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Twitter before Parliament

It should have proactively engaged with Indian lawmakers

he summoning of Twitter Chief Executive Officer Jack Dorsey by the Parliamentary Committee on Information Technology to discuss the "safeguarding of citizens' rights on the social media platform" has interesting ramifications. At one level, it is de facto acknowledgement of the importance of social media as a kev channel for political messaging. At the same time, it is also an example of the elected representatives of a democratic nation emphasising the sovereignty of local laws while dealing with a multinational corporation (MNC). There is no doubt that social media is a force multiplier during contemporary political campaigns. Twitter is a

remarkable platform for publicly showcasing political ideologies. It is used by all sorts of political formations for the dissemination of news, fake news, and opinions favouring their respective causes, making it an arena for deploying argument and counter-argument.

In that sense, social media platforms are open pulpits and there must indeed be a level playing field in terms of allowing the free expression of different points of view, subject to basic limits being placed on violent threats and hate speech. So, the right wing complaining about possible bias in the moderation of Twitter accounts has to be taken seriously. However, it may well also be true that Twitter is responding evenhandedly, as it insists it is, in removing bots and abusive posters, and that the right wing simply has a numeric preponderance in terms of abusive posters.

The paradox arises in that social media platform such as Twitter are public spaces that happen to be privately-owned. They are curated by their owners who happen to be MNCs driven by the profit motive, rather than by altruism or any specific political ideology. Twitter, like Facebook and Google, operates in India in the hope of gaining traction and garnering revenues in one of the world's largest internet markets. And, like other multinationals, social media corporations must abide by local laws in every nation where they operate.

It is especially important for the Indian Parliament to assert its sovereignty in this instance since there is extreme sensitivity about this subject because of the country's colonial history. The British East India

Company was, after all, a private company that entered the subcontinent looking for profits. There have been countless instances through the colonial period and even later when MNCs have manipulated political systems across the world in the hope of maximising profit. Indeed, MNCs have provoked coups and backed dictatorships in Africa and Latin America to safeguard their commercial interests. Given the direct impact of social media on politics, it is understandable that there is a great deal of nervousness about possible bias on the part of Twitter.

A third, and so far unstated, strand in this narrative is the enormous investment of resources by all sides, which makes it difficult to contemplate drastic action. The political establishment cannot afford to simply eschew social media and ban Twitter. Every political party has a social media wing with a substantial budget and every party relies on its social media strategy to energise the base and to deliver votes.

For its part, while Twitter doesn't disclose national numbers, its India base is estimated to be 30-50 million active users. This makes it a potentially huge market and, indeed, Twitter admits it hopes to generate significant revenue from political advertisements as the election campaign hots up. Of course, Facebook and Google are also hoping to pick up slices of the campaign pie.

This creates an uneasy situation of mutual dependency. Twitter would be loath to abandon India and the politicians would also be unhappy if it does leave. That is why it is all the more surprising that Twitter would delay participating in the Parliamentary Committee's process. It is also quite surprising that none of its Indiabased officials is empowered to answer for it before the Parliamentary Committee. To that extent, it has been a public relations fiasco on Twitter's part.

> shows in four major Chinese cities. Our efforts cannot end there. India must expand the size of the India

Tourist Office in Beijing and put

more resources at its disposal. We

need to appoint a top-of-the line strategic consultant in China to aid

us in drawing up a comprehensive tourism development plan. This

should be backed up by hiring an excellent PR firm to help us get our

message of "Incredible India" out

down from the metropolitan cities

of China to the tier-2 and tier-3 cities

too, since many of the potential

tourists live there. Advertising cam-

paigns, bus-wrap projects as well as

material in the Chinese language

and India Tourism also boasts a

Chinese language website, surely

we can make some incredible adver-

tising with a well-known Chinese

film or sports star as the face of our campaign in China. Perhaps, Aamin

Khan (whose films are loved by

Chinese audiences) and Jackie

Chan could be made brand ambas-

sadors for India.

While we already have tourism

on-line blitzes will be necessary.

This message needs to be taken

to the Chinese audience.

Putting the EVM controversy to rest

Doubts about the reliability of electronic voting machines will continue unless election results obtained through EVMs and voter-verified paper trails are matched through statistically rigorous tests



Election staff check electronic voting machines at a distribution centre. Boosting the voter's confidence in the safety of EVMs is as important as making the machines tamper-proof

ATANU BISWAS

he 2006 Emmy-nominated documentary Hacking Democracy investigated anomalies and irregularities in electronic voting systems, particularly those made by Diebold Election Systems, during the years 2000-04 in the United States, especially in Florida, However, Diebold President David Byrd suggested that the documentary was "replete with material examples of inaccurate reporting".

Most voters, like me, are technologically not knowledgeable enough to understand the security of electronic oting machines (EVMs), and would depend either on institutions or political parties to make up their minds in such a delicate issue. The Election Commission of India (ECI) has consistently maintained that EVMs in India are standalone devices not connected to any network, that the software is written onto a one-time programmable chip, and that these EVMs cannot be tampered with. The courts also have ruled in favour of the machines quite a few times. However, most major political parties have raised their voice against EVMs at some point or the other. The EVM Hackathon Challenge organised by the ECI in June 2017 was, in fact, a litmus test for EVMs, but no expert from any political party could hack the machine. However, such allegations are not good advertisements for democracy. And the "common man" remains utterly confused. Can this be stopped by using scientific evidence? Now that we are almost into the era of 100 per cent Voter Verifiable Paper Audit Trails (VVPATs) in all elections, VVPATs can be used for macro-level verification as well. Some statistical application, specifically efficient sampling and probability calculations, might be enough to prove that EVMs have not been tampered with. In a Press Note dated May 20, 2017, the ECI stated: "The Commission will count VVPAT slips up to a definite percentage, which will be determined by the Commission."

of a five per cent ceiling on counting VVPAT trails, and also mandatory counting of 5-14 polling stations in each constituency. There has even been speculation to the effect that 10-25 per cent of VVPAT slips would be counted manually. But, that is a huge proportion. Statistically, we really do not need such a large number of paper trails to be counted and tallied with EVM results. A much smaller number of VVPAT slips would be more than enough to ensure that EVMs have not been tampered with.

During the Assembly Election in Gujarat in December 2017, VVPAT slips and FVM results were matched in one application

Some technical issues, such as the possibility of stratified sampling, selection of strata and determination of sample size within each stratum, should also be fixed a priori. For example, assuming that only 0.1 per cent of EVMs are tampered with, a sampling of one per cent will almost certainly identify at least one mismatch. If, instead, only 0.3 per cent of EVMs are sampled in this case, a mismatch can be identified with a probability more than 99.5 per cent.

Alternatively, we may prefer to assess the EVMs of each constituency separately, depending on its political and social nature. On average, a little over 3,300 EVMs per constituency are used in India, and the number of EVMs for which VVPATs are tallied should depend on the level of vulnerability and level of precision we need. For example, if we want to identify a "20 per cent EVM tampering" scenario in a constituency with 95 per cent probability, we would need to count VVPATs in 14 machines. On the other hand, a "three per cent tampering" scenario can be detected with 99 per cent probability with a sample size of 99 per constituency. In both cases, nearly three EVMs that have been tampered with are expected to be found in each constituency. In any case, we would count the VVPATs of a very small proportion of EVMs, and yet that would provide enough scientific evidence. Also, there might be different levels of allegations of EVM tampering in different parts of the country, which might be an additional input for the formation of strata. A "no mismatch" in the sampled EVMs in such a set-up might be very strong scientific evidence against the possibility of EVM tampering. Voters may also find it helpful to keep their faith in EVMs. Unless EVMs are put through such a clear scientific agni pariksha, grumbling about them will continue. Bolstering the common man's confidence in the safety of the EVMs is no less important than making the EVMs themselves safe, if not more important.

Why Chinese tourists matter

GAUTAM BAMBAWALE

ndia's large and growing trade deficit with China has agitated our policymakers over the past decade. All efforts to bridge the trade gap or even reduce it have so far come to naught. Our efforts to export more basmati and non-basmati rice, sugar, cotton, mangoes, grapes, pomegranate and sapota have not dented the ballooning deficit. Our attempts to sell software and pharmaceuticals to the Middle Kingdom have run into elaborate Chinese non-tariff barriers. Our deficit with China constitutes the bulk of our global trade deficit.

India's expanding trade deficit is dictated by the composition of our trade with China. When we import every kind of finished, value-added product - including iron and steel, electronics, electricals, power equipment and mobile handsets no amount of pro-active effort by our exporting community to boost the sales of primary produce to China will narrow the deficit. This is dictated by the nature of our imports and exports.

The key to balancing our deficit with China is not to

look at the balance of We have the capacity to trade, but instead to entertain many focus on the Invisibles part of our bilateral balmore tourists from across our ance of payments. India needs to boost northern borders. the number of in-A concerted effort bound Chinese tourists to get our message to our country. We need across to them to do this quickly. We could see up to 1.5 need to do this on a million Chinese tourists visiting large scale. We need to do this with a game India by 2020 plan in mind.

continuous, focused on our end goal and credible. If we are able to bring such single-mindedness to bear, we can achieve the objective of attracting significant Chinese tourism to India. Many

Chinese tourists, but not all, prefer to travel in groups, and special catering

It is critical for our

promotion efforts to be

intense, ongoing and

In 2018, Chinese tourists made may be necessary in terms of 50 million trips abroad. In that accommodation, food and local same year, India received just transportation. India's Buddhist 250,000 tourists from China. India trail is sure to be especially attracneeds to work on attracting a sizetive, but so will our beaches, our able chunk of the large numbers of mountains, our forests, and our his-Chinese nationals who travel outtorical sites. We have the capacity to entertain many more tourists side their country. Even one per cent of this number works out to a from across our northern borders. whopping 1.5 million Chinese visi-What is required is a concerted push tors to India. This enhanced tourist and a special effort to get our mesinflow would help balance our paysage across to them. Such an effort ments with China on the current could see up to 1.5 million Chinese tourists visiting India by 2020. account. This is where India needs Not merely will this help us to focus its efforts. We must make a herculean effort achieve all our targets for the in the coming two years on this tourism sector, but it will also proscore. It needs to be a public-private vide gainful employment to many of effort, where the central governour countrymen and women, while at the same time balancing out our ment, the state governments and privately-owned-and-run trade deficit with China. our tourism industry pool all their The writer is a former Indian Ambassador resources and work in tandem. to China. He is currently Distinguished An excellent start in this direction was made in August 2018, when Professor at Symbiosis International Tourism Minister KJ Alphonse con-(Deemed University). ducted a series of tourism road The views are personal

In the past, there was speculation about the possibility

such as efficient randomly selected polling station in sampling and each of the 182 constituencies, and the probability Commission did not find any discrepcalculations may ancy. While it was an experiment involving 182 polling stations out of a be enough to prove that EVMs total of 50,128, which is just 0.36 per have not been cent, in practice it might be strong evitampered with dence of non-tampering with EVMs,

Statistical

provided proper statistical sampling design and techniques are followed in selecting the sample.

For example, if only two per cent of EVMs are tampered with, such a small sample size with proper sampling methodology will be able to identify a tampered EVM with 97.5 per cent probability. Let us try to understand how such a small sample size would work.

About 18 lakh EVMs are used all over India across 543 Lok Sabha constituencies. To check whether rice is properly boiled while cooking, we use a spoon to make the grains homogeneous in the rice pot, and then test only a few grains. That is sampling, enough to judge whether the rice is nicely boiled, and the technique can be used to identify possible tampering in the case of EVMs as well. However, "random" selection of EVMs should be executed by eminent experts in sampling, who could be appointed a priori for this job by an appropriate authority.

The writer is Professor of Statistics at the Indian Statistical Institute, Kolkata

cle loaded with explosives

▶ OTHER VIEWS

CAG report does not allay all doubts about Rafale deal

Clearly, defence acquisition processes require reforms and streamlining

The price-redacted audit report on the process to acquire 36 Rafale fighter jets is unlikely to bring closure to the controversy over the deal. The Modi government can draw comfort from the fact that the CAG report concludes that the 2016 agreement is slightly better in terms of both pricing and delivery than what was under negotiation in 2007 during the UPA regime. However, the report does not allay all doubts. Pegged at 2.86 per cent, the price advantage in the contract over the 2007 offer is marginal. It is a far cry from the nine per cent saving claimed by the government. The delivery schedule is only one month sooner than the estimated outer limit in the earlier process.

The original issue of bringing down the total acquisition from 126 to 36 aircraft does not draw much comment. Also, the huge outgo on the India-Specific Enhancements (ISEs), despite the final figure being projected as a 17 per cent saving on the aligned offer, is something that requires deeper examination. Dassault was not the lowest bidder in the earlier process, and its technical bid had been rejected. Perhaps, this presented an opportunity to the present regime to reopen the entire process to buy Medium Multi-Role Combat Aircraft



(MMRCA) and invite fresh bids. The CAG identifies as a major problem the fact that the technical requirements are too narrowly defined for most vendors to comply with. The message from the report is that defence acquisition processes require reforms and streamlining.

The Hindu, February 15

The nation mourns

This moment calls for wisdom, foresight

The vehicle-bomb suicide just has to wait for his attack on a CRPF convoy near opportunity.

Awantipora on Thursday is Whether Jaish had the deadliest ever terror advance information, and strike against security forces how the bomber slipped in three decades of militancy through road opening parties in Kashmir. The loss of so that must clear and secure many security personnel the route, is now a question while on duty will be for investigators to probe. For mourned across the country. now, however, this moment calls for sobriety and wis-Jaish-e-Mohammed, which works out of Pakistan under dom. With parliamentary the leadership of Masood elections only weeks away, Azhar, has claimed responsithe timing of the attack is a fraught one. But the nation bility for the attack. The route taken by the 78 vehicles with would be better served if the more than 2,500 jawans on BJP-led NDA government at Thursday is used by troop the Centre, and all political parties, including those in convoys travelling up from Jammu to camps in Srinagar. the Valley, pause and reflect As it is the only highway, on the grave juncture in their movement is no secret. Kashmir in which this dev-But as Thursday's attack has astating attack has come. revealed, a bomber in a vehi-

The Indian Express, February 15

SBI chief revives an old idea

But little progress on unified regulator

Rajnish Kumar, the chairman of State Bank of India, has tried to stir a debate on that old chestnut: The need for a unified regulator in the financial services industry. On the face of it, the concept of a unified regulator appears to be very seductive. The United Kingdom experimented with a single regulator, the Financial Services Authority, between 2001 and 2013. It has since been split into two agencies.

Regulators in India have baulked at the idea, fearing invasion of their turf and the loss of independence to a super regulator. In 2013, the BN Srikrishna committee, which had been asked to suggest financial-sector legislative reforms, had examined the idea closely. The committee had proposed the formation of a super regulator with the merger of four regulators: The Securities and Exchange Board of India, Forward Markets Commission, Insurance Regulatory and Development Authority, and the Pension Fund Regulatory and Development Authority. While the oldest regulator, the Reserve Bank of India, would continue to operate independently, the committee suggested that its role ought to be modified to initially cover the three areas of monetary policy, banking supervision and payment systems. Mr Kumar's latest push for a debate on the issue opens up the scope of tearing down the walls of regulation.

The Telegraph, February 15

How to fix a school? By fixing the leader

Indian School Leaders Institute, a Mumbai–based initiative, aims to motivate leaders to transform a failing institution into a successful one

ANJULI BHARGAVA New Delhi, 16 February

The fate of 100 young girls hung by a thread when the head of the Telangana Welfare Society in the that the residential school which it ran may as well be shut down.

Not only were the results abysmal — the students were failing most of the external examinations — the school itself was in a decrepit condition. Poor hygiene and the infestation of mosquitoes on the grounds meant that students were often sick. The problems of the Telangana Social Welfare Residential School, Gowlidoddi, looked insurmountable

Still, the head of the Society made one last attempt to revive the school. He brought in a new school leader and sought the assistance of the Indian School Leaders Institute (ISLI), a Mumbai-based initiative. ISLI began a two-year dents who were mostly first-gen-School Improvement eration learners. Development Plan with the new head. The Society also agreed to and the new principal, the pump in more resources to

structure.

The new principal, assisted by ISLI, adopted a painstakingly detailed data-driven reform plan - class by class and lesson by lesson. For example, if in a class, 17 state's Ranga Reddy district felt students got something right and 3 did not, the teacher was asked to focus on the three who erred. But if in a class of 20, 17 got an answer wrong and 3 got it right, the principal was to focus on the teacher. Two years later, the change was dramatic. In 2017-18, the school's pass rate for the Class 12 board examinations rose to 98 per cent - up from 65 per cent before the reform. As many as 55 girls joined the MBBS/BBS programme, 14 joined ayurveda and homeopathy courses, and 10 enrolled in char-

tered accountancy or other finance courses. Two girls made it to the Azim Premji University in Bengaluru and three to the Delhi University - both game changers for stu-

Welfare Telangana Social improve the school's basic infra- Residential School had been saved teachers in "flipped pedagogy",



Grav Matters India (GMI), which assesses low-cost private schools in India, has found that ISLI schools have seen a 20.5 per cent improvement in the number of students performing better than the GMI Average

from closure. Not far away, R Prashanthi, a

principal in a school in Telangana's Siddipet district, was vet another cog in the public-education wheel until she underwent ISLI's City Fellowship programme in 2015.

Prashanthi learnt how to develop school improvement plans, design academic calendars, and Thanks to the efforts of ISLI expand the scope of activities for a more holistic development of students. She also learnt how to train

where students are the active participants and the teachers are the facilitators.

The personal transformation of Prashanthi is a story in itself. She trained her own teachers so successfully that she was entrusted with the training of teachers in six other schools. Today, she is the controller of examinations and

training for 267 schools in the district — a star of sorts. The two examples above — one where a failing institution was

where a star was identified in a system that consistently fails to recognise merit - illustrate why ISLI came into being and what can be achieved if the school leader is motivated.

Set up in 2013, ISLI is the brainchild of three key people in India's education space. Shaheen Mistry (Teach for India), Vandana Goyal, CEO of Akanksha (then Foundation) and Ashish Dhawan (founder. Central Square Foundation) came together when turned around, and the other they spotted the gap in the system

and realised a motivated school leader can transform a failing school into a successful one.

"At that time, there was a lot of conversation about teacher quality, but conversations about school leadership quality were limited. It was to bridge this gap that we decided to set up ISLI," explains Dhawan.

Moreover, global research has found that school leadership accounts for a quarter of the school's impact on student learning. The National Centre for School Leadership (NCSL) was set up in 2012 to focus on this need in the public education system, but there was no one addressing this in the case of private schools.

ISLI has two main interventions: the City Fellowship and a programme to work with state governments. The City Fellowship, which is an urban initiative, is one where ISLI staff work closely with a school leader for two years. Currently operating in Mum-

bai, Pune, Hyderabad and Bengaluru, the programme involves ISLI running workshops every 4 to 6 weeks, where the principal is trained to raise their expectations from students (instead of writing them off), develop a vision for the school, and motivate teachers.

Leaders learn to make academic calendars, train teachers and maximise what the school

offers. ISLI is medium- and boardagnostic. Typically, training is customised depending on the regior and the school. And there is every indication that ISLI's efforts are paying off.

Gray Matters India (GMI) which assesses low-cost private schools in India, have found that ISLI schools have seen a 20.5 per cent improvement in the number of students performing better than the GMI Average.

ISLI has also started working with state governments. A pilot project was recently launched in Tamil Nadu, where it is working with 1,400 school principals in the educationally backward district of Krishnagiri. In 2019, it will work with 117 government schools in Pune's Pimpri Chinchwad district over a period of three years.

Gayatri Lobo, CEO of ISLI, who quit a career in consulting, moved into education in 2009, and ther joined the body in 2017, is focused on expanding its reach.

Plans are afoot to reach 16,000 government school leaders by 2020. A model is being developed to "virtually" reach 40,000 school leaders.

With over 400,000 low-cost private schools and private-aided schools and over a million gov ernment schools across the country, ISLI clearly has its work cut out.

Air Force shows off strike power at Vayu Shakti



Firepower demonstration of an Indian Air Force fighter plane during the 'Vayu Shakti-2019' at Pokhran, Rajasthan, on Saturday PHOTO: PT

AJAI SHUKLA Pokhran, (Rajasthan), 16 February

n Saturday, two days after the Pakistanrorist group orchestrated a deadly sui- Gagan Shakti. ashmir that killed ome 40 troopers from the Central Reserve Policy Force (CRPF), 137 aircraft from the Indian Air Force (IAF) struck ground targets 200 kilometres due south of Bahawalpur, the headquarters of the JeM. This was not retaliation. The targets struck were well inside India, in the Pokhran Field Firing Range. This was a pre-planned exercise called Vayu Shakti, which the IAF carries out once every three years, to demonstrate it is equipped, rehearsed and ready for action. It has been rehearsing Exercise Vayu Shakti for almost a month.

ground — such as enemy convoys and tanks, radar stations, railway yards and military headquarters. The other important dimension of air power, air-to-air combat, had been practiced a based Jaish-e-Mohammad (JeM) ter- few months ago in a large IAF exercise called

not miss the opportur hanna di

'New India' won't spare those who target our soldiers, says PM Modi

PRESS TRUST OF INDIA

Dhule (Maharashtra)/Jagdalpur (Chhattisgarh), 16 February

Prime Minister Narendra Modi on Saturday said the grief caused by the Pulwama terror attack would be avenged. He said this was a "new India" that would not tolerate those who provide guns and bombs to target security personnel.

Addressing a public meeting after inaugurating several development projects in north Maharashtra, he said anger over the assault in Jammu and Kashmir that claimed the lives of 40 CRPF jawans was palpable in the country.

"I have come here at a time when there is anger and eyes are moist. I salute the brave soldiers and the mothers who gave birth to them," he said. "Apart from the government, as citizens of the country, it is our responsibility to stand by the families. This is the time for mourning.

"I want to assure each family who lost their loved one that each drop of tear will be avenged (aasu ka pura pura jawab liya jayega)."

The PM also said, "Ours is a new India with new methods and policies, and the world will experience this now. Those who spray bullets or those who provide will not be spared. We will not allow them to sleep in peace," Modi asserted. The prime minister said his government has worked tirelessly for the welfare of farmers and pointed to the recent announcement of providing ₹6,000 annually directly into the bank accounts of agriculturalists having less than five acres of land.



(From left) Prime Minister Narendra Modi hands over a key to a beneficiary of the Pradhan Mantri Awas Yojana, in Yavatmal, Maharashtra, on Saturday, along with Maharashtra Chief Minister Devendra Fadnavis. Congress President Rahul Gandhi, Chhattisgarh Chief Minister Bhupesh Baghel and other senior Congress leaders during a rally in Bastar, Chhattisgarh, on Saturday PHOTOS: PT

Bolton calls Doval, China also condemns attack

US National Security Advisor John Bolton telephoned Indian counterpart Aiit Doval on Friday night to express his ist attack by a

haven for terrorist organisations. Chinese State Councilor and Foreign Minister Wang Yi on Saturday also

"Lakhs and crores of rupees have been given to the people like Anil Ambani, Nirav Modi, Mehul Choksi, Vijay Mallya and Lalit Modi, but farmers will get just ₹3.50 per day," he said, referring to the Pradhan Mantri Kisan Samman Nidhi Scheme un

"Today we will display the way we would influence events on the ground (in a war). We are showcasing our ability to hit hard, hit fast and hit with precision, hit during day, hit during night and hit under adverse weather conditions through our autonomous bombing capability," said IAF chief, Air Chief Marshal B S Dhanoa, while inaugurating the demonstration.

Like every year, dozens of diplomats, mostly foreign military officers posted in embassies in New Delhi, were flown out to Pokhran in an IAF aircraft and shown the display. There were no diplomats from Pakistan or China — the two countries to whom New Delhi would most like to send out messages of operational readiness.

Business Standard learnt diplomats from these two countries were not issued invitations to the demonstration.

Exercise Vayu Shakti was mostly about displaying the IAF's ability to strike targets on the Ranges where more land is available.

correlate Vayu Shakti with the recent events in Kashmir.

"While wars are few and far between, we have an ever present sub-conventional threat as the enemy knows he cannot defeat us in a conventional conflict. So today we showcase our ability to punish, our ability to insert and extricate our troops from hostile territories," he said.

This was demonstrated in spectacular fashion, with Dhanoa himself arriving in a C-130 special forces aircraft that landed right in front of the spectators on a makeshift airstrip barely 800 metres long. The C-130 is built for inserting commandoes into enemy territory using makeshift airstrips.

Thereafter, the Pokhran Ranges resonated with explosions as each of the IAF's fighter aircraft struck a variety of simulated targets with unerring accuracy. For the first time, the MiG-29UPG — an air-to-air fighter that has now been upgraded to a multi-role aircraft — showcased its new ground strike capability.

Also featuring for the first time was the swing role capability of the Tejas fighter, which fired a missile at an enemy aircraft and also struck a ground target in the same mission. The indigenous Akash missile also engaged and directly hit a simulated aircraft target by night.

Exercise Vayu Shakti is conducted once every three years. This firepower demonstration was earlier conducted at the Tilpat Ranges outside Delhi. But, after 1989, it was shifted to Pokhran

Rahul rakes up Ambani, Mallya

Congress president Rahul Gandhi on Saturday hit out at the Modi government, saying that while it waived loans worth

Pakistan-based group of Islamic extremists on Thursday in Kashmir, according to a statement from India's foreign ministry. The statement said the two vowed to work together to ensure Pakistan ceases to be a safe

₹3.5 trillion of select industrialists such as ning of the function, homage was paid to Anil Ambani and Vijay Mallya, it promthe jawans who died in Thursday's terror ised just ₹3.50 per day to farmers. attack. "We remember the CRPF jawans

Gandhi was speaking at a convention who sacrificed their lives in Jammu and of tribals at Dhuragaon village in Bastar Kashmir, and extend condolences and love to their families." Gandhi said. district of Chhattisgarh. At the begin-

at least 40 CRPF personnel were killed, saying Beijing "resolutely opposes" all forms of terrorism and countries in the region should enhance cooperation and jointly address the threat of posed PTI by it.

farmers cultivating up to two hectares (five acres) will get direct cash support of ₹6,000 annually.

"When the announcement of ₹6,000 for farmers was made in the Union Budget, BJP MPs were thumping their desks in Lok Sabha... Is this a joke?" he asked.

He promised that if the Congress was voted to power after the 2019 Lok Sabha polls, a minimum income guarantee would be provided to the poor and the money would be deposited directly into their bank accounts.

NGT hits out at TN govt for failing to clean water bodies

AASHISH ARYAN New Delhi, 16 February

The principal Bench of the National Green Tribunal (NGT) has come down heavily on the Tamil Nadu government for failing to clean its water bodies. particularly the Cooum and Adayar rivers, and the Buckingham canal, despite repeated reminders.

these three water bodies has tee to assess the exact quantum may assess the causes and in the present matter as well been owing to "repeated failure of damage.

of the state of Tamil Nadu in its duties," said a three-member Bench led by Chairman Justice Adarsh Goel. The Bench said it was tenta-

tively inclined to fining the state government ₹100 crore for not being able to act on its assurances about cleaning the water bodies. But, it would wait for a

"Before taking a final view, a joint committee comprising representatives of the Central Pollution Control Board (CPCB), Indian Institute of action plan," the Bench said. Sciences-Bangalore, Madras School of Economics, Environmental National Engineering Research of hearing on April 23. "We Institute (NEERI), and the direct the chief secretary to be The increasing pollution in report from an expert commit- State Pollution Control Board ready with the progress report guarantee of ₹10 crore.

quantum of damage to the environment as well as further steps required for restoration of the environment which are not covered in the The NGT has also directed the chief secretary of the state to be present on the next date

which is impacting a large number of inhabitants living in the catchments of these river systems," the NGT said.

On the last date of hearing in the matter, the NGT had said it was not satisfied by the action taken report submitted by the state and asked Tamil Nadu as to why it should not be asked to submit a performance

In a trend reversal, jewellers shift to handcrafted designs



Fewer options and inability to correct design errors are some of the major drawbacks of machine-made jewellery

Heavy machinery costs, changing mindset of consumers responsible for the shift, say experts

DILIP KUMAR JHA Mumbai, 16 February

Machines replaced human hands in the manufacturing of gold jewellery a few decades back. The need, back then, was to cut costs, and cater to the rising popularity of machine designs in chains, earrings and bangles. Handcrafted designs were blended with machine-made ones. And soon machine-made ornaments expanded their share in the overall jewellery sales to 25-30 per cent, from less than 5 per cent.

However, after revolutionising the jewellery industry through machine-made designs, jewellers are going back to their roots of traditional handcrafted manufactur-

ing of gold and diamond ornaments to appease customers for premiums.

This move can be seen as a result of combination of factors. One, most jewellers are voluntarily opting for hallmark jewellery. Second, the retail gold price is in sync with the indicative price announced daily by the Indian Bullion and Jewellers Association for retailers.

Therefore, the major differentiation is the design. And without designs, the brand value, which otherwise is a guarantee for purity, is diminishing.

Adding to this, the shift from hand-crafted to machine-made ornaments did not serve the purpose. Neither the cost of machine-made jewellery declined, nor did

the jewellers find innovative designs.

"The industry is going back to 'handcrafted' ornaments for both domestic and overseas buyers. Thus, such jewellery will be the future in India," said N Anantha Padmanaban, managing director, NAC Jewellers, a leading jewellery manufacturer in Chennai, and chairman of the All India Gems & Jewellery Domestic Council (GJC)

In fact, the GJC plans to re-introduce 'Lucky Lakshmi' — its famous marketing campaign - to encourage jewellery manufacturers to work with intricate handcrafted designs.

"Installment of a machine calls for a massive investment. Hence, small jewellerv orders cannot be fulfilled using machines.

For every small order, a dye needs to be made, which costs a lot to jewellers. Since the consumers' mindset in India keeps changing, the machine-made ornaments become outdated after a small period. In case of handcrafted ones, the consumers hold onto the ornaments for long because of their emotional attachments," said Shaankar Sen, chairman and managing director, Senco Gold, a Kolkata-based jewellery manufacturer.

Availability of options and flexibility with errors and omissions are some of the major drawbacks of machine-made jewellery. Also, machine-made jewellery tends to break during the finishing process. They are then connected using laser technology, which has short durability and further adds onto the woes.







