

● POLITY

● ECONOMICS

● TECHNOLOGY

● ECOLOGY

MANY KILLED IN RIOTS IN MANIPUR; GOVT. ISSUES SHOOT-AT-SIGHT ORDER

The Manipur government on Thursday issued a shoot-at-sight order in "extreme cases", as escalating ethnic violence following a tribal solidarity march displaced over 9,000 people in the State.

There was no official confirmation of the number of people killed or injured in the violence, but Chief Minister Nongthombam Biren Singh admitted that "some precious lives were lost".

Clashes initially broke out during the course of Wednesday's solidarity march, called by the All Tribal Students' Union, Manipur. The Scheduled Tribe communities, mostly from the Kuki-Zomi group, are protesting against a move to grant a long-standing demand for ST status to the Meitei community, which makes up the majority of the State's population.

On April 19, the Manipur High Court directed the State government to submit its recommendation to include the Meiteis in the ST list to the Union Tribal Affairs Ministry by May 29.

Mr. Biren Singh appealed to the people to maintain peace and harmony, soon after updating Home Minister Amit Shah about the situation.

Hundreds of houses, churches, temples, and vehicles were either vandalised or set ablaze across five districts: Imphal, Churachandpur, Bishnupur, Kangpokpi, and Tengnoupal. Among the seriously injured was Manipur MLA and former Tribal Affairs Minister, Vungzagin Valte, who was admitted to hospital after a mob attacked his official residence in the State capital Imphal.

Curfew continued in some districts, while Internet services were suspended. Nearly 500 personnel of the Rapid Action Force were flown in on Thursday morning. They joined 55 columns of the Army and the paramilitary Assam Rifles, apart from the police. Officials said the Imphal-Churachandpur road, the axis along which much of the violence took place, had been secured by the combined forces.

"The Army and Assam Rifles personnel are conducting flag marches and aerial reconnaissance in the affected areas. We have rescued 5,000 people in Churachandpur and 2,000 each in Imphal and Moreh and lodged them in safe places," a defence spokesperson said. An additional 14 columns of the Army and paramilitary force have been kept on standby for deployment on short notice, he



Vehicles set afire in the State capital Imphal on Thursday. PTI

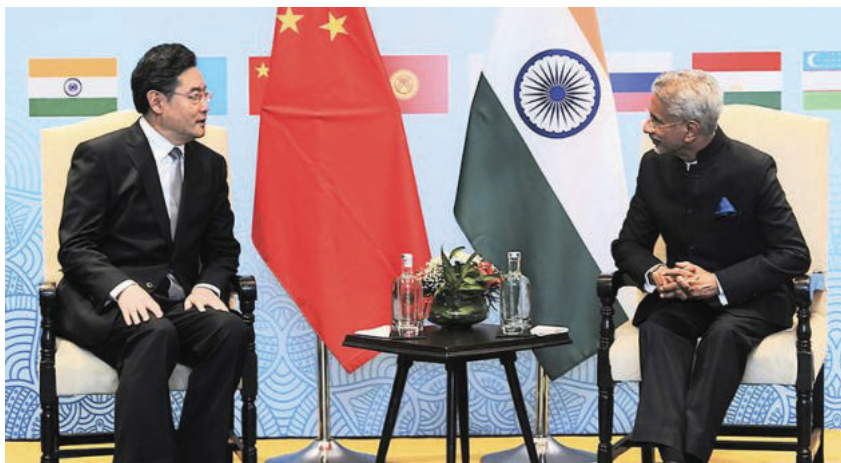
Clashes broke out after a march was taken out by tribes against decision to grant ST status to the majority Meitei community; Army and RAF deployed

added.

The heightened security did not deter mobs from attacking vulnerable spots. Assessing the situation, Governor Anusuiya Uikey authorised all district magistrates and executive magistrates to issue shoot-at-sight orders "in extreme cases whereby all forms of persuasion, warning, reasonable force etc has been exhausted".

The order came hours after Mr. Shah called up Mr. Singh and took stock of the situation. The Union Home Ministry appointed Kuldip Singh, former Director-General of the CRPF, as the CM's security adviser. Mr. Shah chaired two video conferences with Mr. Singh, the State police chief and other senior officials and also conferred with the CMs of Nagaland, Mizoram and Assam.

JAISHANKAR DISCUSSES LAC WITH QIN, HOLDS TALKS WITH LAVROV, BUT NOT BHUTTO



External Affairs Minister S. Jaishankar with his Chinese counterpart Qin Gang on the sidelines of the SCO meet in Goa on Thursday. AP

The unresolved three-year-old military stand-off at the Line of Actual Control (LAC) remained the "focus" of India-China talks as External Affairs Minister S. Jaishankar met with Chinese Foreign Minister Qin Gang here on Thursday, and held a "detailed" discussion on bilateral ties.

This is the second time the two Ministers have held talks this year, as Mr. Qin had earlier attended the G-20 Foreign Ministers Meeting in Delhi in March.

Mr. Jaishankar also met with Russian Foreign Minister Sergey Lavrov and Uzbekistan counterpart Bakhtiyor Saidov, after which he hosted them and all the other Foreign Ministers from the Shanghai Cooperation Organisation (SCO), at this Goan beach resort for a meeting on Friday.

However, no bilateral meeting was held or planned by officials between Mr. Jaishankar and Pakistan Foreign Minister Bilawal Bhutto Zardari, although the two Ministers greeted each other and shook hands at the dinner event, sources said.

Mr. Bhutto said his visit was "focused exclusively on the SCO" and that he looked forward to speaking to his counterparts from "friendly countries".

"A detailed discussion with State Councillor and FM Qin Gang of China on our bilateral relationship. [The] focus remains on resolving outstanding issues and ensuring peace and tranquillity in the border areas.[We] also discussed

SCO, G20 and BRICS,” Mr. Jaishankar tweeted about his meeting, although neither side issued any official statement about the talks.

Mr. Jaishankar also tweeted that he had held a “comprehensive review” of the bilateral, global and multilateral cooperation between India and Russia with Mr. Lavrov.

A statement released by the Russian Embassy said that the two Ministers had held a “trust-based exchange of views” on all issues, and on their cooperation as part of the India-Russia Special and Privileged Strategic Partnership.

Both Mr. Jaishankar’s meetings with the Russian and Chinese Ministers lasted more than an hour each, and included discussions about other upcoming events, including the SCO and G-20 summits in India, and the BRICS summit in South Africa, where Prime Minister Narendra Modi is likely to meet Chinese President Xi Jinping and Russian President Vladimir Putin.

In particular, Russia and China have held up consensus on the joint

communique that India is hoping to release during the G-20 summit in September.

“The intention to further strengthen coordination to develop common approaches within the framework of interaction at the most important international platforms, including the SCO, BRICS, the UN and the G20 was confirmed,” the Russian statement said, adding that India and Russia were committed to “building a fair multipolar system of interstate relations”.

Mr. Lavrov arrived in Delhi on Thursday morning, a day after Russia claimed that the Kremlin had been targeted by unmanned drones from Ukraine, which the Ukrainian President denied. He is expected to raise the issue during the SCO FM deliberations on Friday.

“The Russian Foreign Ministry believes that the international community and international organisations, which are free from double standards and seek guidance from international law, must condemn this new criminal undertaking by the Kiev regime,” the statement added.

ON THE WASHINGTON DECLARATION



Firm ties: U.S. President Joe Biden and South Korea's President Yoon Suk Yeol on April 26. REUTERS

What prompted the visit of South Korean President Yoon Suk Yeol to the U.S.? Why does South Korea not have its own nuclear arsenal? What is the significance of the new agreement? How does it relate to nuclear deterrence?

How have China and North Korea responded?

On April 25, South Korean President Yoon Suk Yeol arrived in the U.S. to commemorate the 70th anniversary of U.S.-South Korea bilateral relations. A highlight of the visit was the signing of the “Washington Declaration” as a nuclear deterrence strategy.

What prompted the U.S. visit?

The successful launch of North Korea’s Hwasong-8 solid-fuel intercontinental ballistic missile (ICBM), a vital component for nuclear weapons delivery, seems to have triggered the U.S. visit of the South Korean President. Mr. Yoon aimed to advance the strategic partnership, drawing an alliance over an extended nuclear deterrence plan against the regional aggression of North Korea. The Washington agreement will launch a new phase in the partnership between Seoul and Washington. “Our two countries have agreed to immediate bilateral presidential consultations in the event of North Korea’s nuclear attack and promised to respond swiftly, overwhelmingly and decisively using the full force of the alliance, including the United States’ nuclear weapons,” said Mr. Yoon.

What does the Washington Declaration say?

The agreement outlines cooperation towards deterrence. According to the declaration, an American nuclear ballistic submarine would be deployed in

the Korean peninsula; a nuclear consultative group would be formed to formulate principles of joint response tactics; South Korea would receive Intel from the U.S. regarding nuclear advancements; and the U.S. will strengthen South Korea’s nuclear deterrence capabilities through joint military training programs and an annual intergovernmental simulation. The declaration reaffirmed the non-proliferation Treaty implying that South Korea would not venture into the creation of its own independent nuclear capabilities and would instead focus on deterrence measures through an alliance-based approach. It also mandates the U.S. President as the only ‘sole authority’ to use the nuclear arsenal of the U.S. in the event of a nuclear confrontation. While the existence of the agreement is based on the security needs of South Korea, the policy reflects big power politics where the interests of the larger power (U.S.) takes precedence.

Why is the U.S. not keen on S.Korea having a nuclear arsenal?

South Korea’s nuclear development programme supported by former president Park Chung Hee was hindered due to U.S. pressure. In the 1990s, the U.S. withdrew one hundred nuclear weapons from South Korea as part of their “Strategic Arms Reduction Treaty”. The U.S. was hoping to make North Korea unarm itself. Washington made an erroneous assumption that it could deter the weapons production of North Korea by extracting South Korea’s nuclear capacity.

Secondly, the Nuclear Posture Review 2022 reflects a shift in the U.S. narrative where it is now concerned about the progressing nuclear capacities of North Korea. The report states that North Korea creates “deterrence dilemmas for the United States and its Allies and partners,” and that “a crisis or conflict on the Korean Peninsula could involve a number of nuclear-armed actors, raising the risk of broader conflict.”

And finally, the U.S. wants to control global nuclear arms production. It has been reluctant to allow South Korea to develop their own nuclear arsenal as it would hinder the prolonged efforts of controlling nuclear production in the world. The assurance that the U.S. and its nuclear weapons would protect its allies by being responsible for maintaining stability in the region aligns with the larger goal of non-proliferation. Washington plays a major influence in South Korea’s foreign policy objectives, and Seoul would rather not disappoint the U.S. as they are a vital supporter of their cause.

What has been the regional response?

The Washington Declaration advocates for nuclear deterrence policy in the region, aiming to balance power dynamics against North Korea. While the aim is to defuse the threat, physical deployment of the arsenal can be deemed as a direct threat by opposing actors and used as leverage to act aggressively. China criticised the agreement with Foreign Ministry spokeswoman Mao Ning saying, “What the U.S. is doing .. provokes confrontation between camps, undermines the nuclear non-proliferation regime and the strategic interests of other countries.” North Korean leader Kim Jong-Un’s sister Kim Yo-jong warned that the declaration would, “only result in making peace and security of North-East Asia and the world be exposed to more serious danger.”

What is the domestic response?

The South Korean public are sceptic about U.S. support. A poll by the Chicago Council on Foreign Relations reported that 71% of South Koreans want to build their own nuclear weapons. With an aggressive North Korea in the neighbourhood, they would prefer their own deterrence.

WHAT IS BEHIND MANIPUR'S WIDESPREAD UNREST?

What triggered the conflict between the non-tribal Meitei people and other tribal groups?

Manipur has been restive since February when the BJP-led government launched an eviction drive seen as targeting a specific tribal group. The drive led to protests but not on the scale of the one on May 3 triggered by the Manipur High Court's direction to the State to pursue a 10-year-old recommendation to grant Scheduled Tribe (ST) status to the non-tribal Meitei community.

What is Manipur's ethnic composition?

Geography has a lot to do with Manipur's problems. The State is like a football stadium with the Imphal Valley representing the playfield at the centre and the surrounding hills the galleries. Four highways, two of them lifelines for the State, are the valley's access points to the world beyond. The valley, which comprises about 10% of Manipur's landmass, is dominated by the non-tribal Meitei who account for more than 64% of the population of the State and yields 40 of the State's 60 MLAs. The hills comprising 90% of the geographical area are inhabited by more than 35% recognised tribes but send only 20 MLAs to the Assembly. While a majority of the Meiteis are Hindus followed by Muslims, the 33 recognised tribes, broadly classified into 'Any Naga tribes' and 'Any Kuki tribes' are largely Christians.

What is the Meitei argument?

Hearing a petition by eight people representing the Meitei (Meitei) Tribe Union, the Manipur High Court on April 19 directed the State government to submit, within four weeks, a 10-year-old recommendation to the Union Tribal Affairs Ministry for the inclusion of the Meitei community in the ST list. The court referred to the Ministry's letter in May 2013 to the Manipur government seeking specific recommendation along with the latest socio-economic survey and ethnographic report. The letter followed a representation submitted by the Scheduled Tribe Demand Committee of Manipur (STDCM), which began demanding ST status for the Meiteis in 2012. The petitioners told the High Court that the Meiteis were recognised as a tribe before the merger of the State with the Union of India in 1949. They argued that the ST status is needed to "preserve" the

community and "save the ancestral land, tradition, culture, and language" of the Meiteis. The STDCM also said the Meiteis needed constitutional safeguards against outsiders, stating that the community has been kept away from the hills while the tribal people can buy land in the "shrinking" Imphal Valley.

Why are tribal groups against ST status for Meiteis?

The tribal groups say the Meiteis have a demographic and political advantage besides being more advanced than them academically and in other aspects. They feel the ST status to the Meiteis would lead to loss of job opportunities and allow them to acquire land in the hills and push the tribals out. Groups such as the All Tribal Students' Union of Manipur point out that the language of the Meitei people is included in the Eighth Schedule of the Constitution and many of them have access to benefits associated with the SC, OBC or EWS status. "To the hill tribal people of Manipur, the demand for ST status is a ploy to attenuate the fervent political demands of the Kukis and Nagas, as well as a tacit strategy of the dominant valley dwellers to make inroads into the hill areas of the State," Jawaharlal Nehru University lecturer Thongkhohal Haokip wrote in 'The Politics of Scheduled Tribe Status in Manipur'.

What led to the unrest?

Pro-government groups in Manipur claim some tribal groups with vested interests are trying to scuttle Chief Minister Nongthombam Biren Singh's crusade against drugs. The anti-drug drive began with destroying poppy fields and the theory that "illegal settlers" from Myanmar — ethnically related to the Kuki-Zomi people of Manipur — are behind clearing forests and government lands to grow opium and cannabis. The first violent protest on March 10 was against the eviction of the residents of a Kuki village. This made the State government withdraw from the suspension of operations with two Kuki extremist groups accused of inciting the protesters. The large-scale arson and violence claiming the life of at least one person on May 3 and 4 followed a "tribal solidarity rally" against the reported move to include the Meiteis in the ST list.

SCO MINISTERS MEET TODAY TO DISCUSS ECONOMIC TIES

Stepping up economic cooperation, including discussing national currency payments for mutual trade, will be on the agenda for the Shanghai Cooperation Organisation (SCO) Foreign Ministers meeting in Baulim on Friday.

The proposal, which comes in the wake of the Ukraine war and sanctions imposed on Russia, which is one of the founder members of the organisation, came from Central Asian members, said sources, indicating that "initial discussions" had begun between the eight-member group comprising Russia, China, India, Pakistan, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan.

"The most important work before the SCO Foreign Ministers will be to assess the status of decisions that will be approved at the SCO Summit in New Delhi in July," said Dammu Ravi, Secretary (Economic Relations) in the MEA, briefing presspersons on Thursday.

India is already in bilateral discussions with Russia on using national payments, third-country payments and other means over circumventing unilateral sanctions imposed by the U.S. and the European Union, and is part of the BRICS (Brazil, Russia, India, China, South Africa) grouping that is also discussing a multilateral payment mechanism.

"While traditionally, security and terrorism used to dominate the SCO's agenda, but during its presidency, India is bringing on the table issues of economic and cultural cooperation between the members as well," official sources said.

The issues were discussed on Thursday morning by External Affairs Minister S. Jaishankar and SCO Secretary-General Zhang Ming. They also reviewed 15 "decision points" that would be discussed and approved by the Foreign Ministers after Friday morning's SCO meeting, and MoUs will be signed. A final decision on all the points, including the national payments collaboration will be taken at the SCO Heads of State Summit in July this year, where the officials said Russian President Vladimir Putin and Chinese President Xi Jinping will be among those invited by Prime Minister Narendra Modi.

While all other countries are represented by their Presidents, India and Pakistan are represented by their Prime Ministers at the HoS meeting.

The sources said that the SCO Foreign Ministers will discuss the induction of Iran and Belarus as full members at their meeting, and will forward their applications



Boosting measures: External Affairs Minister S. Jaishankar with his Russian counterpart, Sergei Lavrov, in Goa on Thursday. REUTERS

Officials say India's position is seen as a 'balancing force' as a member of Quad, G-20, BRICS, IBSA and SCO; Foreign Ministers to discuss the induction of Iran and Belarus as full members

to the summit.

Asked whether India, that has no ties at a political level with co-member Pakistan, and strained ties with SCO founder China due to the military stand-off at the Line of Actual Control (LAC) three years ago, as well as a member of U.S.-led groupings like the Quad which have been criticised by SCO co-founder Russia, was in an awkward position as the SCO host, officials said that India's position is appreciated as a "balancing" force.

"I think that most [countries] appreciate the fact that India is able to play such a versatile role, as a member of different groupings such as Quad

(U.S.-India-Japan-Australia), G-20, BRICS, in IBSA (India-Brazil-South Africa) and the SCO. This shows that India's role is appreciated and India is seen as a balancing force," said the official.

INDIA, RUSSIA SAID TO SUSPEND TALKS TO SETTLE TRADE IN RUPEES

Talks deadlocked

Negotiations with Moscow on a rupee trade settlement mechanism have been suspended after months of talks

■ **Seen as a major setback for importers of cheap oil and coal from Russia**

■ **Russia's favourable high trade gap could land it with an annual rupee surplus of over \$40 bn, which Moscow sees as not desirable**

■ **India's low share in global trade, rupee's lack of full convertibility seen as factors against holding rupees**



Two Indian government officials say negotiators unable to convince Moscow to stock rupees in its coffers; an increasing amount of trade is being settled in other currencies like the UAE dirham

India and Russia have halted efforts to settle bilateral trade in rupees, after months of negotiations failed to convince Moscow to keep rupees in its coffers, two Indian government officials and a source with direct knowledge of the matter said.

This would be a major setback for Indian importers of cheap oil and coal from Russia who were awaiting a rupee payment mechanism to help lower currency conversion costs.

With a high trade gap in favour of Russia, Moscow believes it will end up with an annual rupee surplus of over \$40 billion if such a mechanism is worked out and feels rupee accumulation is 'not desirable', an Indian government official, who did not want to be named, told Reuters.

The rupee is not fully convertible and India's share of global exports of goods is just about 2%. These factors reduce the necessity for other countries to hold rupees.

India started exploring a rupee settlement mechanism with Russia soon after the invasion of Ukraine. Most trade is in dollars but an increasing amount is being done in currencies like the UAE dirham.

'CBDC CAN EASE CROSS BORDER PAYMENTS'

Central Bank Digital Currencies (CBDCs) could bring about a substantive change in the sphere of cross border payments, RBI Deputy Governor T. Rabi Shankar observed on Thursday, adding that coordination across countries, and between the public and private sectors was, however, essential.

"Cross border payments has been at the forefront of initiatives by G-20

and other organisations for the last few years," Mr. Shankar said, unveiling the fourth edition of the G20 TechSprint, a global technology competition to promote innovative solutions for improving cross-border payments, jointly organised by the RBI and the Bank for International Settlements' BIS Innovation Hub (BISIH). "This Hackathon will give it a fillip in taking this initiative forward."

LEG-UP FOR ALL TONGUES, NO HINDI IMPOSITION: SHAH

The BJP stands for the promotion of all Indian languages and the accusation that it promotes Hindi at the cost of regional languages is "politically motivated", Home Minister Amit Shah has said.

In an exclusive interview with The Hindu, Mr. Shah said the party would win an absolute majority in Karnataka, where issues of regional identity have featured in a big way in the election campaign.

Dismissing the allegation that the BJP and the Union government were trying to impose Hindi, he said the Modi government had put in systems to

conduct recruitment tests for all-India services in all languages in the Eighth Schedule of the Constitution.

"... The BJP is working to strengthen all local languages. Most of the Central services exams can now be taken in local languages. Earlier, someone who has studied, say, in Kannada medium would have found it difficult to take many of these exams. NEET can be taken in several languages, so can exams for recruitment of constables, with SSC as the basic qualification..."

BUOYANCY CHECK

Services sector's resilience may be tested as global demand cools

India's services sector seems to have had a great start to the financial year, if one were to go purely by the findings of the S&P Global Services PMI Business Activity Index. Based on surveys of around 400 firms across segments such as consumer services, finance and communications, the index reading stood at 62 in April — the highest seasonally adjusted figure in 153 months or nearly 13 years. A reading of over 50 on the index, constructed since 2005, indicates an expansion in activity levels relative to the previous month. To put the April number in perspective, the average PMI reading for services through 2022-23 was around 57.3. The increasing importance of the services economy to India's total output and job creation does not need to be reiterated much. As per the second advance national income estimates for 2022-23, the Gross Value Added (GVA) growth from industry as a whole slipped to 4.1%, with manufacturing tripping to just 1.6% — both of them had grown at around 10% in 2021-22. Services' GVA, on the other hand, is expected to have grown 9.1% during the year, accelerating from 8.4% in the previous year. Along with a pick up from the farm sector, services is expected to lift GVA growth in 2022-23 to 6.7% with GDP rising 7%.

On the trade front, India's services exports are estimated to have hit a

record \$325 billion in 2022-23, reflecting a growth of almost 28% over the previous year. The strong uptick in such intangible trade and the resultant surplus vis-à-vis imports of services have significantly plugged the hole in India's current account deficit caused by a much sharper 40% widening of the goods trade deficit, which is reckoned to have hit \$267 billion during the year. Growth in services exports during March had slipped to around 3% from 29% in February. However, as per the April PMI print, along with a surge in fresh demand and output for domestic services, outbound deals also increased at the highest pace in three months. That offers some comfort amid a strengthening global slowdown in major markets for India's IT-dominated services exports. Yet, the flurry of crises in U.S. and European financial institutions, a key clientele for India's tech majors, for instance, remains a worry. That services exports growth could moderate going forward is corroborated by the lower earnings guidance provided by IT companies as well as their extended dithering over on-boarding young recruits. The latter is part of an uncomfortable trend captured within the PMI reading — despite April's boom, job creation has remained negligible and input costs have resurged. Neither augurs well for sustaining domestic demand, which has already taken a hit from high inflation.

AND ANOTHER AIRLINE BITES THE DUST

The line from the famous song by Queen (Farrokh Bulsara), "Another One Bites the Dust", appears to be the swansong for another airline in India. In the 1990s, an airline with promise, Damania Airways, went bust. This week, the Wadias declared insolvency for their airline, Go First, bringing down the curtains on another airline company. In its wake, we have hundreds of passengers, pilots and cabin crew stranded in various locations, and thousands of employees who have been left in the lurch with a long legal battle ahead of them to salvage what is owed to them. Employees of Kingfisher Airlines and Jet Airways are still struggling to get their dues while their owners and promoters live a life of luxury with zero accountability.

Are airlines and their owners/promoters the only ones to blame for these failures? I would put the blame squarely on the Ministry of Civil Aviation and its puppet, the Directorate General of Civil Aviation (DGCA). The regular chest thumping acts where there are proclamations of India being the 'fastest growing aviation sector' also turn a blind eye to serious deficiencies in safety, the financial security of airlines, oversight audits by the DGCA to assess the financial health of airlines, and last but not the least, the inflated numbers game they play to project exponential growth in the aviation sector.

A story of distress

The last 30 years have seen the failure of Damania Airways, NEPC Airlines, Air Deccan, Air Sahara, Paramount, Kingfisher, Jet Airways and several other smaller airlines in the aviation sector in India.

In 2008, the financial world's collapse resulted in problems for major airlines. The Boeing representative made a statement during the Singapore Airshow in 2009 that India has space for just three airlines and that consolidations and mergers would take place.

Back in India, crony capitalism ensured that the favoured lot were never questioned and banks kept pumping in funds to aid non-performing assets. A DGCA audit of Kingfisher Airlines indicated a clear case of deep financial stress. As in the DGCA's normal procedure, the reports were consigned to the dustbin. There were similar results for Jet Airways before its collapse too. The airline's board was loaded with former Ministry of Civil Aviation and DGCA officials, just to give the reader an example of how airlines in India operate and hoodwink the public. The media helped in dishing out the figures and the numbers handed out to them without due diligence or any cross checks being done.

The DGCA's Civil Aviation Requirement for Scheduled Transport Operations clearly spells out the minimum requirement for starting/running an airline: finance, crew numbers, other staff and route projections. Yet, those setting up airlines announce grandiose plans with the blessings of the Ministry and the DGCA, without proven financial security, and without a minimum number of pilots, engineers and cabin crew. Has anyone checked whether the numbers projected and numbers that actually materialised have matched? Has anyone checked why India pays the highest lease charges for aircraft when compared to other countries? Has the DGCA, the so-called regulator, ever taken action against those who make and come up with false projections and numbers? Pleasing the Minister and pandering to the ego of the government is not going to

prevent another airline going bust.

After the worst of the COVID-19 pandemic was over, it was obvious that every airline in India was deep in the red. Areas that take a hit for airlines in India include training and safety. Airlines know that as long as their umbilical cord is connected to the Ministry of Civil Aviation, the regulator is a mere facilitator. Has the DGCA done a financial audit of all the airlines in India and has it published its findings?

Warning signals

The number of aircraft that have been mothballed in several airports in India and the number of accidents and serious incidents over the months have not raised a red flag. Passengers have been lucky that more lives have not been lost. This false numbness is likely to be mushrooming shortly.

Leasing companies repossessing aircraft due to non-payment of lease charges and airports requiring cash and carry operations from an airline for airport and fuel charges are all clear indications that the financial health of the airline is in a state of deterioration. Another clear pointer is the cancellation of flights due to "operational reasons".

In simple terms, it means that there is a shortage of crew. Will the DGCA publish the data on flight cancellations because of crew shortage? Will it take the bold step of preventing airlines from acquiring more aircraft until they can show that they have sufficient numbers of crew for continuous scheduled operations without any flight disruptions?

Revamp aviation policy

What is urgently required in Indian aviation is transparency and accountability. This includes not just the airline owners and promoters but also the Ministry of Civil Aviation, the DGCA and the officials concerned. The day is not far off when another favoured and propped up airline is going to lose its wings. Go First is just the new beginning. And it is not going to be the last. A complete revamp of India's civil aviation policy is required. We have seen the charade of Jet Airways 2.0, where some people have skimmed from the top and pulled wool over the eyes of unfortunate employees waiting for their legitimate dues. To begin with, they should enforce a ban on any official of a failed airline from holding managerial posts in another airline. Airlines should also be asked to have a corpus fund locked up to meet the dues of employees and passengers in the event of an airline closing down. The sudden announcement by Go First of operations being put on hold is like the announcement of demonetisation, in 2016. Do people deserve this disservice?

India is a goldmine for tourism. Aviation is a sector that is important to cash in on this. But the way it has been mismanaged and killed makes one wonder whether we can ever reach the potential to become the fastest growing sector. We need professionals with knowledge to run the sector. The way Air India is heading, I worry for another venture. My empathies for J.R.D. Tata. The vision he had for aviation in India is crumbling rapidly.

A BOOST FOR SCIENCE, A WIDER WINDOW TO THE UNIVERSE

In the distant universe, black holes merge, supernovae explode, neutron stars collide. Colossal events such as these create cosmic ripples in space-time called gravitational waves. In 2015, the Laser Interferometer Gravitational-Wave Observatory (LIGO for short) observed this phenomenon for the first time, expanding our understanding of the universe around us. Now, the United States National Science Foundation is partnering with top U.S. universities and India's Raja Ramanna Centre for Advanced Technology, or RRCAT (a unit of Department of Atomic Energy, Government of India) to launch LIGO-India, a ground-breaking collaboration, fuelled by a \$320 million investment from India, that will accelerate discovery and innovation in India and around the world.

Albert Einstein's 1916 general theory of relativity first predicted the phenomenon of gravitational waves. But it took physicists another century to prove Einstein right by observing them directly. Most of the history of astronomy has been accomplished by observing light and the electromagnetic spectrum — everything from radio waves to infrared and visible light to high-energy x-rays and gamma rays — but gravitational waves are fundamentally different; they are ripples in space-time, the fabric of the universe itself.

In 2015, for the first time in human history, physicists observed the gravitational waves emanating from two merging black holes, 1.3 billion light years from earth. This Nobel prize-winning breakthrough was accomplished by the Laser Interferometer Gravitational-Wave Observatory, known as LIGO, a

research initiative that the U.S. National Science Foundation first began investing in the late 1970s.

More experiment than observatory

LIGO is the world's largest gravitational wave observatory, a scientific collaboration and marvel of engineering that consists of two facilities in the United States, one in the Pacific Northwest at Hanford, Washington, and another near the Gulf of Mexico in Livingston, Louisiana. LIGO uses lasers to detect ripples in space-time through a method called interferometry: as gravitational waves pass by, they cause space itself to stretch and squeeze, which scientists can measure through changes in the beams of the LIGO lasers. More than an observatory, LIGO is an experiment of pre-eminent scale and complexity. The data LIGO collects have far-reaching implications in many areas of physics. LIGO has provided new clues about merging black holes, the existence of neutron stars and the origin of the universe. It has opened an entirely new way of observing the universe — astronomers have been studying light from the universe for thousands of years, but now we can also "hear" the universe through gravitational waves.

That is why I applaud the recent announcement of the \$320 million investment in LIGO-India. Just like LIGO in the U.S. has become a resource for students, researchers, and educators throughout local communities, LIGO-India will create new opportunities in Maharashtra's Hingoli district.

Projects such as LIGO-India can create jobs across the technical workforce, unleash new avenues for scientific talent and inspire the next generation of science, technology, engineering, and mathematics (STEM) leaders.

The benefits of collaboration

By joining the global network, i.e., the two LIGO detectors in the U.S., Virgo in Italy, and the Kamioka Gravitational-wave Detector (KAGRA) in Japan, LIGO-India will push forward the boundaries of what science and technology can achieve and help unlock some of the universe's greatest mysteries.

LIGO-India is a collaboration between the LIGO Laboratory — operated by Caltech and MIT and funded by the National Science Foundation (NSF) —

and India's RRCAT, the Institute for Plasma Research (IPR), the Inter-University Centre for Astronomy and Astrophysics (IUCAA), and the Department of Atomic Energy Directorate of Construction, Services and Estate Management (DCSEM).

The construction of LIGO-India is a major milestone for gravitational wave science and for the universal progress of science that transcends borders. The observatory will help to answer some of the most fundamental questions about the cosmos. And through collaboration with like-minded partners, it will provide current and aspiring scientists with a wider window into the universe while inspiring the next generation.



The advertisement features a smartphone with a red book cover on its screen. The book cover has a white spiral logo and the text "BOOK ONLINE". The phone's display shows the time "9:30" and "Thursday". A Wi-Fi symbol is visible above the phone. To the right of the phone, the Vedhik IAS Academy logo (a red spiral) and the text "VEDHIK IAS ACADEMY" and "The New Learning Mantra" are displayed. Below the phone, two physical books are stacked. The background is a gradient of yellow and orange.

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