. Meal timings were strict, as were bath times. The very taps were locked up and warm water rationed in winter. We were well fed, of course. Each of us had a bed to herself but we certainly didn't have six feet of space between beds.

The madrasa was one tenth the size of the hostel I lived in, perhaps smaller. It didn't have a vast campus attached or the real estate to allow sports. It certainly didn't have the money for lessons in art. It probably didn't serve pastries on Sunday afternoons.

**Space as luxury**

I think of those little girls now, during this harsh lockdown. If, instead of four hours, the Prime Minister had given them four days' notice, they still wouldn't have been able to go home. Even four weeks may not have been enough. They didn't have mobile phones. They didn't have money. They didn't have transport. Their parents had no money to fetch them in a hurry.

**Tens of thousands of poor Muslim children have been left stranded in the limited spaces their circumstances have given them**

Their teachers could not afford to drop them home. I doubt the state could have made arrangements for their safe conduct home, with food and trusted escorts.

How can a madrasa make alternative arrangements for physical distancing in the midst of a lockdown? What are they expected to do? Magically transform a building to 20 times its

size? Procure dozens of new beds and bedding overnight? Conjure a sprawling dining hall out of thin air?

Our right to demand adherence to rules framed by the state in a health crisis must be tempered by our willingness to accept that we have failed to take collective responsibility for each individual child, each school, each worker. Just as millions of migrants were left stranded in metro-polises with no wages and no transport, tens of thousands of poor Muslim children have been left stranded in the limited spaces their circumstances have given them. It is not for us to ask how big these spaces are. It is for us to ask how we can enable those spaces to expand, in both a physical and a social and intellectual way.

The author writes fiction, non-fiction, drama and films.

SUNDAY RECIPE



## Failproof bread

**INGREDIENTS**

3 cups whole wheat atta, preferably ground with its husk  
1 tsp salt  
1 tsp yeast (instant or active)  
2 cups water + a few tbsp more

**METHOD**

1. Knead it all, adding 2 cups of water. (If using active yeast, first proof it as per the packet instructions and then add it to the flour.) The dough will be sticky, so pour a few tablespoons of water in a plate. Now, dip your sticky palm face down in the water, lift it and shake off the excess water. Using the wet palm, get back to work with the dough, which will behave better now. Whenever it starts becoming sticky again, wet your palm again in the plate and knead it. When it comes together into a ball and your fingers are clean of all stickiness, your dough is ready. Keep it in a large bowl and cover with a plate.

2. Come back after 90 minutes and check on the dough. It will have doubled in size. Make a fist and knock it gently back into the bowl. Now shape it gently into a ball or an oblong depending on the shape of your bread pan. Handle it like a baby. Grease the pan with butter and drop the dough in the pan. Put the bread pan in the cold oven for another round of rising and come back after 50 minutes.

3. Take out the bread pan. Preheat an empty oven on toast (top and bottom rod on) mode to 250°C for 10 minutes. Now change the settings to 220°C, 30 minutes and bake (bottom rod on) mode. Take a small pair of scissors and with a light hand, quickly make 3 equidistant snips on the surface of the dough and put the bread pan in the centre rack.

4. After 15 minutes, open the oven door and turn the bread around. After 15 more minutes, remove bread from pan and knock on its bottom. It should make a hollow sound; that means the bread is done. Let it cool for 4-5 hours before serving.

NOSHTALGIA

# A trail of breadcrumbs

As the world makes bread during the pandemic, tracing a Mumbai's journey from paav to sliced white bread to wholewheat loaves

**Shilpa Paralkar**

If you grew up in the Mumbai of the 80s, you will know the term *maca paav*. It was used (mind you, in a very matter-of-fact way, with no malice intended) to describe any football-loving, churchgoing Goan girl or boy who resided anywhere from Mahim creek to the outer edges of Santa Cruz. What or who *maca* was held no interest for us. It was the 'paav' part that we were fascinated by.

You see, while the rest of us ate chapatis or rice at every meal, rumour had it that these lucky lads and lasses, whose great-uncles and grandfathers had moved from Goa to Mumbai along with their bread-making skills, ate paav with everything. Paav with omelette, paav with potato bhaaji, paav with mutton curry, paav with soup, paav with kheema, paav with rassa, paav with fried prawns, paav with cutlets. You name it and they topped it up with paav, much to our envy.

In our 'ghaati' household (another Mumbai moniker for locals from the Western Ghats), paav was rationed. Not because it was expensive (at 25 paise for a *laadi* or slab of 6, it was not) but because my grandmother didn't consider it suitable food. For a woman who lugged back 5 kilos of the choicest ground wholegrain wheat flour from the mill and transformed it into robust, brown-flecked chapatis, this paav made from insipid white flour was an absolute affront.

She would rather we ate *batape* poha for breakfast, but the fact that lunch for the officegoers in the family had to be ready to be picked up at

8.45 a.m. by the *dabba-wallah* meant there was no time to cook breakfast. So, with a pained look and much clucking of the tongue, she resigned herself to watching her 'jungle' grandchildren falling over themselves to get at the paav, which she served with a pat of her homemade butter and a cup of extra milky tea to compensate for its lack of sustenance. As you might have guessed, we loved paav. And what was not to love? White all around and pale brown on top. We could have eaten them by the dozen. Instead, we got two each for breakfast. As an incentive, the cousin whose turn it was to wake at 5.30 a.m. to fetch the paavs would be allowed one extra paav. When my turn came, I would eat my extra paav on the way back, tearing eagerly into its warm, pillowy insides.

**Baker's den**

The bakery where we lined up at dawn was just across the road. A small shopfront with no signboard, it had soot-laden walls and one flickering lamp hanging from a cracked ceiling. A pink and green icon of baby Jesus was nailed to the back wall and flour covered most of his cherubic face and body. Actually, flour covered most of the counter, the aluminium trays and the neatly stacked shelves of old newspapers. Under baby Jesus' watch was a dark cavern from which another boy, his face and singlet also covered in flour, would



pop out and thump down a large tray of plump paavs. The man at the counter would push the change you placed on the counter into an open drawer, tear off the paavs, wrap them in a newspaper and shoo you away.

Back then, nobody had ovens at home, so what exactly went on inside that black hole aroused immense curiosity. It was rumoured that drunkards were hired to knead the dough through the night and that they kneaded it with their dirty feet. Once, it seems, a child had stayed back to watch and he got kneaded right in.

But mostly we were preoccupied with the paav's life story. How did it fluff up like this? We had heard whispers of some germs called 'yeast' that were fed in. We also knew there was a 'bhatti' into which wood had to be constantly fed. Our

requests to see the bhatti were never taken seriously.

**More to bread**

Later, as reforms started trickling in, came the Sandwich Breads. Unlike paav, these didn't need to be bought fresh daily and you didn't need to queue up at the crack of dawn for them. It wasn't long before the bakery opposite our house shut down and a dry-cleaning shop took its place. Soon we grew up and went to college. And then a new kind of bread arrived in our lives which displaced our affections yet again. This hand-span sized disc of thick white bread was sold in twos for a rather princely amount. On the plastic cover was written 'Pizza Base' but for the longest time, we knew it simply as pizza paav, and there was a colourful picture of what you could do with it once you took it home.

**Mouth-watering Paav buns**

at an Irani cafe in Mumbai.  
• VIVEK BENDRE

So we took it home and recreated the picture faithfully. On top of the pizza paav, we shook a bottle of tomato sauce till its surface was covered in red blobs. Then came one layer of onion rings, one layer of capsicum rings, one layer of tomato rings.

Over this heap of balancing vegetables, were grated two cubes of cheese, their streaky stringy bits rendering the entire surface white. This wobbly thumb-high arrangement was delicately transferred to a heating tava and covered with another large upturned vessel till the cheese melted completely. For the next 15 messy minutes or so that it took us to devour it, we were in raptures. We finally knew what America tasted like.

It would be another 10 years before I would travel to Italy and finally know what a pizza tasted like. And another 10 years more before I would muster up the courage to buy an oven and try my hand at bread-making.

But when it came to baking my own breads, I found I had inherited my grandmother's distrust of 'white flour'. Maida just wouldn't do. Well, learning to make bread from chakki-ground whole grain *atta* wasn't easy. It required a certain amount of naïveté, patience and a family that would stoically put up with frequent disasters.

A decade and thousands of loaves later, there are many lessons to share. First and foremost, real bread needs no maida, no sugar, no oil, no improver. Bread is just whole grain flour, salt, yeast and water. And the reassurance that bread-making is like every other thing we do in life. Breads turn out terrible at first, they get better and better with practice, till finally a day comes when your loaf sings, the crust crackles, and your family cannot stomach store-bought bread ever again.

The writer lives in Bengaluru with herself, one husband, one daughter and one oven.