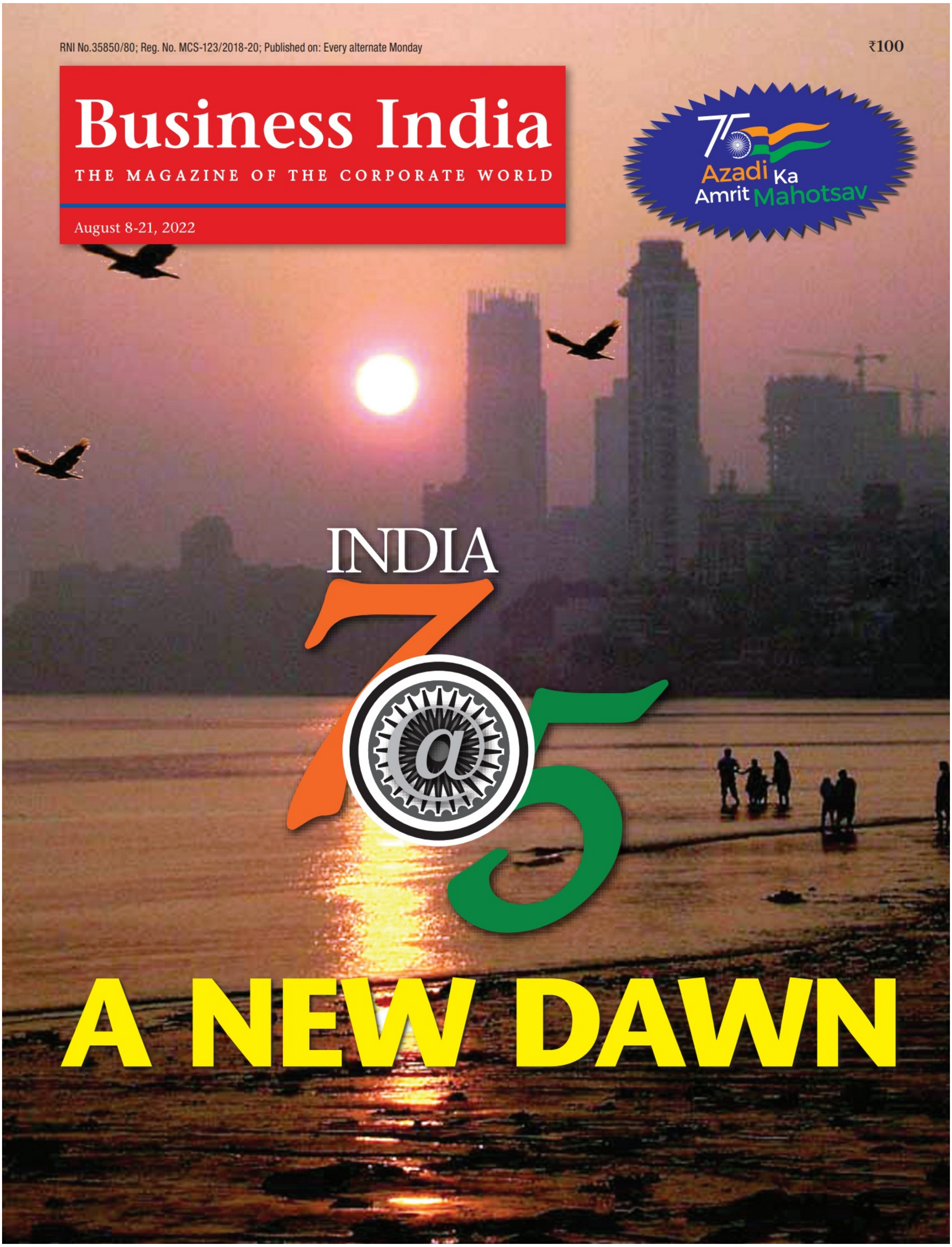
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August 8-21, 2022
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INDIA
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A NEW DAWN


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nation building!
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Business India

Our 75th year of Independence is an important milestone. All anniversaries and birthdays are days to celebrate, and also days to reflect on the past, and also the time to look ahead.

We certainly have a lot to celebrate and be proud of. The India of today has been transformed from what it was 75 years ago, in a manner that few thought would be possible. We are the world's largest functioning and vibrant democracy. The poor, the Dalits and women have effective voices, and in many ways determine which government is in power. This is widely accepted by all political parties all over the country. We are now the fifth largest economy in the world. And while there still are unacceptably large numbers of illiterate and poor, the reality also is that we have a burgeoning educated middle class wanting and driving change. Our IT services companies are world leaders – to the point where we can be the back offices of the world. Our pharma industry has grown to where we can be the pharmacy to the world. And almost unbelievable but true, we are amongst the largest exporters of cars and motorcycles in the world!

At the same time, we cannot gloss over or ignore the fact that unacceptably large numbers are still mired in poverty. Too many still go hungry at night. The school dropout levels are too high. And adequate healthcare for all is still a distant dream.

We have all the institutions of a modern democratic power. We have a functioning Constitution, free elections to Parliament and State assemblies, an independent judiciary, an army under civilian control and independent centres of social power. These include academia, an intelligentsia, a functioning bureaucracy, organised labour, organised and independent businesses and free markets. Although many of these components are under strain and work somewhat creakily, they are all part of the modern Indian State. Few countries can boast of the same.

We would need tomes upon tomes to cover all our successes. Or to describe all the deficiencies. But we can put together snippets and brief descriptions that outline the enormity of our successes as also the enormity of the challenges that lie ahead.

India has changed almost unrecognisably in the last 75 years. And so have we as a people. We are proud of our successes. And as a nation, the world accepts India as a major nation and power in every sense of the word.

At the same time we must also recognise the changes in society. Social and religious divisions are coming to the fore and in many ways being encouraged. The reality also is that we are seeing the clear beginnings of an ugly majoritarianism. We are being seen as a major power, but we have poor relations with most of our neighbours. Historically, India used to be seen as an open, tolerant, philosophical, welcoming and large-hearted country. This allowed us to be seen as a moral force and accepted as a leader.

As we move towards our 100th year of Independence, we will see even greater changes and economic and material growth and progress. There is no stopping us from occupying our rightful place in the world. But, at the same time, we have to rededicate ourselves to the ideals and way of life that made India admired as a leader in the truest sense.

Ashok H. Advani

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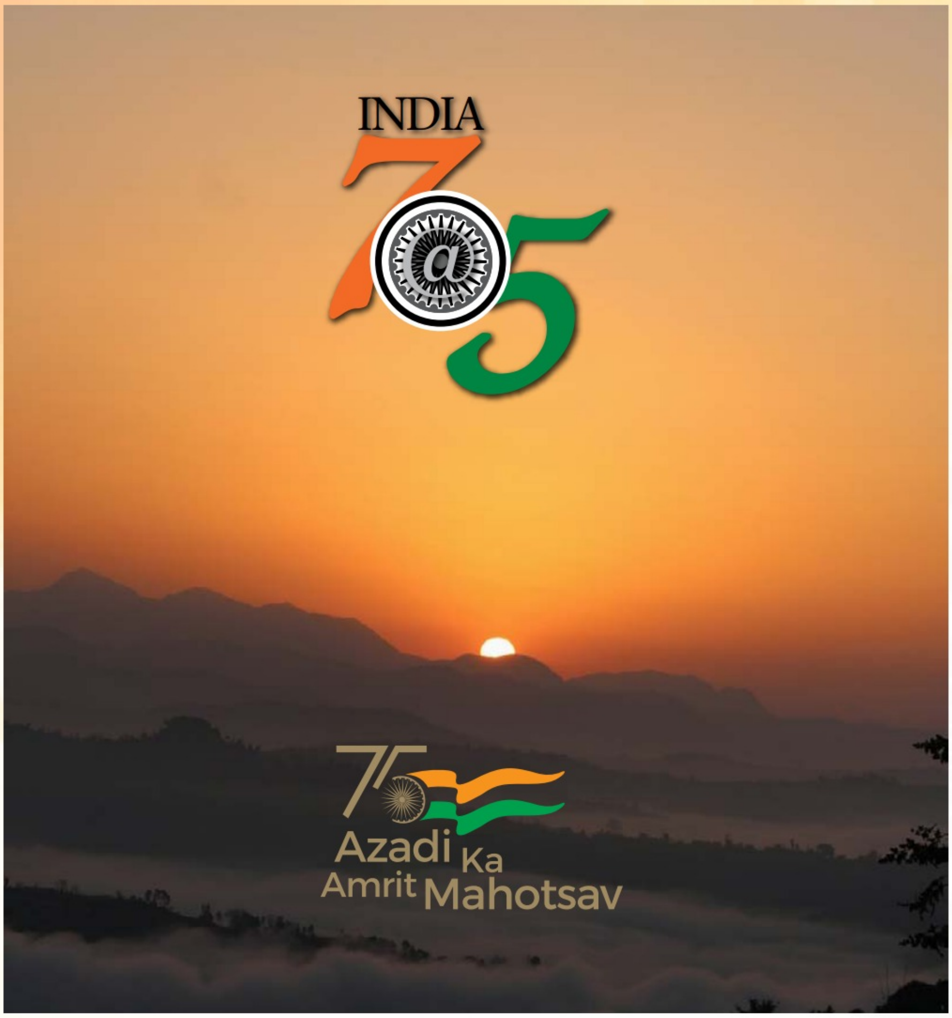

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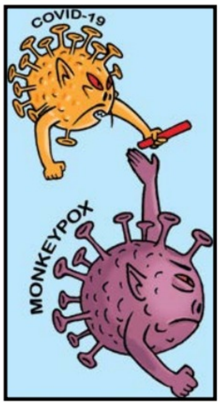
No room for laxity

Government must diagnose monkeypox threat fast



A fortnight after the first case of monkeypox was confirmed in India, the first death has been reported from Thrissur in Kerala. More and more cases are coming to light. The Kerala victim had tested positive in the United Arab Emirates (UAE) and was undergoing treatment in a private hospital for severe fatigue and brain fever, six days after his arrival. His swab samples had been sent to the ICMR-National Institute of Virology (NIV) Centre in Alappuzha for confirmation before the authorities reportedly swung into action. Intriguingly, the report that he had tested positive for monkeypox was disclosed to the health authorities only a day before he died. By then, perhaps, it was too late. Such laxity should now be avoided.

Death from the virus is rare. According to the World Health Organisation, the case fatality ratio of monkeypox is historically 0-11 per cent in the general population, though higher among young children. In recent times, the case fatality ratio has been 3-6 per cent. So, the Thrissur death should be a cause for alarm. Also, as the experience of Covid-19 shows, it could vary depending on the population at hand. Besides, some researchers worry that monkeypox could mutate and become a greater threat to humans.

The WHO has now declared the monkeypox outbreak a public health emergency of international concern. For well over a decade, members of the scientific community have been concerned about the potential of a monkeypox epidemic. It's not a disease that the general public has been familiar with; in fact, it was once mistaken for smallpox. The only similarity between the two is that they're caused by a virus from the orthopox-virus family. So far, monkeypox has not been as transmissible or as fatal as smallpox.

However, the government must not underestimate the severity of the threat. This should be communicated to the people as well. In 2020-21, when the two waves of the pandemic struck India, our health infrastructure was found woefully wanting. Even oxygen supplies fell short, as patients gasped for breath. India had to face the embarrassment of being told by WHO that its casualty figures were a gross underestimation. Currently, there is no treatment approved specifically for monkeypox virus infections. Anti-virals developed for use in patients with smallpox are being used against monkeypox too. The government should now develop a medical protocol for its treatment to rule out a mis-diagnosis (as was the case with the victim from the UAE).

The government must also not allow the people to lower the guard on another front; cases of corona-virus and its positivity rate are rising in our major cities and large sections of the population seem to have given up on precautions like masking and hand-sanitising. We don't want a double whammy to hit us.

Fortunately, a task force has been set up to monitor the disease spread. The Indian Council of Medical Research has isolated the strain of the virus and invited vaccine makers to develop a vaccine. It has also invited proposals to develop diagnostic kits.

While the disease has been around in Africa since the 1970s, it was reported in the US, the UK and Israel too, later. In 2017, Nigeria experienced a large outbreak, with a case fatality ratio of about 3 per cent; and cases continue to be reported there. It is its surge outside Africa, in 78 countries, that has elevated the risk profile of the disease along with the realisation that there are considerable gaps in knowledge on whether the disease poses a greater risk to specific population groups, just as it was eventually determined for Covid-19. In monkeypox deaths in Brazil and Spain, the patients were reported to have had serious associated syndromes, such as encephalitis and lymphoma, though it is unclear what role the virus played in their disease outcome.

That monkeypox spreads mainly through sexual transmission and close contact. It is not an airborne disease. That should not be of comfort to health authorities. The death in Thrissur highlights the need for a thorough probe as well as a public disclosure on the case progression. But there is no need for panic. Smallpox was eradicated through global vaccination efforts in the 1980s. A vaccine, when it is developed and commercialised, could take care of monkeypox as well. ◆

Nitish stirs the pot

Another volte face by Bihar CM

For a man who has done so many political volte face in his political career, doing another is no big deal. In his latest U-turn, Nitish Kumar is joining hands with Tejashwi Yadav, five years after they parted ways to form the new government in Bihar. Bharatiya Janata Party-baiters would have us believe that he has turned the tables on the saffron party in the process. But his cleverness and manoeuvring skills may not exactly win him a similar pat on the back from the people of Bihar watching his political trapeze act for long – after being with the BJP, he fought the 2015 Assembly elections with the Rashtriya Janata Dal of Laloo Yadav, later splitting with it in 2017 to return to the BJP's embrace. And, now, he is consorting with the RJD, the Yadav-dominated political formation he had accused of corruption in defence of his split with it in 2017. In politics, respecting the political mandate is important. Kumar is making a habit of trampling over the mandate entrusted to him by the voters of Bihar.

Justifying his moves, Kumar's party men say this time things were different. According to them, the BJP, fresh from its political success in Maharashtra, was scheming to split and sabotage the state government from the inside, the agent provocateur in the JD (U) being R.C.P. Singh, a former bureaucrat-turned- Union minister. Kumar had quickly nipped the challenge in the bud by denying Singh a Rajya Sabha membership. The BJP has dismissed this allegation, pointing out that it could not have formed a government, even if the JD (U) were to split.

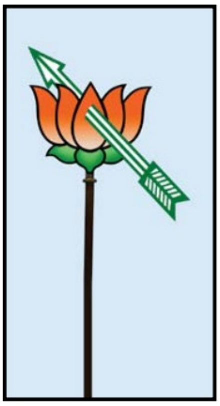
More important, however, will be whether the people of Bihar swallow the explanation of walking out of the alliance. It is possible that, given their sheer numbers, the new alliance of JD (U) and RJD, along with the Congress and the Left parties, manages to pull along till the end of the assembly's term in 2025. What would be of immediate consequence is how the alliance performs in the 2024 Lok Sabha election. If the caste arithmetic of the alliance does work out, then it can give the BJP a run for its money in a state, which accounts for 40 crucial seats in the Lok Sabha.

There is another calculation that is clearly guiding Kumar's move. With the Opposition unity in total disarray regarding who would lead the challenge against Narendra Modi's candidacy, the Bihar CM feels that he has the right credentials for the job. His long experience as chief minister and Union minister (in the V.P. Singh and Vajpayee cabinets) and his background as a veteran Hindi heartland politician make him a better candidate than Mamata Banerjee or Telangana's KCR, one handicapped by language and the other by the north-south divide. All he needs is the backing of the Congress party. It is not for nothing that Kumar is now paying obeisance to the Gandhis.

However, the road to 2024 and beyond is a long way away from here, and there is little that is predictable about Kumar en route. In Bihar itself, a lot will depend on how supporters of the individual partners of the alliance respond to this abrupt realignment, and how the JD (U) and the RJD respond to the signals from below. It will also be interesting to see how the country responds to Kumar's national moves, if and when he makes them. Right now, Kumar has just stirred the pot; what will come out of it is not known.

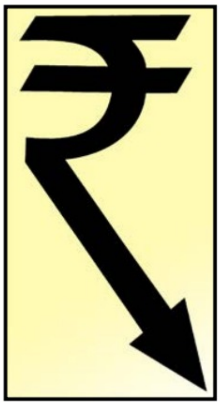
As for the BJP, though it may suffer a setback, a new window can open for it in Bihar, as the sole claimant of all anti-incumbency votes. It is expected that Central investigative agencies will get active against key figures in the new ruling coalition, adding grist to the anti-incumbency against the new coalition, if it does not perform well. However, if the state government delivers on jobs and governance, then the BJP is up for a rough haul.

A more reasonable thing for the BJP to do is to be more respectful of its partners and opponents. As the Shiv Sena and now the JD (U) are claiming, the BJP as a friend is as dangerous as the BJP, an enemy. The BJP seems intent on expanding its base at the expense of friends and foes alike. While this is good as a long-term strategy, it runs the risk of undermining established power equations and coalition governments in the near term. And, in politics, as in other aspects of life, there is no long-term future, if one is unable to survive in the short term. ◆



Rupees, in bits and bytes

The rupee has turned digital and that transformation will continue



Seventy-five years is a long time to assess the strength of a currency, particularly one in transformation.

The first transformation is a comparison with the US dollar, the most widely used currency: with each dollar exchanged for 3.3 rupees in 1947. Back then, the rupee was a reserve currency for parts of Southeast Asia and much of the Middle East.

Today the rupee trades at nearly 80 to a dollar. Though economists, divided on the issue, argue whether the word 'strength' in this case ought to be replaced with 'value'.

Alarmists point at a second transformation that is unfolding in parallel: a sudden and sustained rise in the sale of crypto 'currencies'. Indeed, the bitcoin's 'Genesis Block' prints a timestamp: 03/Jan/2009 Chancellor on brink of second bailout for banks – which has been seen by some as a declaration, of its offer to be an alternative to government-issued currencies.

But cryptos are far from being true currencies. For a currency is defined as a system or type of money that a particular country uses, typically fiat.

And money itself is a store of value, the means of paying or buying something. Against this yardstick, cryptos serve mostly as digital tokens, made available for sale and purchase by private entities. They cannot in turn be used to buy and sell goods and services. Their prices soar against a stream of buyers and fall when a panicking herd heads for sale.

But while cryptos may look and feel like a gamble, the verdict on cryptos is not out yet. For, akin to barter trade, currency has another definition: the state of being believed, accepted, or used by many people. Indeed, nothing less than the Ukraine government has accepted bitcoin donations in its ongoing war against Russia.

This brings us to the third transformation: financial inclusion. For the ordinary eye, 2016-17 – the year of demonetisation – should have been the year of complete financial inclusion.

But the country's Central bank measures financial inclusion as an index: it has risen to 56.4 from 43.4 in March 2017. At 0 the index represents complete financial exclusion and 100 indicates full financial inclusion. The RBI definition of financial inclusion includes broad parameters like access, usage, and quality – reflected by financial literacy, consumer protection, and inequalities and deficiencies in services.

Which brings us to the fourth transformation: the rupee's change from metal and paper to bits and bytes. The RBI's annual report for 2022 offers some insight on this front. A line item in its balance sheet called 'currency with the public' (CpW), includes paper notes, coins and demand deposits of banks in circulation.

While in the year of demonetisation, CpW dipped by ₹4 lakh crore to ₹12 lakh crore, the number has risen steadily since then. Currency with the public stood at ₹30.4 lakh crore on 25 March this year, having increased by roughly ₹3 lakh-crore each year – and more than doubled – since 2017.

Within its bubble, cash is still king. But alongside cash, digital payments have risen much faster. In 2021-22, the settlement value of government securities and forex transactions alone touched ₹2,068 lakh crore.

Retail payments are now almost as large as trade in securities: with ₹1,286 lakh crore through RTGS (real-time gross settlement) and ₹287 lakh crore through NEFT (National Electronic Funds Transfer) transactions.

The fastest growth has been clocked by the UPI network, which more than doubled in transaction value to ₹84 lakh crore last year. Total retail payments – including credit and debit cards and pre-paid instruments – touched ₹1,810 lakh crore in 2022.

Placing just these two numbers beside each other – CpW at 30.4 lakh crore and retail digital transactions at ₹1,810 lakh crore – exhibits just how digital the rupee already is.

The path ahead is thus clearly digital, but not without caveats. Earlier this year finance minister Nirmala Sitharaman announced in parliament that 2023 will see the RBI launch a digital rupee.

This is likely to be different from the line items recorded by the RBI in its annual report. This is because unlike paper and metal currency, which is distributed by the banking system, the fiat digital currency is likely to be distributed directly by the Central Bank.

If the past 75 years have thus been transformational for the rupee, its journey of change will be much faster in the next 75. ◆

Experience safe, sustainable and responsible tourism in MP

Are you a woman traveller and want to explore many beautiful places and adventure activities without fear? Are you the one who wants to witness the making of beautiful keepsakes with locals and take it with you as a memory to cherish? Or you are a person who wants to soak into the tribal or rural culture? Then Madhya Pradesh is the place for you.

To experience what has been mentioned above, it is important to keep these places safe, friendly, and beautiful along with preserving their culture and traditions. All these responsibilities are being done by the natives for ages. Hence, Madhya Pradesh understands its responsibilities not only to its tourists but also to the local people who have been preserving the beautiful ancient culture of the state.

Madhya Pradesh Tourism is intensely working on its Responsible Tourism Mission, which is being run with an aim to preserve the natural and cultural heritage of the state. The mission aspires to provide an additional income and a better livelihood to locals, traditional artisans, and marginalized people along with creating social and environmental stability.

Responsible Tourism is a vital part of a state to maximize the benefits to local communities and minimize negative social or environmental impact, helping local people to preserve fragile cultures and habitats.

For this, the state tourism department has signed MOU with Responsible Tourism mission-Kerala, International centers for responsible tourism UK and UN women.

The major components that taken under the umbrella of Responsible Tourism Mission are, community development, economic development, cultural protection and exchange, conservation of environment, promotion of arts and crafts, empowering human capital and building talents through skilling and training, public health and hygiene, peace building and happiness, stakeholders promotion programs etc.

There are many projects being implemented under this:

- Rural Tourism
- Safe Tourism Destinations for Women in Madhya Pradesh
- Responsible Souvenir
- Solid waste management- clean destination
- Project Humsafar – Accessible for all
- Skilling of youths

Let's have a look at a few projects:

Rural tourism: Madhya Pradesh Tourism (MPT) brought together gram stays, farm stays, and homestays as safe and culturally rich stay options.

It is being run with the objective of economic development and social development of the local community associated with the tourism sector. This project is being implemented in 100 selected villages of Madhya Pradesh that represent the culture of various parts of the state. The major components, of the project, are a convenient stay in the village, local excursions, local cuisines and culture, art and crafts, and skill and training. The department has initiated work in 60 villages by partnering with some NGOs. The department is also focused to benefit the rural communities by holding their hands for agri-based tourism. The aim of this project is to provide direct and indirect livelihood opportunities to 10 thousand families. Six villages have already started hosting the guests.

Madhya Pradesh understands its responsibility not only toward its tourists but also to those who have maintained the beauty and preserved the ancient culture of the state

Responsible Souvenir: Madhya Pradesh is not only a state to explore its heritage, culture, adventure, wildlife, spiritual, food, rural, and wellness destinations but it is also a hub to experience amazing arts and crafts. To prepare such beautiful souvenirs, MPT is promoting the local artisans by developing handloom and handicrafts through responsible souvenirs development projects. MPT has also hand-hold the artisan for designing and is developing market linkages for them. Two art and craft centers have already been started in Madla and Dhamna villages, where the community learns and produces new crafts at fair prices.

Safe tourism destination for women in MP

This vibrant state offers destinations where travelling alone is not just comfortable but one can also get to taste of freedom and fun without fear. With an aim to create women-friendly environment especially at the tourism destinations with the support of the local community, Madhya Pradesh Tourism Board is implementing the project 'safe tourism destinations for women in Madhya Pradesh'. The main objectives of this project are coordination among stakeholders for developing women-friendly public infrastructure, community participation and awareness of women safety and building community-based institutions. As many as 50 districts are being focused under this project. To make tourist destinations women friendly, the state tourism body is maximizing women participation through trainings in e-riksha or taxi driving, scout leader, city explorer, location manager, security guard, cook etc.

Consolidation

UNO Minda Limited (formerly Minda Industries Limited), manufactures automobile components for original equipment manufacturers (OEMs). It offers wide product ranges like switches, lightings, seating, castings, acoustics, wheels etc, catering to both domestic (85 per cent) and international (15 per cent) markets. It supplies its products to the OEM (88 per cent) aftermarket (12 per cent) service 2W (47 per cent) and 4W (53 per cent) segments. Now, the consolidation of UNO Minda Group companies' firms over the years into UNO Minda has transformed the company into a unique cohesive unit with considerable financial strength growing as a unified force. In this direction, the company has increased its stake to 77 per cent. It is believed that 35 per cent in Minda Kosei Aluminium Wheels (P) (Minda Kosei) and would invest ₹ 17.49 crore to acquire the remaining stake of promoters in four partnership firms, namely Samaria Engineering, SM Auto Industries, YA Auto Industries and auto components. This would conclude the company's consolidation exercise with all group companies. Minda Kosei had significant growth opportunities with increasing penetration of 4W alloy wheels. The company is expanding capacity at both plants at Bawal and Gujarat at a capital expenditure of ₹74 crore. Post which total capacity will increase to 3,30,000 wheels per month from the current 2,10,000 by FY24. Minda Industry is also expanding its 2W Alloy wheel capacity by two-million wheels per annum at its existing Supa Plant in Maharashtra at a capital expenditure of ₹190 crore. Meanwhile, the company has a capex plan of ₹72.89 crore for its Chennai plant which is engaged in the manufacture of 4W switches.

Disappointing numbers

Prince Pipes and Fittings Ltd (PPFL) reported disappointing numbers in Q1FY23. Volumes were 5 per cent below the estimates, largely due to muted demand from the agri segment. As July 2022 witnessed a further fall in PVC prices, margins are likely to remain under pressure for the coming quarter. Management believes that PVC prices are nearing bottom and should stabilise going forward; hence they expect margins to come back to 13-15 per cent from Q3FY23. Moreover, the low PVC prices should boost overall demand from the agri- as well as plumbing segments. Therefore, management continues to remain bullish on the industry's medium to long term demand trajectory. PPFL has also announced its foray into the bathware segment (sanitaryware and faucets) which will initially be an outsourced model for the next 12-15 months, post which the company will look to set up a manufacturing unit for faucets.

Expanding footprint

The Rhenus group, a global logistics service provider, is expanding its footprint in India in a big way. Having entered India in 2010 in a joint venture with Western Arya group, the \$8.0 billion group has now launched two new multi-user chemical warehouses in Jamalpur, Gurugram, and Bhiwandi, near Mumbai. Besides, it is also introducing its own building, Rhenus Tower, in the logistics hub of Andheri, Mumbai. With this addition, Rhenus India now has 31 warehouses in India, with more than 2.4 million sq ft of space, including dedicated and multi-user facilities. Backed by 2,000 employees and 70 offices in India, the company is looking to double its warehousing capacity to about 5 million sq ft in the next three years, amid rising demand. The company, which so far has been pursuing the asset-light lease model, is now also looking to put up its own greenfield warehouses as well, and one such greenfield warehouse of about 200,000 sq ft is coming up in Mumbai by this year end, at an estimated cost of about ₹200 crore.

Exploring opportunities

Godrej Körber, the JV between Godrej & Boyce and Körber Supply Chain, a part of global technology group Körber AG, has secured a significant order from a leading Indian multinational paint manufacturer, for setting up an automated warehouse, attached to their green-field facility for manufacturing paints in Uttar Pradesh. This order comes on the heels of the flagship company of the Godrej group strengthening its partnership with Germany-based Körber AG, to bring together an unmatched depth and breadth of technologies and expertise to conquer supply chain complexity. The new project will help the paint company to seamlessly manage the movement and storage of 15,000 tonnes of decorative and industrial paints, manufactured at Sandila, UP. Godrej & Boyce's partnership with the Körber group began in 2015, with Körber acquiring Efacec Handling Solutions, Portugal, the joint venture partner for Godrej at that time. The joint venture was then renamed Godrej Consoveyo and further rebranded as Godrej Körber early this year.

Bagged orders

PNC Infratech is engaged in infrastructure development through the construction of highways including BOT (built, operate and transfer projects), airport runways, bridges, flyovers and power transmission projects, among others. Recently, the company has signed concession agreements for three Hybrid Annuity Mode (HAM) projects with the National Highways Authority of India (NHAI) having bid a project cost of ₹2,487 crore. The projects are to be completed in 25-30 months. All three projects are in UP. Meanwhile, the company has an order book of over ₹14,600 crore. After including the EPC value of the projects, contract under execution is over ₹21,000 crore which is over three times that of the FY22 revenue. This excludes the above concessional agreement from NHAI for the UP project. The company was declared an L1 bidder in seven HAM projects in March 2022 and LOAs for all seven projects were received by the company with an aggregate bid project cost of ₹8,446 crore. Given the substantial order book of water projects – while it wants to consolidate its position in the water sector, the company's focus area will remain the highway and expressway space. ◆

Launched in September 2020, **Hirect** offers a chat-based-direct hiring platform which is designed for high-growth start-ups and SMEs to meet their hiring needs without consultants. The hiring platform allows recruiters to conduct the entire hiring process within the application with its in-built audio and video calling feature and with 100 per cent data privacy. A new-age algorithm is used to match profiles of job seekers with job descriptions and recommend a list of the right candidates. The start-up allows candidates to connect directly with founders, CXOs, and HR leaders. With the help of AI integration, it has revolutionised recruiter-candidate engagement and enabled the recruitment process with greater efficiency and agility. The app has already reached over 3.0 million verified start-up job seekers and more than 1,40,000 start-ups are already hiring on the app. "Conventional hiring methods are now becoming obsolete as compared to digitised, AI-based applications that play a major role in strategically locating and compartmentalising quality talent pools, especially for start-ups," says **Raj Das**, global co-founder & CEO, Hirect India. ◆

Shipyaari is a SaaS-based logistics service provider based out of Mumbai. Founded in 2013, the company has emerged as a leading shipping solution provider to e-commerce players and SMEs. Today, it is trusted by around 20,000-plus sellers across India for simplifying real-time visibility throughout the end-to-end supply chain. The platform provides solutions to all shipping troubles like saving money by reducing the transportation cost, better management, cost-saving linked to visibility at discounted rates, management of non-compliant suppliers, and improved tracking. The tech platform helps reduce paper usage in logistical operations. "The primary objective of our company is to provide a transparent and simple logistics solutions to e-commerce players and SMEs, letting them focus on their core business. Our automated shipping solutions has become a big success story among small and medium-sized e-tailers," says **Nayan Ratandhayara**, co-founder and CEO, Shipyaari. ◆

Praman.Ai was launched in August 2021, and introduced a first-of-its-kind revolutionary exchange platform that is dedicated to horticulture and agri commodity trading. With over ₹5,000 crore in annualised trade value, the start-up, powered by Intello Lab's proprietary quality assessment technology, facilitates spot-trading, e-auctioning, and reverse-auctioning in horticulture commodities including onion, cardamom and apples. The platform uniquely underwrites the quality risk of trades and guarantees settlements of the same. Praman.Ai has proved to be a trusted partner with a flourishing community of over 34,000 growers, 5,000+ buyers, and 700+ partnerships including governmental organisations and bodies like NAFED, AP Markfed, Spices Board of India, J&K Horticulture Board, among others. "Praman's technology intervention converts farmyards into digital market yards with end-to-end traceability, quality assurance and trade discovery. Today, we are pioneering the concept of the spot-quality assessment across cash crops," says **Saurabh S**, President, Praman.Ai. ◆

Pi Green Innovations is a cleantech company, founded with the aim of creating technology-driven solutions for the reduction of particulate matter emissions at source and from the ambient air. The company's key solutions include carbon cutter machines – filterless retrofits for diesel generators and heavy vehicles. In addition, the company, co-founded by **Irfan Pathan** and Shantanu Sonaikar, has also developed RepAir – a filterless ambient air-purification tower that can be installed in public spaces. The company's revolutionary innovation has been rated as one of the best technologies globally to reduce air pollution at Smogathon 2018 in Poland and it has also won several other industry awards. In 2021, Pi Green secured over $4.5 million in Series A funding. Harshal Morde, director of Morde Foods, had previously provided $300,000 in start-up finance. With its mission to make clean air accessible to everyone, PI Green is empowering government bodies and organisations to address the issue of a severe public health scare in the form of air pollution. "The company is committed to creating sustainable solutions for a greener future. Innovations in technology and design are used to indigenously develop products that hold the promise of a cleaner environment. We have patents granted in the USA, UK, China, EU, and Singapore," says Pathan, co-founder & CEO, Pi Green Innovation. ◆

JK Tyre has taken yet another step to further enhance its technological prowess in the industry, by developing the complete range of EV-specific Smart radial tyres for all categories of buses, trucks, LCVs and Passenger Cars in India. Designed and developed by the engineers from the state-of-the-art global technology centre, Raghupati Singhania Centre of Excellence (RPSCOE), the tyres have been engineered specially to the unique needs of electric mobility. "At JK Tyre, innovation and technology are the core pillars," says **V.K. Misra**, technical director, JK Tyre & Industries Ltd, speaking on the new development. "And, each of our product categories is ahead of its time to meet the need of our customers and industry. With the evolution of the EV sector in India, the development of EV-oriented technology remains a key focus for the company. Our smart tyres are developed with EV-specific NextGen Design philosophy, making the entire range smarter, quieter, durable and energy-efficient." JK Tyre has developed technologies to cater to the special needs of EV and ensures ultra-low rolling resistance, improved wet and dry traction, higher durability and lower energy consumption. To meet the challenging lower noise requirements of EVs, the tread pattern has been crafted using advanced FEA simulations for lower noise and better-wear characteristics. ♦

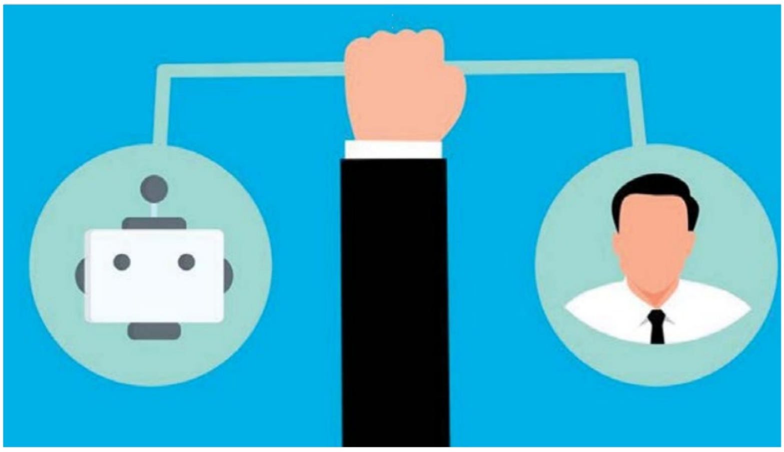
The Rakesh Jhunjunwala promoted **Akasa Air** is finally taking off. The airline claims it would fly daily direct flights on the Chennai-Mumbai route from next month onwards as its gears to launch its commercial operation in the country later this week. The flights between Chennai and Mumbai sector would commence by 15 September, announces a company statement. The airliner, as part of pan-India network connectivity, would also add new routes between Ahmedabad and Bengaluru from 23 August. "With the first flight scheduled to take off on 7 August, we have seen tremendous response for booking from travellers and our first flight got sold out within a day of going live," says **Praveen Iyer**, co-founder & chief commercial officer, Akasa Air. "With an aircraft arriving every fortnight, we are delighted to augment our network to meet our commitment of progressively adding more cities along new sectors to establish a pan-India presence," he adds. Akasa Air would fly between Mumbai-Ahmedabad on 7 August on the inaugural day and would later expand the routes to Bengaluru-Kochi (12 August onwards), Bengaluru-Mumbai (19 August onwards), Bengaluru-Ahmedabad (23 August onwards). ♦

Volvo Car India's all-electric offering the XC40 Recharge has received an overwhelming response. The car got booked for the whole year 2022 within two hours of the company opening bookings on their official website. Volvo plans to deliver 150 XC40 Recharge cars by end of December 2022 after starting the deliveries in October. "The long wait for our customers for the XC40 Recharge is over," says **Jyoti Malhotra**, managing director, Volvo Car India. "The overwhelming response on bookings in just two hours is a reflection of the consumer confidence in Volvo Cars. Our strategy of showcasing the car across our business partner locations and giving the prospective customers in these cities the opportunity to drive the XC40 Recharge has helped them in deciding. The XC40 Recharge can only be booked online on Volvo Car's official website and the pan India customer drive experience resulted in a quick hassle-free ordering process". ♦

Integrated automotive and industrial supplier, **Schaeffler India** has inaugurated its first aftermarket experience centre in Pune. This division of Schaeffler is responsible for the spare parts business of the company for transmission, engine, and chassis systems under the leading brands LuK, INA, and FAG respectively. "We are excited with the launch of this world-class experience centre," commented **Debasish Satpathy**, president, automotive aftermarket, Schaeffler India, at the inauguration. "The primary objective of this initiative by the company is to supply our retailer and mechanic partners, with technical information and training about state-of-the-art Schaeffler aftermarket products. In this era of rapid technological advancements in vehicle making, repair and maintenance, it is important for the retailers and especially for mechanics to understand and learn about the latest techniques and developments in the industry." Schaeffler continues to lead automotive innovation with this state-of-the-art facility, which showcases a wide range of innovative automotive aftermarket products in a cut-section format to enable customers to get a physical sense of the products. ♦

The new world of machines

Companies increasingly use machines to hire and train their staff



At first, it looked as if machines were invading human resources departments across industries. This invasion of machines has been euphemistically termed as digitalisation.

Sample this. Ceat, the tyre-maker, has introduced robotic process automation (RPA) in its HR department in 2021-22. "Ceat HR department handles the data of about 6,000+ employees, which is quite cumbersome to manage manually," the company communiqué informs. "Now, through RPA, Ceat has transformed 90 per cent of the manual efforts to automation in 2021-22. While, through manual efforts, the HR payroll process was taking 36 hours, with RPA, the time has reduced to 12 hours – a 63 per cent time saving."

To address employee grievances, feedback, etc, firms have started using AI Bot. "Using Leena AI chatbot, the company has been keeping track of employee emotions and moods," confides PCBL (formerly Phillips Carbon Black). "Continuous employee feedback is also gathered with the AI-enabled employee listening tool 'Amber', states Crompton Greaves Consumer Electricals, in its 2021-22 annual report.

Coming to training, many companies are showing interest in the digital platform 'learning experience platform' (LXP). "Digital adoption is a critical pillar of the new learning philosophy," contends the ICICI Lombard General Insurance spokesperson. "IL's LXP supports and offers personalised learning experiences aligned to the current and future professional development needs of employees. It presents content in a 'Netflix-like' interface, with recommendations, curated learning content from different sources, mobile interfaces and AI driven recommendations and has seen a high adoption amongst employees."

The National Stock Exchange (NSE) too has adopted LXP. "In the learning & development space, the organisation embarked on digital transformation project of creating a 'learning-on-demand' infrastructure through identifying LXP, along with the content partners and MOOC content that suit the diverse learning needs for the exchange business," comments NSE.

L&T has introduced engineering concepts on mobile apps. "Our AR-based mobile application on Wall & Column System module is an immersive self-paced learning mobile application for detailed visualisation of the concept created with completely gamified outputs on mobiles to create an enriching interactive experience," the company says.

Broking outfit Angel One has partnered with San Francisco-based HackerEarth, which provides software for technical hiring. Its online recruitment advertisement is reproduced below:

Mobile Application Developer
Hiring Challenge
Take our coding challenge and make a career with some of India's finest minds in tech at Angel One.

The company's 2021-22 annual report reveals that it has used this method to recruit a software engineer and a mobile application developer. For the two openings, there were more than 1,600 registrations, out of which 700 qualified for the challenge.

Speciality chemicals company SRF has installed machines to induct new recruits. "HR at SRF has been working with agility to reshape and automate its processes, provide custom-made decisions aligning to individual needs," the company's 2021-22 annual report reads. "To understand these individual needs even better, we reached out to Gallup and hope to soon roll out customised solutions in areas that matter most. One such solution was the automated induction plan which was rolled out last year."

Moving to appraisals "In 2021-22, our PMS (performance management system) was brought on mobile with pleasant and easy design, facilitating qualitative and quantitative dialogue between the supervisor and the supervised," HDFC Bank reveals. "It seamlessly encompassed elements of competence and Bank values in the process."

Carborundum Universal, from the Murugappa stable, has gone a step further, handing over hiring and appraising to machines. "The quality of the hires has been enhanced by introducing Thomas Personal Profile Analysis (PPA)," CU admits. "The capability of the HR team has been enhanced by undergoing training program on PPA and getting certified on the same. Employees with high potential in junior level management are being identified through a performance-potential matrix."

On visiting the Thomas website, it says: "PPA in just eight minutes; get insight into a person's behaviour at work," and adds: "General Intelligence Assessment (GIA) – Accurately predict a person's potential to grasp a new role."

The sum and substance of this extraordinary development is that prospective employment seekers will feed their resumes into a machine and those who get selected by the machine will be inducted, whenever the need arises, by the machine; they will be trained by the machine and the machine will also prepare report cards, decide managerial capabilities and settle accounts in case a person leaves or retires. Perhaps the only function that will remain with humans is to say good bye. Welcome to the new world of machines. ◆

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ATTRITION

The Great Resignation!

This is the time of the year when Annual Reports of March-ending companies start pouring in. Attrition, a problem being faced by companies across industries, has been addressed in some of the annual reports. Five companies (Ceat, Dr Reddy's, Havells India, Hindalco and TCS) in their 2021-22 Annual Reports have termed this problem – The Great Resignation – a term getting currency after more than 47 million Americans quit their jobs in 2021.

A bit of digression. Apart from filing Annual Reports, the existing Business Responsibility Report (BRR) to be mandatorily filed by the top 1,000 companies in terms of market cap will be replaced by the Business Responsibility and Sustainability Report (BRSR), says a SEBI circular issued in May 2021. For March-ending companies filing BRSR in 2021-22 is voluntary while, from 2022-23 onwards, it will be compulsory. By and large, companies carry BRR in their annual reports. So has been the case so far with those companies filing BRSR voluntarily.

According to the regulator, this new reporting is based on ESG (environmental, social and governance) parameters. A company has to furnish a lot of information under this report, such as the number of permanent employees, with aggregate and break-up by gender; attrition rate for permanent employees for the past three years in percentage terms, with aggregate and break-up (male and female) – these are two such examples.

It has to be borne in mind that the Industrial Relations Code 2020 has clearly defined the terms employees (Sec 2.l) and workers (Sec 2 zr) and, as such, they are distinct. In case a company has workers, then similar information has to be given about them too.

Coming back to employee exodus, software major TCS, which had 590,662 employees (as on March 2022), saw its attrition rate jump to 17.50 per cent in 2021-22, from 13.30 per cent in 2019-20. For 2020-21, this was unusual, because of the pandemic. Comparison with this year would not be meaningful. "It has been a challenging year for employers all over the world," acknowledges Milind Lakkad, chief human resources officer, TCS, in the annual report for 2021-22. "In our industry, it wasn't as much due to the Great Resignation, as a churn within the industry. Our attrition went up as well. We undertook several other tactical measures to cope with the supply side challenges, including generous promotions, retention bonuses and increased use of sub-contractors."

Turnover rate (%) for permanent employees

Company	No. of permanent employees	2021-22 (%)	2020-21 (%)	2019-20 (%)
Asian Paints	5,712	15.3	9.9	13.4
ICICI Lombard General Insurance	11,085	35.36	17.51	29.44
JSW Energy	1,603	4.76	2.21	2.99
Sun Pharma	13,395	10.4	7.9	10.0
Tata Chemicals	1,192	11	7	10
TCS	590,662	17.5	7.5	13.3
UltraTech Cement	15,546	9.75	5.97	8.09
Bucking the trend?				
Dr. Reddy's	20,122	17	17.50	18.1
Macrotech Developers	3,359	22.4	30.9	28.2

Source: Business Responsibility & Sustainability Report – 2021-2022

Managerial remuneration HDFC Bank, as per its annual report for 2021-22, saw 36,113 employees leaving. The bank puts the attrition rate at 25.50 per cent. As of March 2022, the head count stood at 141,579 while figures for 2019-20 are not available. So, for the purpose of record, 18,349 employees left in 2020-21.

Thermax, a Pune-based engineering company, has been forthcoming in its annual report for 2021-22 about attrition. Besides furnishing the mandatory information about managerial remuneration (as mandated by Section 197(12) of the Companies Act, 2013), the company has gone a step up further and explained how it intends to arrest attrition.

The average rise in salaries other than KMP (key managerial personnel) was 30 per cent, informs the company. The reason is that Thermax gave increments to 140 employees; also, short-term incentives were higher and, as the company faced higher attrition, replacements were taken at higher salaries during the course of 2021-22. The report also accepts that attrition in 2021-22 was close to 13.9 per cent. Thermax has set up a central team for recruiting at a rate faster than attrition. As of March 2022, the company had 3,758 employees on its rolls.

National Stock Exchange of India (NSE), has followed Thermax, but in a more circumspect manner. "In 2021-22, apart from the performance-based normal increment, salary correction was also given to all junior management employees whereas, for middle management cadre, salary correction was on a case-to-case basis." says the company's annual report (2021-22).

Coincidentally, the Nomination & Remuneration Committee (NRC), met 13 times in 2021-22, out of which four meetings were in February 2022 itself. There are three members in this committee, all of whom attended all the 13 meetings. Normally, NRCs' energies are concentrated on the board of directors, KMP and a rung below KMP. Also, the exchange has appointed a new managing director and, as of March 2022, the exchange had 1,197 employees.

ICICI Lombard General Insurance's attrition for 2021-22, at 35.36 per cent, appears to be high, when compared with attrition rates of other companies. It is pertinent here to mention that Bharti Axa General Insurance was merged with ICICI Lombard in 2021-22. ◆

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Seeking methods of deterrence

Delhi has to find a way to prevent a Sino-US confrontation

BRIJ KHINDARIA

American domestic politics is lamentably fragmented and aggressively tearing itself apart. The impacts are alarming and potentially destabilising even for India, particularly the external peace it needs to benefit from the foundations of prosperity being laid by the Modi government.

The latest example is the political dissension within America highlighted by House Speaker Nancy Pelosi's decision, against White House advice, to visit Taiwan. She may have wanted to demonstrate her power to poke Beijing in the eye, while also defying President Joe Biden as head of US Congress. Since both Biden and Pelosi are Democrats, her action displays significant disunity within the party less than 100 days from the November legislative elections, when the Democrats may lose both Congress and Senate.

Enraged by the visit, China's Xi Jinping immediately tightened the military noose around Taiwan. The day after she left, China's military surrounded Taiwan on all sides for live-fire military exercises unprecedented in scope, including dropping missiles only 10 miles from its coast.

Xi wants to renew his mandate as China's supreme leader for a third time at a Communist Party congress in October. Immediately after that, he may decide to show muscle by confronting US warships in the narrow Taiwan Straits, where they have patrolled for decades to assert freedom of navigation, despite Beijing's anger. The Chinese coast is just 80 miles from Taiwan and the US navy may have to back down to avoid a direct war with China.

Xi is deeply committed, as is the entire Chinese Communist Party, to unifying Taiwan with the mainland -- through war, if necessary. Pelosi has declared full US support for Taiwan's people, which will ring hollow, if a Chinese show of naval force coaxes the American navy to avoid war by accepting limitations on its navigation in the Taiwan Straits. Such a military stand-off may not happen if Pelosi walks back her apparent disrespect for Xi's insistence that Taiwan is a part of mainland China. Xi is determined to integrate Taiwan regardless of its 75 years of autonomy, including nearly four decades as a thriving Western-style democracy.

Prime Minister Narendra Modi's India is deeply enmeshed in all of this because of Delhi's closeness to Washington and membership of the Quad partnership -- comprising the US, India, Japan and Australia -- to contain China. The partnership's goals include preserving US power in the Indo-Pacific and turning the Indian Ocean into a backwater of the American and Indian navies.

In her swansong, Pelosi, 82, has pulled the doublespeak and exposed Taiwan is an indispensable kingpin of this Indo-Pacific strategy. US Army General Douglas MacArthur called Taiwan 'an unsinkable aircraft carrier and submarine tender'. It is the gateway of US warships to the Philippine Sea, which is vital for defending Japan, the Philippines and South Korea. It is also vital for the protection of America's friends all the way from Vietnam to India. If Beijing gained control of Taiwan and based advanced military facilities there, China's military reach would be much greater in the surrounding seas and stretch beyond India to the Horn of Africa.

Taiwan sits at the nexus of US-Chinese relations, geopolitics, and the military balance in Asia. Its military value gives China a strong motive for seeking unification. Preventing Beijing from acquiring Taiwan may force Washington to abandon its long-held policy of 'strategic ambiguity', regarding whether it would go to war against China to defend Taiwan. Many in the US are already calling for a crystal-clear commitment to defend Taiwan, if China attacks.

If Beijing gained control of Taiwan and based advanced military facilities there, China's military reach would be much greater in the surrounding seas and stretch beyond India to the Horn of Africa

China's acquisition of Taiwan would give Beijing a secure forward base for advanced submarines and air and coastal facilities for defence and offence. It would be in a position to push the US out of the Indo-Pacific and acquire influence over all Southeast Asian littoral states. A fleet of quiet ballistic missile submarines, which China does not yet have, could reach the open ocean from Taiwan's east coast and conduct sea-launched nuclear attacks on mainland America and, of course, on India, Japan, South Korea and Australia.

The question now is whether Washington can ever allow Beijing to use unification to turn Taiwan into a menacing military platform for the US and all its Asian allies and friends. It may have to go to war with China to not only defend Taiwan but also prevent its own ouster from the Indo-Pacific. The decision for Delhi is whether it will be dragged into that war or help Washington and Beijing to find methods of deterrence to prevent that war definitively. ◆

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Data Bill gone

Will the new framework address lacunae?

In a move that was widely expected, the Modi government has withdrawn Personal Data Protection Bill 2019, with the assurance that it will come up with a 'comprehensive legal framework' on data privacy and Internet regulation. The government has affirmed that the new draft will be in sync with the principles of privacy, in line with Supreme Court guidelines (based on the landmark judgment on privacy) and would consider the Joint Committee of Parliament's recommendations on the framework to regulate the digital ecosystem. Experts say that, while a data protection bill brooks no delay, as the lack of a proper data protection law in the country is an anomaly, when compared with major countries. The government's move is a chance to address the lacunae and come out with a more comprehensive legislation.

But will that happen? The bill was also seen as being too 'compliance-intensive' by the start-ups of the country. Global tech companies had, in particular, questioned a proposed provision in the bill called data localisation, under which it would have been mandatory for companies to store a copy of certain sensitive personal data within India; also, the export of undefined 'critical' personal data from the country would be prohibited. The activists had criticised, in particular, a provision that allowed the Central government and its agencies' blanket exemptions from adhering to any and all provisions of the bill.

National security

Also, the Joint Parliamentary Committee, which vetted the bill, had recommended changes on issues, such as regulation of social media companies, and on using only 'trusted hardware' in smartphones, etc. It proposed that social media companies that do not act as intermediaries should be treated as content publishers – making them liable for the content they host.

The bill of 2019 had been slammed by stakeholders, including Justice B.N. Srikrishna, who chaired a committee of experts that had authored a draft bill in 2018 – for over-emphasising the national security angle, among other reasons. The bill diverged from the Srikrishna Committee Draft in the selection of the chairperson and members of the Data Protection Authority (DPA) that shall protect the interests of data principals and also in the leeway given to the Union government to exempt its agencies from the application of the act. It whittled down the provision in the 2018 draft bill, which allowed for judicial oversight in the selection process for the DPA. The bill of 2018 allowed for exemptions to be granted to state institutions from acquiring informed consent from data principals or to process data in the case of matters relating only to the 'security of the state'. It also called for a law to provide for 'parliamentary oversight and judicial approval of non-consensual access to personal data'. In contrast, the 2019 bill added 'public order' as a reason to exempt a government agency from the act, besides only providing for these reasons to be recorded in writing.

National security has been at the core of the Bharatiya Janata Party's political philosophy of muscular nationalism and it is unlikely that, by choosing to withdraw the bill, the government has given up on its earlier concerns. It is also unclear whether the government would address the demand for a realignment of the legislation with the 2018 draft bill that came about after extensive consultations with civil society. Even the Joint Parliamentary Committee report on the bill allows for retaining provisions that given to the government access to private data of citizens without sufficient safeguards. The dissent notes to the JPC report, by Congress MP Jairam Ramesh, had criticised the leeway granted to the government on exemptions and how the ground of 'public order' and not 'security of the state' was liable for misuse.

While opposition MPs like Manish Tiwari, information & broadcasting minister in the UPA regime, have alleged that the bill's withdrawal is linked to opposition to mandatory 'data localisation' from multinational Internet and social media companies, the government has chosen not to react to the charge. It is a fact that, apart from Facebook and Google, the government had faced a major pushback from privacy and civil society activists in India and abroad.

Experts aver that, if the government is indeed committed to a comprehensive legal framework on data privacy and protection, it must revert to the baseline provided in the Justice Srikrishna Committee recommendations and enact a law within a reasonable timeline. ◆

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BSNL bailout

The government offers a ₹1.64 lakh crore package for PSU

The Modi government has given a fresh lease of life to the loss-making Bharat Sanchar Nigam Ltd, by announcing a ₹1.64 lakh crore package – the second package doled out to BSNL. In October 2019, the government had infused ₹74,000 crore into the company.

There were two conflicting view in the telecom industry on the bailout. One view asks whether this will really help the ailing public sector telecom company become a viable competitor to private operators such as Reliance Jio and Bharti Airtel or even a market balancer in the strategic telecom sector. "When a company needs ₹1.64 lakh crore to help it turn around, one is justified in asking if that's worth it," argues a senior executive of a telecom major. "And when that ₹1.64 lakh crore comes from the government -- which means taxes -- one is even more justified in asking why our money goes to fund a company that seems unlikely to make any money in the foreseeable future".

The second view is that the move underscores the strategic importance of BSNL at a time when the Centre has been exiting public sector companies. India's telecom consumers need BSNL as an effective counter to a fast-emerging duopoly in the sector. A strong public sector telecom company will prevent private players from increasing tariffs to wriggle out of financial stress, and ensure that even rural consumers access digital services.

Communications and IT Minister Ashwini Vaishnaw had informed Parliament in March that BSNL had run up losses of ₹50,000 crore over the last five years. However, it had managed to turn EBIDTA-positive, in large measure due to the 2019 package, which had a VRS component of about ₹30,000 crore. Over 78,000 employees opted for the package, leading to a huge reduction in the wage bill.

The company's financials, according to reports, are not that rosy. It reported a net sale of ₹16,809 crore in 2021-22, from ₹17,452 crore a year ago (down 3.7 per cent) and loss of ₹6,982 crore, from ₹7,441 crore in 2020-21 (a marginal improvement). It has now cumulatively lost ₹1.02 lakh crore in its operations in 13 years – one of the biggest loss-making streaks in the corporate sector. The telecom major had last reported net profit in 2008-09.

BSNL's revenue share of the domestic telecom market declined to a record low of 8.5 per cent in 2021-22, down from 9.4 per cent a year ago and 16.7 per cent in 2017-18. Private telecom operators continue to erode its wireless, broadband, and fixed-line business.

The telecom ministry believes that the latest package can now help BSNL bolster its technological competence to improve long-term revenues. Under the package BSNL will be given spectrum worth ₹44,993 crore, which should help it to launch its much delayed 4G services this year. The Centre will also provide sovereign guarantee to BSNL and MTNL for raising long-term loans of ₹40,399 crore, in addition to paying AGR dues of BSNL amounting to ₹33,404 crore. These measures will clean up BSNL's balance sheet, enabling it to make large investments for rolling out a pan -India mobile broadband network.

BSNL's big challenge

However, experts aver that BSNL needs to put in place a turnaround strategy. It has received large bailout packages in the past, in the form of refunds on spectrum payments, soft loans and grants. The deliverables should be clear.

BSNL's biggest challenge is to shake off a bureaucratic decision-making apparatus and a culture that does not put customers at the Centre. The new paradigm in telecom is data -- and here, whoever gives the best experience will emerge a winner. This experience is driven by device, content, access, application, storage and security. Operators, quick to understand consumer demands and nimbly cater to them, will win.

BSNL may do well to learn from past errors of omission and commission. In December 2012, a panel headed by Sam Pitroda offered a 15-point turnaround plan, which included changing procurement procedures (using tools such as e-procurement and vendor rating), adopting a managed services model for its various operations, and inducting a chief executive from the private sector. BSNL now needs to be given autonomy, with leaders of integrity who can establish transparent and effective governance policies. Marketing executives who cannot adopt a customer-centric approach; technicians, and engineers who cannot innovate for the future, staff who are occupying redundant positions, and top executives who cannot steer the company's turnaround plan have no place. For instance, the PSU will have to give up its practice of buying equipment through tenders where the lowest bidder wins. But the best vendors in technology are not the cheapest. ◆

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Winds in the willows

Growth tailwinds in the retail sector have to be converted into retailwinds

JAGDEEP KAPOOR

The already rapidly-growing Indian retail sector has got a boost with the spell of the pandemic coming to a close and the markets opening up. The Indian retail sector, now estimated to be about $883 billion, could be in the region of $2 trillion in the next few years, showing strong 'tailwinds'.

I would like to call this particular phenomenon the Indian 'retailwinds'. The speed at which the retail sector is spreading and the width of distribution it is managing to achieve is going to make the world sit up and notice. There are many factors contributing to these retailwinds, such as the arrival of new international stores in India; the Indian chain stores expanding and growing across cities and within the cities; and, most importantly, the SSSG (same store sales growth) being extremely encouraging, which is the true indicator of consumption growth in the retail sector.

If you look at the Indian retail sector, there are more than 11 million FMCG retail outlets. If we count the total retail outlets of all industries, it would be more than 18 million retail outlets. Apart from its growth, the Indian 'retailwinds' phenomenon is huge, because it contributes to almost 10 per cent to India's GDP and almost 8 per cent to India's employment. That is not all. On the global stage, India's retail space industry is the fourth largest in the world and still growing.

Though digitisation has helped online growth, actually the major beneficiary has been off-line retail sector consumption growth. The ease of payment, convenience, speed, security and all other benefits (that come with the digital economy moving away from a cash economy) has helped the retail sector. It is also a factor in strengthening 'retailwinds'.

Consumer and retailer behaviour have also contributed to the 'retailwinds' and the growth in the retail sector. India, being a vast country, requires a tremendous amount of ease-of-shopping and buying and, hence, retail or proximity is critical. Whether it be FMCG, jewellery, garments, hardware, sanitaryware, electrical goods, stationeries or even *paan bidi* store, consumers prefer to buy from a shop in the neighbourhood. Retailer behaviour also works well because of consumers coming in regularly, thereby the retailer getting an opportunity to build a strong relationship.

People believe they should have exclusive retail distribution in only selected stores. This is nonsense. You can have exclusive brands with exclusive designs and exclusive quality, but you need to have inclusive retailer distribution, wherein your brand is available in each and every neighbourhood store in each and every locality in each and every *tehsil* in each and every district, town and village. And, each and every retailer should be able to meet the consumer needs and facilitate ease of consumption, which is part of the Indian consumer behaviour.

If you look at some of the brands available in millions in multi-brand outlets (MBO), you will find that these are huge brands, which keep growing because of sheer availability. It could be Amul, Lux, Fevicol, Frooti or, of course, Parle G.

Apart from the MBO part of the retailer industry, there is an aspect of EBO (exclusive brand outlets) too. Bata has some 1,400 stores in which the products are exclusively available. McDonald's in the West and South have 320 odd restaurants and 260 McCafe stores in the WestLife portfolio.

Relaxo Footwear has more than 350 owned outlets, apart from thousands of MBO outlets. Jockey has 471 stores across the country, apart from the products being available in more than 50,000 MBO retail outlets. Starbucks too has opened up some 270 Starbucks outlets. Then, there is Monginis, which has 1,200 exclusive outlets and is available in another 500,000 multi-brand outlets across the country.

In the health sector, Wellness Forever, a chemist and lifestyle chain, has grown to more than 270 retail stores across India. Incidentally, its turnover has grown from just ₹8 crore in 2008 to about ₹1,000 crore now, due to the retail expansion. Westside has more than 130 stores all across India and growing, while DMart has about 290 stores all over India, with rapid expansion taking place.

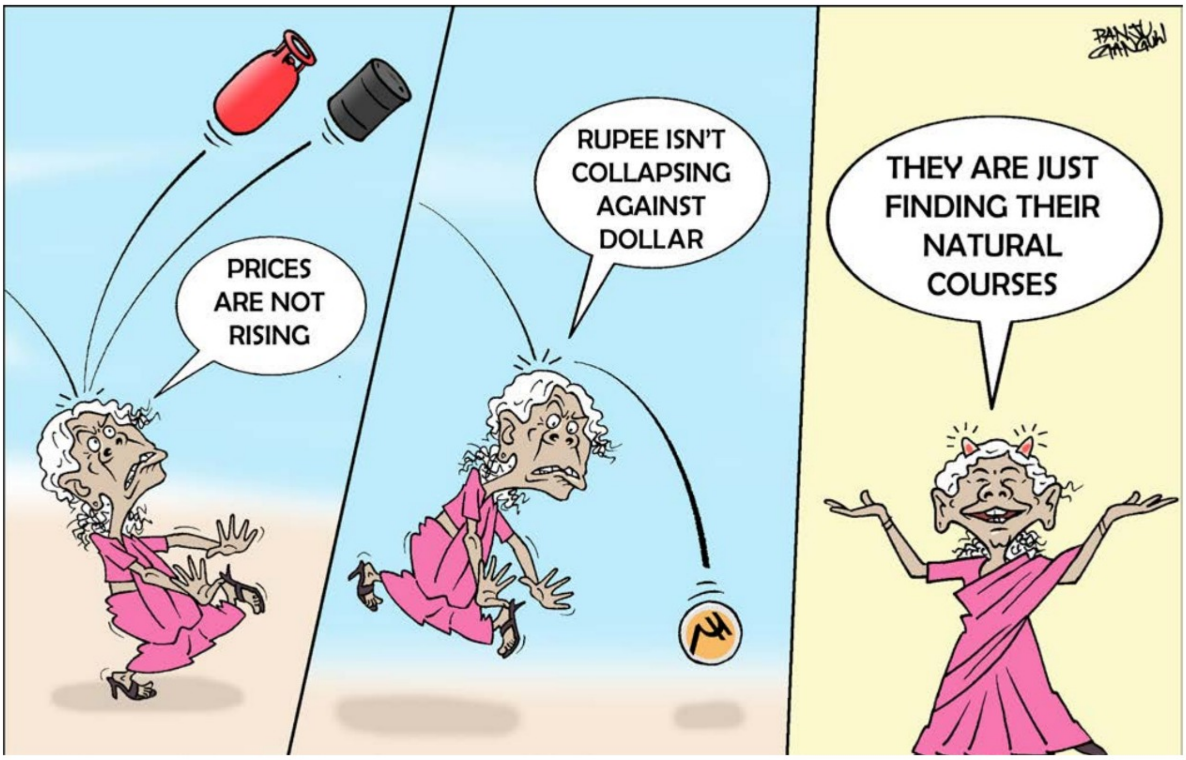
Natural Ice Cream serves its favourite brand in more than 135 outlets, while Barbeque Nation has crossed over 190 outlets and is growing. Shoppers Stop too has more than 80 retail outlets.

Tanishq among the jewellers has more than 350 stores in the retail sector, while Burger King, the fast food major, has more than 265 retail outlets all over India and growing. Titan Eye too has more than 680 retail stores. And Manyavar has more than 600 stores. Domino's Pizza operates more than 1,495 stores in India, whereas Metro Shoes has 640 odd outlets in India.

Thus, the culture of retail expansion in India is growing across categories. There are innumerable examples of similar brands, which have not been mentioned here due to space constraints. But there are no space constraints for the retail industry in India. ♦

The author is CMD, Samsika Marketing Consultants. He can be reached at jk@samsika.com

Panju's Page By Panju Ganguli



FORTUNATELY OR UNFORTUNATELY, I AM THE FATHER OF THIS (EXPRESSWAY) TOLL BECAUSE FOR THE FIRST TIME IN THIS COUNTRY, I STARTED THE TOLL SYSTEM AND THE FIRST PROJECT OF BOT (BUILD-OPERATE-TRANSFER) WAS THANE IN MAHARASHTRA.

NITIN GADKARI
Road Transport Minister

WE HAVE EARMARKED ₹10,000 CRORE FOR INVESTMENTS TO REDUCE OUR CARBON EMISSIONS THROUGH VARIOUS INITIATIVES...WE COMMITTED TO REDUCE OUR CO2 EMISSIONS INTENSITY BY 42 PER CENT BY 2030, COMPARED TO THE BASE YEAR OF 2005.

SAJJAN JINDAL
Chairman, JSW Steel

How inflation-ready is your board?

One should be cognizant of the leading and lagging economic indicators

Dr M. MUNEER

RALPH WARD

Global inflation is surging. Two months ago, the wholesale price inflation had touched 8 per cent in Europe, 10 per cent in the US and 15 per cent in India. It has nearly doubled in 37 of 44 leading economies, informs Pew Research Centre. Energy prices and agriculture products seem to be leading the spike -- and both are commodities that will work their way into coming price hikes for manufactured goods.

According to*PwC*, inflation is on 'top of the mind' in their recent board surveys. It is on the agenda for every meeting every time for most boards in the US. This means board meetings with you, the rest of the board and management commiserating about the present and worrying about the company's future. What does your board need to do about assuring company's readiness for an inflated future?

As a director, you should realise that your board (as well as your management) would need to relearn skills and behaviours that most advanced economies haven't demanded since the early 1980s, when both inflation and interest rates soared. Few executives were about 40 years of age some 45 years ago when inflation was at double-digit rates last. You may want to do some research on what companies *did then* (right and wrong) to cope up with inflation in terms of strategy, pricing, finance, growth, compensation and hiring.

While the majority of board directors are not economists, they need to still understand how the economy works and how government policies of rising price inflation and falling rupees impact the business of the enterprises they serve. Boards are supposed to provide the guidance to the management for the future and so inflation-readiness is a key competence directors must have today.

Indeed, most directors know the impact of the price inflation as the household expenses have increased and the fuel prices have been hurting all of them. How long this inflation might last is a bigger concern for most directors. If it is going to stay for a year, 2022 will be a problem year for most organisations, given that India has a higher poverty rate than even Nigeria this year. At what point, will the current sales growth backfire with increased prices and added burden of GST on food items? Will there be a backlash for spurious products when retail outlets start selling loose tea and milk, to avoid the 5 per cent GST?

Board members must closely study management numbers on the company impact of current inflation figures, and projections for the next year. What are your most significant cost dangers from your suppliers and what are you doing to diversify your supplier base? What inputs would see the greatest inflation hits and how are you hedging/managing them? Look for numbers on whether transitory inflation can (or should) be built into pricing. What are the projections for your margins under various inflation/ cost/ pricing scenarios?

Do you need to raise prices? Modify products and services? Push lines up to higher margin premium models? Who are your most price-sensitive customers? Private and venture firms need to look closely at the capital impacts of inflated times – Are you pruning your capital; will you need a down round to raise more; how much of your capital is variable versus fixed?

The enterprise business should be doing more than hunkering down, so the board must also ask about active inflation-coping moves. What are we doing on credit issues – should we borrow now, before interest rates jump further? Are we using more active balance sheet management, and monitoring our cash and credit situations? Perhaps, we should hold our transformation plans, or spending on digitisation? Inflated, uncertain times could be the moment to press ahead with investments (before they grow even more expensive), as well as hiring of talent. For the latter, the 'great resignation' may quickly become the great 'stay-put and keep safe'. Ask how inflation is hitting the company talent acquisition and retention, and how compensation and benefits should keep up.

Smart boards should be asking management for their plans under various inflation scenarios – How will we make capital reallocation decisions, and adjust them as interest rate changes occur? But, they should also expect the team to flex the muscles they have built over the past two years in dealing with uncertainty. There are so many unknowns board members can't control. Assure yourselves not just on plans, but management's early warning skills on inflation and capital issues that require a quick reset. Could the alternate supply and transport sources you had to hustle up for Covid now offer new pricing opportunities? Should we continue to let those employees, who are more productive working from anywhere to work from home? (Research says introverted men and women, who have domestic and office duties, perform much better in WFH mode).

No matter what your expertise is in, be cognizant of the leading and lagging economic indicators. Inflation is a reality and it may be here to stay for a while, no matter what the government or RBI makes us believe otherwise. A persistent inflation has major impacts on all stakeholders and asking pertinent questions is an important agenda item for all board members. ◆

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Azadi Ka Amrit Mahotsav

INDEPENDENCE DAY SPECIAL
BUSINESS INDIA ◆ THE MAGAZINE OF THE CORPORATE WORLD

ESSAY

An action-packed journey

To meet present and future challenges, India will have to rise as one

Prime Minister Modi kicked off Azadi ka amrit mahostav in March 2021 at Sabarmati Ashram

India's journey during the last 75 years has been one of trials and tribulations, failures and successes. On balance, there can be no denying that our achievements during this action-packed journey of 75 years outweigh the shortcomings. The fact that India is set to assume the presidency of the G-20 group of nations later this year is testimony to our standing in the comity of nations.

But India has to also face fresh, daunting challenges, which have come up of late. This calls for measured celebration. Our shortcomings call for introspection and rectifications, so that we can avoid the pitfalls of tomorrow and ensure a smoother glide path for the coming generations.

Long before India became a nation state, India started as a civilisational state. Democracy too was an integral part of ancient India. Panini's and Kautilya's texts talk about ideas of grass-roots democracy in ancient India. The Prime Minister has spoken in the past about how *Lord Basaveshwara's* 12th century academy *Anubhava Mantapa* highlighted the importance of people's participation in governance. The 10th century inscriptions found recently in Tamil Nadu highlight a village governance system similar to the *panchayat* system.

Proving sceptics wrong

At the time of India's attaining independence, sceptics had predicted balkanisation, fascism and anarchy for the country. However, the success of electoral democracy in India for more than seven decades (except for a dark patch during the Emergency) is one of the major triumphs of post-independence India. Democracy, sustained by free and fair elections, overseen by a neutral Election Commission and orderly transition of power, has stood the test of time, burnishing our credentials across the world.

Of late, however, the state's ability and recent tendency to centralise power is undermining the country's democracy and, in turn, hurting the very ideals it was built on. If India is to celebrate the enduring legacy of the freedom struggle and its democratic ideals in 2022, it must diffuse power across the government, laterally and to lower levels of government. To foster democratic ideals, the government should encourage feedback from Parliament and the media, instead of ignoring these institutions.

Jawaharlal Nehru modelled the Indian state to respond to a range of crises, from communalism (which had led to Partition) and poverty (which we inherited) to secessionist movements (fanned by our neighbours) and wars (again imposed by our neighbours). India began feeling the need to modernise and catch up with the developed countries only in the 1980s and Rajiv Gandhi realised this when he introduced computerisation and ramping up of our archaic telecom structure. The

1991 economic reforms under P.V. Narasimha Rao gave momentum to this process. Since then, reforms in India have been sporadic, happening under Atal Bihari Vajpayee earlier and Narendra Modi now.

Big achievements

The improvements in India in terms of literacy rate and per capita income since 1947 can be regarded among the bigger achievements of post-independence India. So is the removal of poverty, to an extent.

In 1947, literacy rate in India was only 12 per cent. It had risen to 74.04 per cent by 2011 (when the last census was held). As for per capita income, according to the data from the National Statistical Office of the Ministry of Statistics and Programme Implementation, the per capita income in real terms during 2019-20 touched ₹1.32 lakh, as against ₹250 per year in 1947. During these seven decades and a half, the standard of living in India of an average Indian has improved, though there is scope for more improvement. As for poverty removal, the World Bank in its latest report on the poverty in the country said India saw a massive 12.3 percentage points decline in extreme poverty between 2011 and 2019-from from 22.5 per cent in 2011 to 10.2 per cent in 2019.

Another major achievement of post-independence India has been the building and developing of some world class institutions of higher education, which began with Indian Institutes of Technology (IITs), All India Institute of Medical Sciences (AIIMS) and Indian Institutes of Management (IIMs). The role of these institutions is important, because quality academic education has been disseminated there at nominal cost. Over the years, this has made such world class institutions economically accessible to a huge section of Indian population. This in turn has helped many underprivileged but brilliant people to quickly move up the economic and social ladder and also derive name and fame in overseas. Side by side, we saw the rise of private centres of academic excellence, such as BITS Pilani and Manipal Academy of Higher Education. At present, new private sector-propelled institutions like Asoka University and Jindal Law School are making a mark in the words of academia. The government should not place any regulatory roadblocks in development.

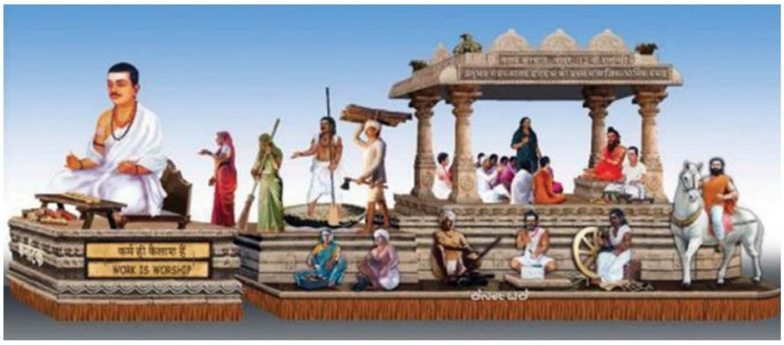
Big achievement: building and developing of world class institutions like IITs

Half-done

Another of the great achievements of independent India is the huge investments in developing basic heavy industries during the mid 1950s, which helped to develop the infrastructural backbone of India in the form of huge steel plants and dams, etc. Massive investment in developing heavy industries was the central theme of the Second Five Year Plan of India (1956-61). The plan was based on the Mahalanobis model.

It is somewhat disappointing that like the emphasis governments in the first 3-4 decades of independence gave to public sector-led development, the governments that followed did not change the paradigm decisively enough for the private sector to take the lead. That would have transformed the economic landscape by now. On infrastructure, except for roads and airport infrastructure which have improved over the last decade, we seem to be lagging other emerging economies.

The Green Revolution (1966) gave a huge impetus to our agricultural production and made it self-sufficient in terms of food grains through the usage of high yield and extensive use of tractors, pesticides and fertilisers. But, after some time, we failed to push other components of growth required for modern farming – mechanisation, crop diversification and strengthen the agricultural marketing system to ensure higher value to the farmers through remunerative prices of their produce by taking advantage of



People's participation in governance: A replica of Lord Basaveshwara's 12th century academy Anubhava Mantapa

Women empowerment: fighter pilots and more

the domestic and export opportunities. The nationalisation of banks in1969 is a much-reviled thing. But it did initially help the economy grow by extending more credit to common people, who did not have the right connections. This, in turn, also contributed to equitable growth economy to some extent. But after some time, this should have been totally reversed to allow the private sector to bring in competition and related efficiencies. The same goes for agriculture. But after bringing in laws to liberate the farming sector, the government buckled under political pressure and rolled back the reforms.

The advent of massive computerisation in the mid 1980s, amidst stiff, unjustified opposition during the Rajiv Gandhi government, is another of the important positive developments for post-independence India. This move eventually catapulted India into a huge IT power to reckon with. In the recent years, digitisation in India has gained further momentum, which has led to spurt in online education in India.

Social empowerment

One of the landmark developments in the evolution of a free society happened during the UPA years. This was the Right to Information Act in 2005. It is easily amongst the most important legislations of India. This act empowers common citizens of India to make the high and mighty of the state accountable to them. RTI was envisaged as one of the strongest information laws in the world. It was successful in enhancing transparency and probity in public offices in India and could have helped in checking to some extent the post-modern India's perpetual malaise of corruption in public offices. But it is unfortunate that the current regime sees no use for it.

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was another legislation of India that had a deep-rooted impact on rural welfare and social empowerment. It endeavours to enhance livelihood security in rural areas by providing at least 100 days of wage employment in a financial year to every Indian household whose adult members voluntarily consent to do unskilled manual work. However, the implementation of this s legislation has been marked by several pitfalls. Still, it is a safety valve, which even the Modi government, after ridiculing it, has deployed now and then, to defuse the rural angst.

Another noteworthy achievement of post-independence India is the vast improvement in the economic and social status of its women. Before 1947, the identity of Indian women was mostly confined to the four walls of the household. They were subjugated by patriarchy, though some did emerge out of its clutches and carved a brave new world for themselves. Women of post-independence India have made their mark in almost every profession, ranging from boxing to the armed forces, from scientific research to entrepreneurship. Today, Indian women are seen as fighter pilots and also as heading multimillion-dollar business empires. Recent schemes like *beti bachao, beti padhao,* to promote education of young girls have abetted this process. Yet, recent reports have talked of their re-marginalisation in the workforce. This process must be arrested and reversed.

The idea of 75 years

To commemorate and celebrate the completion of 75 years of Independence, the Modi government had launched the 75-week long *azadi ka amrit mahotsav* initiative. The government has also launched the *'har ghar tiranga'* – a campaign under the aegis of *azadi ka amrit mahotsav* to encourage people to bring the tricolour home and hoist it to mark the 75th year.

The idea is to kindle the spirit of patriotism among the people, particularly the younger generation. Our younger generation dreams about the future but is largely ignorant about the past, particularly the tumultuous and painful years which led to our freedom. Their relationship with the flag has always been more formal and institutional than personal. Bringing the flag home collectively as a nation and hoisting it collectively on 13-15 August thus becomes symbolic of not only an act of personal connection to the *Tiranga* but also an embodiment of our commitment to nation-building. *Azadi ka amrit mahostav* kicked off in March 2021. It will end post a year on 15 August 2023.

The *mahotsav* was meant to enhance interaction and promote mutual understanding between people of different states and Union territories, by conducting activities in the areas of language, learning, tangible as well as intangible culture and heritage, paving the way for systematic process of mutual engagement and appreciation amongst people. Has this goal been achieved?

Politics again

As it happens in India, politics started creeping into the event as soon as it was announced. The Mamata Banerjee-led Trinamool Congress government in West Bengal announced that

SANJAY BORADE

Rural welfare and social empowerment: MGNREGA is a landmark development

it will not be part of the Centre's mega initiative to celebrate India's 75 years of independence. The party alleged that its non-participation in the central initiative was because of a 'lack of a cohesive approach' by the Union government to work with states. This is not new for the TMC that has often boycotted Central schemes.

The increasing polarisation in our politics, the disruption of Parliament as well the inability of political parties to forge a consensus on issues of vital national importance is something that neither our founding fathers nor the framers of our constitution has realised. India cannot progress holistically just by the might of brute force, whatever the size of its market and how so ever impressive the growth of our economy.

Challenges galore

Then, there are the fresh, daunting challenges that are staring us in the face. Yet, we have not bothered to even begin an effort to tackle them. For instance, India is facing the worst water crisis in history. The NITI Aayog has warned that the demand for drinking water will outstrip supply by 2030, if preventive steps are not taken.

Even after 75 years of Independence, India is facing the worst water crisis in history

Also, India's farm economy is in turmoil. This has serious consequences as an estimated 260 million citizens work in agriculture, making 55-57 per cent of India's population dependent on the sector.

One of our big failures has been the inability to remove criminalisation from politics. It is alarming that more than 40 per cent of members of Parliament in the 2019 Lok Sabha were tainted with some sort of criminal record -- an increase of 26 per cent over the 2014 Lok Sabha figures.

The failure to remove the bane of casteism and communalism from politics is another collective failure. Increasing criminalisation and communalisation of politics lowers the essence of electoral democracy and the sooner our political establishment realises it the better it will be.

Our political parties should take a leaf from the fascinating political contest going on in the UK for the Conservative Party leadership, where the debate is moving from the economy and foreign relations to internal security and immigration. Each contender is questioning the others' record in office, political and ideological perspectives. There is no place for race or religion in the debate.

Most importantly, unemployment is a ticking time bomb. According to Centre for Monitoring Indian Economy, total employment fell by a massive 13 million to 390 million in June 2022, compared to 403 million in May, the lowest level since July last year. Through its Agnipath scheme, the government has shrunk the demand for armed personnel. Opportunities in private equity funded new-world jobs have also come down. Clearly, the economy needs to grow at a faster pace than it may in the near future to save and generate jobs.

To tackle such challenges, the Centre will have to take all the states and political parties on board, building consensus by using platforms like the National Development Council which have fallen into disuse during the Modi regime. But, for this, the ruling dispensation will have to be far-thinking, reaching out to rivals and critics, and shedding its political arrogance. ♦

RAKESH JOSHI
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INDEPENDENCE DAY SPECIAL
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GUEST COLUMN

Women on top

Azadi ka Amrit Mahotsav will inspire a kaleidoscope of women empowerment in India

This journey of 75 years has been eventful and women played a crucial role in the making of today's India. Women are now playing a crucial role in the growth of the economy and have made a substantial impact and achieved success across sectors. In fact, on this momentous occasion of Azadi ka Amrit Mahotsav, dynamic women from different walks of life – whether a housewife or a working professional – must be saluted for their immense and selfless contribution to society and the country.

The status of women in Indian society has been undergoing a drastic change in the past seven decades. The country has taken another step forward towards empowering women in our society. Today we have Draupadi Murmu as the second woman holding the highest constitutional position as 15th President of India after former president Pratibha Patil who became the first woman to do so in 2007.

Draupadi Murmu's journey of tremendous progress as a woman despite personal hardships can inspire the youth of today across all walks of life, including young women in our country struggling with their own hardships related to prestige, career and individual and financial freedom.

Being a woman myself, it's heartening to see how a lady takes charge of her life and leads the way for others to follow. Women in India have been gradually making their leadership presence felt, not only in politics but also in entrepreneurship, administration, education, engineering, health, science, technology and also in my field – financial investment and money management.

For ages, women have been the backbone of our society and have always played a constructive role in shaping our future; however, the fact that women from humble backgrounds are, in a male dominated society, able to occupy some of the top positions is something that was inconceivable many years ago. We must take pride in that and celebrate such women's specific success stories.

Thanks to the changing times, challenging roles and priorities, the world also witnessed the advent of several other women leaders as role models: Indira Gandhi, Indra Nooyi, Hillary Clinton, Theresa May, Christine Lagarde, Kiran Majumdar Shaw, Soma Mondal, Vini Mahajan etc, to name a few. We also have Nirmala Sitharaman become the First Woman Defence Minister in 2017 and the first full time Finance Minister in 2019.

DEENA MEHTA

So, today it is an indisputable reality that women have come this far and are standing on par with men in almost all areas. However, surprisingly, there is one area which remains most challenging for women in India and that is – investing and achieving financial freedom!

As we are celebrating Azadi ka Amrit Mahotsav this year, it's important to draw your attention to research studies and market reports that point to the stark reality that women in India do not invest due to lack of family support, financial freedom, interest, fear, awareness and confidence. They seem to have no idea about investments, various available instruments and how these may affect their money needs and being about their financial freedom.

I personally believe that, more than all reasons mentioned above for the lack of women's participation in investing is the lack of true inspiration and not taking the first step towards financial freedom. The first step is not about having lots of money, information or experience. The first step is to find a role model and a big dream. All successful people have a few unique, common features as they all have role models, big vision, take risks and take the first stride forward and continue on their dream journey despite tremendous hurdles and failures. We must inspire and help our young ladies come forward and take a lead in achieving financial freedom, which is not impossible in today's world with so many avenues available – a click away.

Therefore, to the young ladies reading this with a glimmer of hope I would say, as an aspiring woman you will be waking up to more financial responsibilities than ever before due to the changes in lifestyle. As you begin to play a vital role in major walks of life, it's a very important responsibility for you to know how to save, invest and secure your financial freedom.

Mastering financial matters and knowing how investing works is not rocket science. You need to be a keen learner and self-starter. The strong determination, dedication and discipline that President Draupadi Murmu and other successful women epitomise can work as a great inspiration, the first stepping stone, which can be the true enabler for you as a young lady looking forward to achieving your individual success and financial freedom. ◆

The author is the first Woman President of Bombay Stock Exchange, and Managing Director of Asit C. Mehta Investment Interrmediates Ltd, and also the Mentor of Dhanveda, a Financial Freedom Program for Women

STATES

Evolution, assertion and innovation

India's future lies in how our states progress

For a long time, India had seen a Big Brother attitude from the Centre towards states

Before they took their current shapes, sizes and names, the constituent states of the Indian Republic went through a long process of evolution. While India gained independence officially in 1947, there was a demand for state reorganisation in parts of the country. While the demand for new states was primarily based on language, constitutional drafters held a variety of perspectives. Since the Constituent Assembly did not have enough time to examine such a huge issue and administrative difficulty, they formed Commissions to investigate the matter. The matter rested there for some time.

Earlier, the British authorities had tried to deal with the problem in their own insular way. For instance, the first Partition of Bengal in 2015 was a territorial reorganisation of the Bengal Presidency, which encompassed Bengal, Bihar, parts of Chhattisgarh, Orissa, and Assam, implemented by the authorities of the British Raj. The reorganisation separated the largely Muslim eastern areas from the largely Hindu western areas. What happened in 1947 was not so much the partition of the whole of Britain's Indian Empire as the partition of two of its eleven provinces: Punjab and (again) Bengal, again on religious lines.

Prior to independence, India had three types of states – territories of British India, princely states and colonial territories, formerly occupied by France and Portugal. By the 26 January 1950, India had formally transitioned from a dominion to a republic of states. Following the establishment of an Andhra state in 1953 for Telugu-speaking regions of Madras state, the State Reorganisation Commission was formed to evaluate the republic's restructuring, largely along linguistic lines. As many as 14 states and six Centrally administered territories were created in 1956. The states included Andhra Pradesh, Bihar, Bombay, Jammu and Kashmir, Kerala, Madhya Pradesh, Mysore, Tamil Nadu, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal. Since independence, however, the boundaries of the Indian states have kept on changing year by year.

For instance, Punjab got divided into Haryana, Himachal Pradesh and what now remains Punjab in 1966. Earlier, the states of Maharashtra and Gujarat were divided and given statehood under the Bombay Reorganisation Act 1960. This was in response to strong demands and agitations.

Currently, India has 28 states and nine Union Territories (UTs), with Telangana becoming the newest state of the country. With rising demand from its populations, Indian states are in an assertive mode. Chief ministers belonging to the Opposition, aware that the law of diminishing political returns will set in if they don't deliver, have taken an adversarial position vis-a-vis the Centre, so that they can explain away (partly, if not fully) their shortcomings at the moment of reckoning. States aligned with the ruling party at the Centre have taken advantage of this factor, getting various Union ministries to loosen the financial and regulatory strings to push various projects and getting the Prime Minister's imprimatur on it.

Of course, there are exceptions to this rule. For instance, the Naveen Patnaik-led Odisha, which has emerged one of the top performing states in the country in terms of improvement of Human Development Index, is a model of people-centric governance. But, the manner in which Patnaik, who is also president of his party, BJD, has sought to carry out the business of governance has deeper connotations – a signal of his, and his system's, unchallenged supremacy in the state reflected in his rampaging victories in recent polls.

A happy coincidence has been that states are now in competition to outgrow each other. Uttar Pradesh, led by Adityanath, is trying to compete with industrialised states like Maharashtra, Tamil Nadu and Gujarat, aspiring to become a $1 trillion economy in sync with Narendra Modi's declaration to make India a $5 trillion economy.

What does the future hold for the states? Some time back, there was talk about India having at least 50 states in future, if demands for new states received by the Union home ministry are to be conceded. This was on the basis of representations received by the home ministry. And, Uttar Pradesh, during the Mayawati-led BSP government, did

Patnaik: unchallenged supremacy in the state

propose to create four states, by dividing the country's most populous state. However, the eclipse of Mayawati put an end to this proposal. Later, the Vajpayee government, receptive to the demand for smaller states, did carve out Uttarakhand (from UP), Jharkhand (from Bihar) and Chhattisgarh (from Madhya Pradesh).

Models of innovation

Political scientists aver that innovation will hold the key to the future and growth of states. The classic model of innovation rests on pillars like industry innovation and entrepreneurship (R&D, creation of new firms, industrial clusters, creation of New Knowledge like patents, copyrights etc), factors of production (land, labour, infrastructure, human capital), demand conditions (market size, market sophistication and market growth) and social and political institutions (relating to healthcare, education, administration and finance).

Already, different examples of innovation are evident. Telangana, for instance, is aspiring to emerge as a palm oil hub to take advantage of the endemic shortages, which occur in this commodity. It is targeting 2 million additional acres under oil palm cultivation in the next four years. If successful, the drive could reduce India's mammoth vegetable oil imports, which cost the country a record $18.9 billion a year ago and widened the trade deficit.

Chhattisgarh's scheme to improve livestock conditions by securing the participation of communities has earned praise from the likes of Raghuram Rajan, former governor of RBI. The state government manages livestock care, the provision of free fodder and water, health check-up, treatment, and vaccination of animals. Under the scheme, income-generating activities like the production of organic manure, mushrooms cultivation, large-scale vegetable production, oil distillation, fisheries, poultry, and goat rearing are carried out by women groups. An example of a bottom-up solution for farming and livelihood issues, it also reduces the problems of decreasing fertility of the land due to indiscriminate use of chemical fertilisers and pesticides in agriculture.

For states and UTs to perform to their full potential, outstanding issues will have to be resolved, if states are to deliver on their own. For instance, citizens residing in certain UTs have to swallow whatever is thrust down their throats by their rulers, with no recourse to hold them responsible. A few UTs have partial democracy, where they have a chief minister (in name only) with limited powers (as in Delhi). As of now, only the people of Delhi and Puducherry have the right to elect a Legislative Assembly, which though has only limited powers. The other UTs are at the mercy of the appointees of the Central government called lieutenant governor or administrators, who have no stake or relationship with the areas they govern (a la Lakshadweep).

Redraw the power equation

For some time now, states ruled by the Opposition parties have chosen to confront the Centre on a variety of issues in recent weeks. Is this a sign of a new assertiveness among the states against a powerful Centre, which was enjoying a clearly superior status, as per the Indian Constitution? Is a redraw of the Centre-states power on the anvil?

Recently, Andimuthu Raja, the DMK MP from the Nilgiris and, more famously, the former telecom minister, who was at the centre of the 2G auction controversy during the UPA years, demanded in the presence of Chief Minister M.K. Stalin that, if the Central government did not give Tamil Nadu greater autonomy, the DMK could be 'compelled' to revive the demand for a 'separate' state.

"The Chief Minister is walking the Anna's way; don't push us to take the Periyar's way. Don't compel us to ask for our own country, give us state autonomy. Until then we will not rest," Raja wrote on Twitter, where he posted a video of the speech. Raja did underline, however, that 'national integrity and democracy are important'. His comments come at a time when the DMK government in Tamil Nadu has repeatedly and vocally disagreed with the policies of the Central government and accused it of undermining India's federal structure.

Raja: don't compel us

The reference to E.V. Ramasamy 'Periyar' (1879-1973) is important. He had started the Self Respect Movement to "redeem the identity and self-respect" of Tamils. He envisaged an independent Dravida homeland of Dravida Nadu, comprising Tamil, Malayalam, Telugu and Kannada speakers, and launched a political party, Dravidar Kazhagam (DK), to pursue this goal. C.N. Annadurai (1909-69), who was the last chief minister of the Madras state, and the first chief minister of Tamil Nadu, and his party, Dravida Munnetra Kazhagam (DMK), chose to go slow on the demand for an independent Dravida Nadu and, instead, worked for greater autonomy for Tamil Nadu and better co-operation among the southern states.

Today, TN is in the forefront of the newfound assertiveness by states. From 1 July, states will not be receiving the GST compensation they were receiving till now, which will deprive them of an assured source of income. The Centre has also pared down the subsidies due to the states in various sectors, including food, employment guarantee scheme or kerosene subsidy, all of which are adding to their deficit. "Even more disturbing is

Balagopal: fighting for financial rights

the Centre's attempt to slash the states' borrowing limit, despite our protests," complains K.N. Balagopal, finance minister, Kerala.

Though Raja did not say it, his demand was a reminder of the 1950s and 1960s, when several southern states were rocked by riots over regional and caste politics, leading to a few states being placed under President's rule and governed directly from New Delhi. Many western pundits had predicted the break-up of India then. However, the Cassandras of doom were proved wrong. Instead, southern states such as Andhra Pradesh, Tamil Nadu and Karnataka became the most orderly and prosperous in the country. To a large extent, this was because the caste and language disputes, which came up in these states, were eventually resolved by regional parties. Jawaharlal Nehru's drive for reorganisation of states on linguistic basis also helped cool matters. Today, these southern states are in the forefront of the transformation of India's federal system, where the Central government still yields power and influence, especially on economic and financial matters.

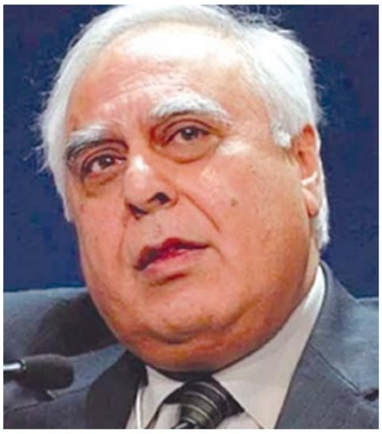
Defusing the angst

When the Modi government at the Centre accepted the 14th Finance Commission's recommendations in 2015, under which states got 42 per cent shares of tax revenue, as against 32 per cent earlier, it was expected to defuse some of the angst harboured by the states. Though, this left far less money with the Central Government, the latter then maintained that it had taken the recommendations of the 14th Finance Commission in a positive spirit, as they strengthen and provide autonomy to states in designing and implementing schemes as per their priorities and needs. The move was meant to generate goodwill for the new government. The Centre has hoped that with the states being allowed to chalk out their programmes and schemes with greater financial strength and autonomy, they would also be observing financial prudence and discipline. There are mixed results, however.

The story of protest on financial issues by states has continued. Kerala's K.N. Balagopal recently said that his state will have to move legally and constitutionally if the Centre continues to insist on eroding the financial rights of states. Kerala has expressed its dissent on the Centre unilaterally amending the terms of devolution of financial powers like slashing of the state's share of tax revenue and the stopping of the revenue deficit grant in a supplementary memorandum submitted to the 15th Finance Commission. The states' share of the Central tax revenue pool, which used to be 42 per cent in the 14th Finance Commission, has now come down to 41 per cent. Kerala's share in the divisible pool has dropped from 3.88 per cent to 1.93 per cent.

And, it isn't just financial matters. Punjab too has been restive with federal sentiments coming to the fore. The recent weeks have seen the Chief Minister Bhagwant Mann taking the lead in the state assembly to pass a resolution urging the Union government to immediately roll back the Agnipath scheme in the larger interest of the country. There has been unrest over the attempts to push the matter for change of status of Panjab University into a Central University, following the reported directive of the Punjab & Haryana High Court. Meanwhile, the issue of river water sharing and the Sutlej Yamuna Link (SYL) canal too has come centrestage again.

When Narendra Modi assumed power at the Centre for the first time, he spoke of co-operative federalism. Other right noises were also made. For a long time, India had seen a Big Brother attitude from the Centre towards states. A 'one-size-fits-all' approach had been used for years, not taking into account the heterogeneity of different states and their local requirements. The NITI Aayog was formed, to provide the strategic policy vision for the government and to further empower and strengthen the states. It was said that the Union-to-state one-way flow of policy would be replaced by a genuine and continuing partnership with the states.



Sibal: it is coercive unilateralism

Gaining salience

Kapil Sibal, eminent lawyer and Rajya Sabha MP, believes that India has moved away from co-operative federalism to 'coercive unilateralism', and the reality is that politics of the Central government rules every state in the country. He feels that the Centre's political and policy decisions have turned one-sided. Citing instances of toppling of governments in several states, he says it started with Uttarakhand, when President's rule was imposed there. The Supreme Court intervened, but an elected government (run by the Congress) was toppled through defection. The same game was repeated in Madhya Pradesh, Karnataka and then in Maharashtra. "Which democratic country allows an elected government to be replaced through processes that are murky, to say the least? Is this an example of co-operative federalism? It is coercive unilateralism," Sibal asks.

That may be a politically coloured view, as the phenomenon of aya Rams, gaya Rams had begun during the halcyon days of the Congress rule – of which Sibal was once a leading light. But it is a view nonetheless that is gaining increasing salience and the BJP would do well to get rid of the dubious tag. ◆

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Azadi Ka Amrit Mahotsav

INDEPENDENCE DAY SPECIAL
BUSINESS INDIA ◆ THE MAGAZINE OF THE CORPORATE WORLD

ECONOMY

Growing footprint

India should cash in on the opportunities that are available now

Modi laying the foundation stone for the International Financial Services Centre Authority at GIFT City

Among Prime Minister Narendra Modi's several visits to Gujarat recently, the visit on 30 July was most important. Modi was at the Gujarat International Finance Tec-City (GIFT City) near Gandhinagar to lay the foundation stone for the International Financial Services Centre Authority (IFSCA) and inaugurate the India International Bullion Exchange (IIBC), the NSE International Financial Service Centre (IFSC) and SGX (Singapore Exchange Ltd) Connect platform. Waxing eloquent, he said that India is entering the league of nations, such as the US, the UK and Singapore, which are trend-setters in the shaping of global financial sector.

IFSCA is the unified regulator for the development and regulation of financial products, financial services and financial institutions in International Financial Services Centres (IFSCs) in India. A well-functioning IFSCA can make regulation and operation cost-competitive not only within India, but also in comparison to countries like Dubai and Singapore. For instance, it is expected to strike new ground for financial innovations in aircraft leasing, ship financing, carbon trading, digital currency and IP rights to investment management. IIBX is aimed to facilitate efficient price discovery, with the assurance of responsible sourcing and quality, apart from giving impetus to the financialisation of gold in India. It will empower India to gain its rightful place in the global bullion market and serve the global value chain with integrity and quality, reinforcing India's ability to influence global bullion prices as a principal consumer.

As for the NSE IFSC-SGX Connect, it is a framework between NSE's subsidiary in the GIFT International Financial Services Centre (IFSC) and Singapore Exchange Limited (SGX). Under Connect, all orders on NIFTY derivatives, placed by members of Singapore Exchange, will be routed to and matched on the NSE-IFSC order matching and trading platform. Broker-dealers from India and across international jurisdictions will participate in large numbers for trading derivatives through Connect, deepening liquidity in derivative markets at GIFT-IFSC.

Is all this just hot air, divorced from the real economy and oblivious to the warts that have recently surfaced like inflation, under-employment and inequalities?

Role of markets

Back in 2007, as the Chief Minister of Gujarat, Modi had conceptualised the idea of GIFT City. His vision was to create a globally-benchmarked financial centre that can compete with the renowned financial centres in London, Tokyo, Shanghai, Paris, Singapore and Dubai. Since its conceptualisation, GIFT City has made rapid progress. An IFSC enables bringing back the financial services and transactions that are currently carried out in offshore financial centres by Indian corporate entities and overseas branches/ subsidiaries of financial institutions (FIs) to India by offering a business and regulatory environment that is comparable to London and Singapore. It would provide Indian corporations with easier access to global financial markets. IFSC would also complement and promote further development of financial markets in India. Since the dawn of the Modi era, the support that GIFT City has received from the Central and Gujarat governments has acted as a catalyst in accelerating its growth.

It is a well-known fact that well-developed, smoothly operating financial markets play an important role in contributing to the health and efficiency of an economy. There is a strong positive relationship between financial market development and economic growth. They help to efficiently direct the flow of savings and investment in the economy in ways that facilitate the accumulation of capital and the production of goods and services. The combination of well-developed financial markets and institutions, as well as a diverse array of financial products and instruments, suits the needs of borrowers and lenders and therefore the overall economy. It is another milestone in the evolution of our economy.

A $3-trillion economy

On the completion of its 75th year of independence, there is little doubt that India's development journey has been marked by significant milestones and reforms that enabled it to achieve substantial progress in many areas including rise in income levels, growth, literacy, life expectancy and a wide variety of other economic indicators. When India declared its independence in 1947, its GDP was a mere ₹2.7 lakh crore, accounting for a paltry 3 per cent of the world's total GDP. For 2021-22, India's GDP at current prices is estimated to attain a level of ₹236 lakh crore ($3.05 trillion).

Recently, Gautam Adani, founder & chairman, Adani group, said that India's demographic dividend, which will carry it well beyond 2050, will put it on track to becoming a $28-30 trillion-dollar economy by 2050. "My optimism comes from my belief that no nation in the world is as uniquely well-placed as India is to capitalise on the four major vectors that will accelerate development – the pull from India's demographic dividend, growth of its middle class, push from an accelerated digital economy and the sustainability focussed economy," he said in Mumbai.

Adani, Asia's richest man, is not known to talk out of his hat. After all, he is planning to invest $20 billion in clean energy generation, component manufacturing, transmission and distribution over the next 10 years and believes that the need for sustainability and renewable power is a game changer for India.

The process of liberalisation, which started during the mid-1980s and made the Indian economy more open to trade and external flows, had gained pace during the 1990s. The objective was to improve the efficiency of the Indian economy through reduction in trade barriers such as import tariffs. Sure, India's economy managers could have done better. For instance, after the burst of privatisation during the Vajpayee regime, the sale of PSUs was put on the back-burner and is picking up only now. The redeeming feature is that the sale of Air India has finally gone through after many false starts.

Adani: India is uniquely well placed

Bank privatisation

Last month was the 53rd anniversary of the day (19 July 1969) when Indira Gandhi nationalised 14 major banks, which accounted for over 80 per cent of India's bank deposits. Attempts to reverse this process have been slow and tardy. The two finance ministers in successive Modi-led governments – Arun Jaitley and Nirmala Sitharaman – have treaded cautiously on this count, preferring to move instead towards mergers of public sector banks. Sitharaman has announced privatisation of two public sector banks in her 2021-22 budget, but there was strong opposition from the employees' union to the move.

But will the government go in for complete privatisaton of the banking sector? Ditto the coal sector, which even 75 years after independence produces well below our requirement, necessitating imports. Senior bankers have suggested that complete privatisation of the banking sector is feasible, but it will take more than a decade to implement the plan. Already, private banks contributed about almost 40 per cent of the industry's total credit – up by over 10 percentage points in five years. The amalgamation of HDFC and HDFC Bank, once legal formalities are done, will create a private sector banking behemoth, resulting in a balance sheet size of almost ₹18 lakh crore. So, why not just expedite the process? If a government bank has to exist, let it be the SBI.

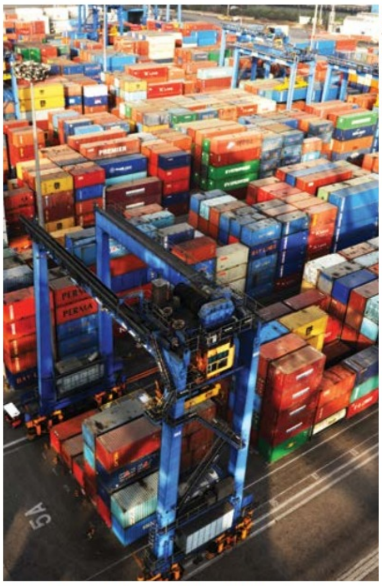
Booming exports

But this is not to say there has been no progress in other sectors. Today, India has developed a significant footprint in the global economy. The value of exports of goods and services stood at just about $0.1 billion during 1950-51; but, by in 2021-22, the figure was $418 billion for merchandise exports while that of services was $254 billion. The share of export of goods and services in India's gross domestic product (GDP) is also rising, having gone up to 21.4 per cent of the GDP in 2021-22 from 18.7 per cent in the previous fiscal.

Service exporters alone are looking at an export target of $350 billion in the current fiscal -- up a steep 37 per cent from last year, despite headwinds and recession fears in the global market. According to the Services Export Promotion Council (SEPC), an expected rebound in inbound tourism and growing demand for India's services in sectors such as medicine, law and even gaming may help the country boost services export revenue to $1 trillion in 2027, three years ahead of estimates. However, this target would require boosts, enhanced trade agreements and incentives from the government across various services sectors.

To go on a higher growth trajectory, Indian economy will have to get over the hump of tighter monetary policy that has emerged in developed economies and macro-economic stress being felt in some emerging markets. This is expected to impact demand for Indian exports as well, at least in the next 6-12 months.

The Modi government's economic management policy in the face of this challenge is one of perseverance. The mantra is simple: instead of getting distracted by 'cyclical factors', India should focus on becoming part of the global supply chain in an aggressive way, since we live in a time when global supply chains are churning and realigning. India will persist with the production-linked incentive schemes and encourage FDI to build economies of scale even as it pursues free-trade agreements with



SANJAY BORADE

Exporting to the world: India has developed a significant footprint in the global economy

more countries. There is a renewed focus on the big (and long pending) FTA with the European Union. With the cycle eventually turning, barring another shock, India will get a smoother patch.

The government feels that India is weathering the current situation rather well, despite the high oil prices and tightening global liquidity. Most official assessments still expect the economy to grow by over 7 per cent in real terms this year. This will make India the fastest growing major economy, and it's likely to repeat this performance next year. Years of structural reforms mean India's supply-side engine is now capable of sustaining GDP growth of over 8 per cent over long periods. This means that when a clear road is available, policymakers will be in a position to press the accelerator. For now, the challenge is to manage inflation and maintain macro-stability.

Inflation imported?

On inflation, the government believes that the current cycle is almost entirely imported, particularly due to high energy prices. The local economy is not generating inflationary pressures. Also, our inflation rate is below those of both the US and Europe. Nonetheless, RBI has tightened monetary policy partly in sync with global central banks and partly to head off second order feed-through to domestic prices. To provide relief to the common man, fuel related taxes have been cut. As the growth momentum is good and there is no need to be adventurous with a large fiscal push at this point. It is enough that the current infrastructure plan is implemented.

Linked to this is the spurt in the price of commodities. Some commodities may have declined of late, but the main concern is energy prices. They remain elevated even if they are currently down from the peak. The conflict in Ukraine and uncertainties about Russian energy supplies to Europe are still in play. Therefore, we are still not out of the woods as far as energy prices are concerned.

Rupee valuation

Then there is the challenge of rupee valuation. The Indian rupee has declined against a very strong dollar, but it has appreciated against virtually all other major currencies. The Reserve Bank has used foreign exchange reserves to smoothen the move, but has refrained from targeting a rupee-dollar level. This is the correct approach, as it is not necessary to keep up with a rapidly appreciating dollar. Defending a specific level would merely create a target for speculators and use up reserves. As mentioned earlier, Indian policymakers are focused on macro-stability and if we handle this cycle well, the rupee can always gain back lost ground.

In the coming years, India should work towards freeing up the rupee, aspiring for the rupee to become a hard currency in 10 years and for it to be included in the International Monetary Fund's SDR (special drawing rights) basket along with the dollar, pound-sterling, Euro, Japanese Yen and Chinese Yuan. This aspiration should neither be confused with any short-term benefits nor with the role of the US dollar as the world's anchor currency. The world has many hard currencies and an additional one will not challenge the dollar's dominance.

Raghuram Rajan, the former governor of the Reserve Bank, recently said that, while growth figures in India is better than many nations as of now, the country needs to do better, as it has a huge population. Though the growth figure is

Rajan: the country needs to do better

about 7 per cent – which the government quoted in Parliament in response to the debate on price rise – Rajan is of the opinion that this growth has been "insufficient for the kind of jobs we need." Rajan is no favourite of this government, but his premise that co-relating jobs and demand can be the only twin drivers of economy makes sense.

Jobs create demand

Despite growth, India Inc's capacity utilisation is low. The economy thus need more demand, going forward. This will happen only if there are more jobs and the buying power increases. Currently, a lot of this growth is jobless growth. Everybody cannot be a software programmer – one of our success stories. Indians need other jobs as well – and that too decent jobs.

India is today at a dramatic inflexion point. It is likely that, over the next few decades, India will have firmly positioned itself as the greatest opportunity of the 21st century and become even stronger 2050 onwards (as Adani believes). There, however, will be challenges such as periods of slowdown that every large economy goes through. But, there should not be any denial of the scale of the opportunity that awaits India. ♦

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INFRASTRUCTURE

Showing progress

India rides high with projections of rapid infrastructure development

Infrastructure is an important aspect of the economic development of a country, which cannot achieve rapid economic growth unless it has the appropriate infrastructure. During the colonial period, basic infrastructure such as water transport, railways, posts & telegraphs, and ports were developed. Some may argue that it served the colonial interest rather than the common people. But it has certainly shown that infrastructure is the key for a country's progress.

Post-independence, the Five-Year Plans focussed on many sectors in order to speed up the pace of development, but the movement was slow. The presence of a lopsided infrastructure resulted in the limited or slow growth of enterprises. The roads constructed then were poor and not connected to rural areas, which hindered the country's development.

To improve the weak surface transport system, Calcutta was the first city to start an underground metro service, thanks to the then Railway minister from Bengal Gani Khan Choudhury, who pushed for it. Despite several difficulties, the project was successfully executed in 1984 for a stretch of only 3.40 km and it made history. Today, the subway network covers about 42 km. At present, more than 15 cities have rapid transit (popularly known as metro) systems and many more are being constructed. The largest network is in Delhi – a distance of 349 km. Kolkata takes pride in the fact that it still operates its tram services, which began in 1902.

Real industrial development began after liberalisation in 1991 and aimed at ending the licence-permit raj by decreasing government intervention in businesses, thereby pushing economic growth through reforms. The policy opened up the country to the global economy. It discouraged public sector monopoly and paved the way for competition in the market. Investments have steadily risen since then.

Infrastructure services were slowly but steadily moving away from the realm of government control to that of the private sector. Across sectors ranging from telecommunications and roads to power and ports, state-owned agencies are giving way to private sector entities operating in a competitive environment and subject to economic regulation where necessary. Governments at both Central and state levels are actively engaged in managing this transition, devising appropriate policy frameworks and establishing suitable institutions such as the Central road fund and independent regulatory authorities in the power and telecommunication sectors. Infrastructure is mainly focussed on core areas like roads, railways, ports and power.

The road network has traditionally been the backbone of the country's transport infrastructure. Former Prime Minister Atal Bihari Vajpayee believed that construction of arterial roads would trigger development. With this in mind, he launched two road projects – the Golden Quadrilateral and the Pradhanmantri Gramin Sadak Yojna. The Golden Quadrilateral connected Chennai, Kolkata, Delhi and Mumbai through a network of highways in 2000, while the Pradhanmantri Gramin Sadak Yojna was planned as a network of all-weather roads for unconnected villages across India. Over a few years, more than 5,400 km of new highways were built across the country. It was the biggest infrastructure intervention in the road sector in postindependent India. Both projects proved to be an immense success and contributed to India's economic growth and development. Subsequent governments have also continued Vajpayee's schemes.

Today, India has the second-largest road network in the world, at about 6.22 million km. In 2020-21, these consisted of 136,440 km of national highways/ expressways, 176,818 km of state highways and 5,902,539 km of other roads. Nitin Gadkari, Union minister for road transport & highways, as also micro, small & medium enterprises, has given priority to infrastructure development and has set a target of ₹15 lakh crore ($206 billion) for road construction, including multi-modal hubs for logistic efficiency, for the next two years.

The Bharatmala Pariyojana, a new umbrella programme of the Modi government, accounts for 34,800 km of roads at a cost of $7.713 billion. It focusses on optimising the efficiency of freight and passenger movement across the country by bridging critical infrastructure gaps through effective interventions like development of economic corridors, inter corridors and feeder routes, border and international connectivity roads, coastal and port connectivity roads and green-field expressways. About 65 per cent of all goods and 86 per cent of the total passenger traffic use the road network in the country. Road transport also acts as a feeder service to railway, shipping and air traffic.

"Last mile delivery is now a reality for nearly all major towns and cities across India," says Vijay Sankeshwar, founder-chairman, VRL Logistics, a national leader in logistic segment. "Abolishing the erstwhile multi-state tax regime with GST is the single most relevant development in the Logistics industry".

India's programmes to build infrastructure and connect the country are picking up pace. The 2019 budget allocates $9.27 billion and the highest ever capital expenditure of $22.77 billion for the Indian Railways.

India inherited the rail network after independence, and has progressively

upgraded and improvement its operations. India's production of indigenous steam locomotive engines commenced in 1950, with the setting up of the Chittaranjan Locomotive Works (CLW). Before CLW, Tata Locomotive & Engineering Co used to produce steam locomotives for railways for sometime; later, the company shifted into vehicle manufacturing. This was a clear example of *atmanirbhar* Bharat, which began in that era. In order to connect important cities, many lines were re-routed and new lines constructed by Indian Railways.

Railway electrification

To control spiralling fuel bills, reduce dependence on imported fossil oil, increase the energy security of the nation, reduce pollution, and improve operational efficiency and operating ratios, electrification was a priority for the railways. Indian Railways has a total broad-gauge network of 64,689 km, out of which 45,881 km -- about 71 per cent -- had already been electrified by 31 March 2021. The government has envisioned total electrification of the railway network by December 2023 and has set an ambitious target of running the entire rail network on renewable energy by 2030.

The Dedicated Freight Corridor Corporation of India Limited (DFCCIL), an undertaking by the Railway Ministry, has commissioned two projects – the Eastern Dedicated Freight Corridor and the Western Dedicated Freight Corridor. The Eastern Dedicated Freight Corridor (EDFC), runs from Ludhiana to Sonnagar, while the Western Dedicated Freight Corridor (WDFC) connects Jawaharlal Nehru Port Terminal (JNPT) to Dadri; their lengths of 1,337 km and 1,506 km respectively will be developed at the earliest, with these corridors witnessing some of the world's largest freight operations. So far, 1,110 km out of the total sanctioned length of 2,843 km of DFC has been completed. Its freight carrying capacity will be 13,000 tonnes -- up from the current 5,000 tonnes. The length of the goods trains will also increase from 700m to 1,500m.

In 2017, the prime minister laid the foundation stone of his high-speed bullet train dream project, despite criticism by the Opposition regarding its feasibility. "Bullet train signifies India's progress," Modi had said. The high-speed train will run between Ahmedabad and Mumbai. This is being implemented with technical and financial assistance from Japan. The high-speed railway, with an operating speed of about 320 kph, will cover a distance of 508.2 km in about two hours, as against seven hours at present. It is expected to become operational – or at least have a trial run – by 2026. Of the total project cost, 81per cent is in the form of a loan from Japan International Corporation Agency (JICA).

The Indian Railways is proactively moving towards privatisation, particularly in the rolling stock business, with modern technology and an emphasis on safety. The Kolkata-based Titagarh Wagon was awarded the contract to design and make lightweight coaches for Pune Metro Rail. "Our stainless-steel coach manufacturing facility will enable us to become a significant player in the upcoming stainless steel coach sector in India, as rail coaches made of stainless steel can minimise the impact of train accidents," says Umesh Chowdhary, vice-chairman & managing director of the company. "The use of stainless steel in passenger coaches is a common practice in developed economies like US, Canada, Brazil and Japan. With our new facility, we will cater to this need of the Indian ecosystem."

A few railway stations, to be developed as per international standards, with modern facilities and passenger amenities using the PPP model, have been identified by the government. The Private Partnership Appraisal Committee has granted approval for the redevelopment of Gwalior, Nagpur, Sabarmati and Amritsar railway stations.

The Sagarmala Programme, on the other hand, focusses on connectivity by sea. It forecasts a role for multiple central ministries and agencies, as well as state governments. As of 30 September 2018, a total of 522 projects at a cost of $6.18 billion were under various stages of implementation, development and completion. The projects include port modernisation, new port development, port connectivity enhancement, port-linked industrialisation and coastal community development.

India has 12 major and 205 notified minor and intermediate ports situated along its 7,500 km long coastline, apart from a vast network of navigable waterways. According to the Ministry of Shipping, about 95 per cent of India's trading by volume and 70 per cent by value is done through maritime transport. The late Arun Jaitley had initiated the privatisation of ports when he was the finance minister in the Modi government. Today, private players have become the changing face of India's exim trade in the port segment. They are fast and are able to efficiently handle the growing volumes of trade.

India's key ports had a capacity of 1,561 million tonnes per annum (mtpa) in 2020-21. In 2021-22 (until February), key ports in India together have handled 650.52 million tonnes (mt) of cargo traffic. India's merchandise exports in 2021-22 stood at $417.8 billion -- up 40 per cent from the previous year. In October 2021, India's merchandise exports grew 43.05 per cent y-o-y to reach $33.65 billion. Under the National Perspective Plan, six new mega ports will be developed in the country.

The shipping industry is moving towards mega-size vessels, with over 40 per cent of the order book in the next 3-5 years including ships with a capacity of 20,000 TEU and above. While a capesize vessel requires 18m plus draft, drafts at Indian ports vary widely – from 7m to 20m. Therefore, Indian ports need to focus on increasing draft availability according to their respective cargo profile. Considering the evolving shipping market, ship sizes, and cargo profile, it is essential for Indian ports to further strengthen port infrastructure and drive a greater share of global exim trade. Infrastructure should be planned carefully, analysing cargo trends and forecasts.


SANJAY BORADE

Ports infrastructure is being strengthened to boost trade

Power for all

The Indian power sector is undergoing a significant change that has redefined the industry outlook. Sustained economic growth continues to drive electricity demand in India, the third largest electricity producer in Asia. It increased its electricity generation capacity from 1,362 MW in 1947 to 395,600 MW as of 2022. The government of India's focus on attaining 'power for all' has accelerated capacity addition in the country. In order to meet the increasing demand for electricity, a massive addition to the installed generating capacity is required. The government emphasises rural electrification, but 13 per cent of remote villages in India still do not have access to grid-connected electricity. They use non-grid sources or don't use electricity at all.

India has witnessed the fastest rate of growth in renewable energy capacity addition among all large economies. India's installed renewable energy capacity is the fourth largest in the world. The government is committed to increase the use of clean energy sources and is already undertaking various large-scale sustainable power projects and promoting green energy heavily. Renewable energy also has the potential to create employment opportunities at all levels, especially in rural areas.

To facilitate renewable power evacuation and reshaping the grid for future requirements, several Green Energy Corridor (GEC) projects have been initiated. The GEC Project aims at synchronising electricity produced from renewable sources, such as solar and wind, with conventional power stations in the grid. The first component of the scheme, Inter-state GEC with target capacity of 3200 circuit kilometre (ckm) transmission lines and 17,000 MVA capacity sub-stations, was completed in March 2020. The second component -- Intra-state GEC with a target capacity of 9,700 ckm transmission lines and 22,600 MVA capacity sub-stations -- is expected to be completed this year.

India's installed renewable energy capacity (including hydro) was 158.12 GW as of April 2022, accounting for 39.43 per cent of the nation's total installed power capacity. The installed capacity for renewable energy has increased over the last few years, at 15.92 per cent CAGR during 2016-22. ICRA expects a renewable energy capacity addition of 12.5 GW in 2021-22 and 16 GW in 2022-23. Power generation from solar and wind projects are likely to be cost-competitive relative to thermal power generation in India in 2025-30.

According to the data released by the Department for Promotion of Industry & Internal Trade (DPIIT), FDI inflow in the Indian non-conventional energy sector stood at $11.62 billion during April 2000-March 2022. Since 2014, the renewable energy sector in India has seen investments totalling more than ₹5.2 lakh crore ($70 billion).

Adani Green Energy Ltd (AGEL) has acquired SB Energy India for $3.5 billion to strengthen its position in the renewable energy sector in India. Reliance Industries has announced an investment of ₹75,000 crore ($10.07 billion) in the green energy segment.

With regards to government initiatives, the allocation for the Solar Energy Corporation of India (SECI: which is responsible for the development of the entire renewable energy sector) stood at ₹1,000 crore ($132 million) in the Union Budget 2022-23. The government has also allocated ₹19,500 crore ($2.57 billion) for a PLI scheme to boost manufacturing of high-efficiency solar modules.

India has launched the Mission Innovation CleanTech Exchange, a global initiative that will create a whole network of incubators across member countries, to accelerate clean energy innovation. At the Cop-26 Summit in Glasgow, Prime Minister Modi had pledged to boost India's renewable energy generation capacity to 500 GW and satisfy half of India's energy needs through renewable sources by 2030.

It is expected that, by 2040, about 49 per cent of the total electricity will be generated by renewable energy, as more efficient batteries will be used to store electricity, which will further cut the solar energy cost by 66 per cent from the current level.

India's aviation industry, by and large, is untapped, with substantial growth opportunities. Air travel for the common citizen was a luxury till two decades back. But entry of private operators in the sector has changed the game. Air Deccan was the first low-cost, no-frill airline, which started its operation in India aiming to cater to the commoner. Several others have joined the move now. The players, who operated efficiently, have gradually increased their operational scale, which the rest could not sustain and have been struggling, due to sharp rise of fuel price and other factors.

The air connectivity has improved not only to the cities but also with the small towns across the country and new airports have been built and, some upgraded, to ease the passenger traffic flow. India has emerged as one of the fastest-growing aviation markets in the world. The domestic traffic in India has more than doubled from about 61 million in 2013-14 to, say, 137 million in 2019-20, registering a growth of over 14 percent per annum.

UDAN takes off

India's aviation industry is expected to witness a flow of ₹35,000 crore ($4.99 billion) investment in the next four years. The Indian government is planning to invest $1.83 billion for development of airport infrastructure, along with aviation navigation services, by 2026. India aims to have 220 new airports by 2025, informs Jyotiraditya Scindia, minister for civil aviation. Cargo flights for perishable food items will also be increased to 30 per cent, with 133 new flights in the coming years.

UDAN, a regional airport development programme of the government of India, is a part of the Regional Connectivity Scheme (RCS) to upgrade underserviced air routes. Till launching of UDAN in 2016, India had 74 airports having scheduled operations. But, within four years under UDAN, four rounds of bidding under RCS-UDAN have taken place and 153 RCS airports, including 12 water aerodromes and 36 helipads have been identified for operation of RCS flights. During the last four years after commencement of the scheme, 948 valid awarded routes have been allotted to various airlines, out of which 389 RCS routes, connecting 62 unserved and underserved airports have been operationalised so far.

To improve efficiency and performance, service quality, encourage greater investment and to reduce government influence, the Airports Authority of India (AAI) has awarded six airports -- Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangaluru -- for operations, management and development under PPP (to Adani) for a lease period of 50 years. In 2006, AAI had leased out Delhi and Mumbai Airports also to private players. As per National Monetisation Pipeline (NMP), 25 AAI airports have been earmarked for asset monetisation over 2022-25 -- Bhubaneshwar, Varanasi, Amritsar, Trichy, Indore, Raipur, Calicut, Coimbatore, Nagpur, Patna, Madurai, Surat, Ranchi, Jodhpur, Chennai, Vijayawada, Vadodara, Bhopal, Tirupati, Hubli, Imphal, Agartala, Udaipur, Dehradun and Rajahmundry. Monetisation stipulates an annual traffic flow of 0.4 million. But, despite all hypes and projections to privatise even small airports, there is apprehension of low profitability.

Besides creating the right infrastructure, the government of India has signalled the beginning of a new era of mobility for India. Global technology trends and India's rapidly growing economy have led to a focus on the electrification of transportation as the primary technology pathway to achieve this transformation, spearheaded by Gadkari.

An increasing government focus on EVs as the primary technology pathway for future mobility has been bolstered by industry initiatives. Established and new industry players in automotive, charging infrastructure, batteries and mobility services have been making investments and forging partnerships to develop and test new products and business models.

"India's sustained focus on growing its underdeveloped infrastructure is crucial," says Sunil Kumar Chaturvedi, chairman & managing director, GainwellCommosales, a provider of caterpillar construction, mining and power solution. "Multiplier effect of infrastructure investment is well-known and India must invest $5.5-6.0 trillion in ramping up its infrastructure over the next 30 years to bridge the existing gaps and create room for pushing further economic growth".

To sum it all, the success of Prime Minister Modi's 'Make in India' concept depends on the right infrastructure for manufacturing competitiveness. Infrastructure also contributes to job creation, which is the key challenge for Modi as India celebrates 75 years of independence.

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GUEST COLUMN

Do you want to become an ANGEL?

Angel investing can be exhilarating and risky

If you had invested ₹30 lakh for a 15 per cent stake in OYO when the 17-year-old Ritesh Agarwal raised his first round in 2011, it would be worth a couple of thousand crores today. Entrepreneur and investor, Vishal Gondal has famously admitted to missing this opportunity offered by Ritesh in 2011 to invest in Oravel, the parent company of OYO, and he must certainly be kicking himself today.

On 15 July, 2002, 5ire became the 20th start-up this year to enter the billion-dollar club, referred to as unicorns. India now has 105 unicorns with a combined value of $338.50 billion. According to a PwC report, there is potential for 50 start-ups to enter the unicorn club this year. There are a staggering 74,400 start-ups registered with the DPIIT and the total universe of start-ups in India is far bigger.

Some mature start-ups have recently resorted to laying off staff and cost rationalisation as they have not been able to raise funds. In spite of this, is there an opportunity to start your journey as an angel investor? Can it become a profitable investment? And how can you get going?

Like every business cycle, the 'maturity cycle' seems to be impacting some funded start-ups and as this cycle unfolds, the entire start-up ecosystem will benefit. However, there is no slowdown in the flow of early-stage start-ups that are emerging from schools, colleges, and incubators. And therein lies an opportunity to become an angel investor.

Investing your hard-earned money in a high-risk asset class is never easy. You need to start by allocating a small percentage (5-10 per cent) of your overall portfolio of assets for investments in start-ups. Unlike other investments, the downside to angel investing is that it can be binary – that is, if any of the start-ups fail, you might lose all the money you have invested in the start-up; but if it succeeds, you can sing your way to the bank. Start-up investments are also illiquid and that should also be factored into your decision-making process. On the other hand, as an angel investor, you can mentor the founder and guide the start-up – something which is not possible when you invest in companies in the public markets. The first step is to decide what kind of angel investor you would like to become.

There are various options:

- Opportunistic: investing in any exciting opportunity
- Thesis-driven: investing within certain boundaries
- Sector-driven: investing in a particular sector (say healthcare or agritech)
- Trend-driven: investing in the latest trends (say Web 3, crypto, metaverse, SaaS)

With this understanding, and your willingness to invest, you will need to decide the ticket size of each investment. There are two options:

- Spray and pray: where you invest small amounts in a large number of start-ups and hope that some of them will give you hefty returns
- Pray and pray: where you invest bigger ticket amounts in a smaller number of start-ups and track them closely

In an ideal scenario, you should look at angel investing through the lens of a portfolio investor and spread your risk over many start-ups, investing over a couple of years. Should any of your early-stage start-ups do well and go to the next round of funding (pre-Series A or Series A), you need to decide if you would want to 'double down' on your investment and participate in the next round or restrict your investment to your initial amount. Most VC firms believe in 'backing the winners' and doubling down on their investments. But as an angel investor, you could build your own thesis on downstream investments in successful start-ups.

- To develop your framework for how much to invest in start-ups, you could consider the following factors:
- limit for investment in each start-up and an overall limit on the total amount to be invested
- returns expected from your investment

acceptable investment risk

Remember, the risk of investment is directly proportional to the stage of the start-up. As an angel investor investing in a pre-seed or a seed round, your risk is high and so is the asymmetricity of the returns – Vishal Gondal and his missed opportunity in OYO is a great example. As the start-up matures and keeps getting funded, you have more visibility into the business model of the start-up and its viability to scale up.

- And finally, before building your thesis of angel investing, you need to consider:
- your knowledge of a particular sector
- your investment perspective
- your way of thinking

Angel investing can be exhilarating and risky. It can give crazy returns, which are probably not possible in any legitimate investment alternative. There is also a surge in the number of start-ups being set up and this presents an active opportunity to an alternate class of investment. So, go ahead and get ready to invest – welcome to the amazing world of angels! ♦

NINAD KARPE

The author is a Partner at 100X.VC, an early-stage VC fund

GUEST COLUMN

Gaining momentum

The Indian real estate sector is about to experience a new kind of revival in the coming months

Change is the only constant, and the real estate industry is no exception. India's real estate market has evolved by leaps and bounds over the past 75 years of the country's independence.

The industry, which traces its roots back to the late 19th century, was unorganised and unregulated initially. Individuals bought pockets of land tracts and developed them. Absence of a centralised title registry, lack of uniformity in local laws and their application, non-availability of bank financing, high-interest rates and transfer taxes, lack of appropriate laws and regulatory mechanism, the lack of transparency in transaction values – all collectively impeded organised dealing. The sector was also believed to be a haven for parking unaccounted black money.

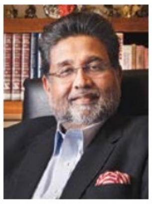
The segment assumed importance, following liberalisation of the economy and the consequent increase in business opportunities, as well as growing urbanisation. The combination of a capitalist economy and a growing urbanisation stimulated the need for urban land and developed residential, commercial and retail real estate throughout India. Demand for hotel accommodation and improved infrastructure too increased.

Policymakers began working on infusing transparency and accountability through technology and regulations. A slew of progressive government reforms and initiatives – such as the repeal of the Urban Land Ceiling Act, modifications in the Rent Control Act; rationalisation of property taxes in a number of states; computerisation of land records; liberalised FDI rules; Real Estate Investment Trusts (REITs); Smart Cities; Housing for All; AMRUT (Atal Mission for Rejuvenation and Urban Transformation) – all these cumulatively impacted the sector, providing vital stimulus for the growth of the real estate industry.

The government of India's vision of 'Housing for All by 2022' has bolstered low-income housing projects in peripheral localities of urban areas.

The government policies and regulatory reforms slowly made the realty sector mature, professional and regulated. The demonetisation scheme, as well as implementation of the Real Estate Regulation Act (RERA) and Goods and Services Tax (GST) turned out to be major inflection points for the industry.

While demonetisation drastically reduced the cash component in the business, GST and RERA were the significant influences in infusing transparency. RERA implementation has also given branded/ organised developers a significant advantage over developers, who are facing financial constraints (mainly from unorganised segment). Builders, who have access to low-cost funding and follow an asset-light model, will be winners in the changed scenario.



HARSHAVARDHAN NEOTIA

These significant policy initiatives, aimed at improving transparency and ease of doing business in the realty sector, will infuse the much-needed confidence and trust in the sector.

There may be a plethora of reasons behind the transition of Indian real estate, technology still continues to be a major catalyst driving the change. Smart houses, Virtual Reality (VR), drones on site, video walkthroughs, new construction technology and online portals – are examples, which indicate how adoption of technology has helped the industry to expand further. The outbreak of novel Coronavirus has further accelerated the use of digital tools in Indian real estate. At present, realty firms are enhancing their online marketing campaigns to gain traction. Video conferencing has emerged as the most convincing mechanism to interact with buyers and stakeholders and AI-backed chatbots to handle routine enquiries from prospective customers.

India's real estate industry has now entered a new phase of growth, innovation and investment. The market is adapting to changes brought about by the pandemic. Going forward:

- Demand for condominium projects with beautiful views, multiple gardens and roof decks adorned with lots of greenery combined with amenities like multi-functional spaces, and relaxation areas, etc, will rise.
- Integrated townships and plotted development of complexes with good amenities, good security and aesthetic ambience will be preferred.
- More and more home-buyers will opt for environmentally sustainable buildings including those with low carbon footprint.
- Real estate developments with biophilic designs will become more popular as they offer more than just aesthetic benefits. It improves the health and well-being of the owner.

Though there is room for further improvement to overcome the ground challenges, the Indian real estate sector has made rapid strides. It is about to experience a new kind of revival in the coming months. We are optimistic of a bright future for the industry. ♦

The author is chairman, Ambuja Neotia group

REAL ESTATE

A journey of resilience

Despite all the odds, the Indian realty sector has put up an impressive show

SANJAY BORADE

As India celebrates its 75th year of independence, its real estate sector has also come a long way. The industry has played a crucial role in providing housing to its growing population, even as it is one of the key segments of the overall economy since it contributes around 7 per cent to the country's GDP. By 2030, the sector is expected to contribute around 10 per cent to the GDP, taking its market size to around $1 trillion from the current $200 billion. Importantly, the real estate sector, while providing one of the basic requirements ie housing, is also one of the major employment generators.

Over the last couple of decades, the Indian realty sector has undergone a sea change against the backdrop of economic liberalisation, with institutional players exploring the opportunities being presented. In 2005, the RBI's decision to allow 100 per cent FDI in real estate was arguably one of the most significant policy decisions by the Union government. This, along with other policy measures led recently by RERA, has gone a long way to bringing some much needed transparency and depth to the entire setup.

"We have come a long way from where we were. From lacking transparency and being completely unorganised, the Indian real estate sector today looks much more organised. Entry of institutional money and large developers has revamped the whole market and home buyers are currently more assured and confident than ever before. As the country celebrates its 75th year of independence, we find the domestic real estate sector resilient and in a better place to start its next growth phase," says Ambar Maheshwari, CEO, Indiabulls Asset Management Co Ltd.

The government of India came out with Pradhan Mantri Awas Yojana in 2015 to addresses urban housing shortage among the EWS/LIG and MIG categories, including slum dwellers, by ensuring a pucca house to all eligible urban households by 2022, when the nation completes 75 years of its independence. The mission provides central assistance to the implementing agencies through states/Union Territories and central nodal agencies for providing houses to all eligible families/beneficiaries against the validated demand for houses for about 1.12 crore people.

Government initiatives

The Minister of State for Housing and Urban Affairs, Kaushal Kishore, recently informed the Lok Sabha that based on the project proposals submitted by states/UTs, a total of 122.69 lakh houses have been sanctioned during the mission period ie till 31 March 2022. Against the sanctioned houses, 102.23 lakh have been grounded for construction, of which 61.50 lakh are completed/delivered to beneficiaries. According to the minister, the government is also considering extending the scheme up to March 2024.

In 2020, the ministry of housing & urban affairs initiated Affordable

Rental Housing Complexes, a sub-scheme under Pradhan Mantri Awas Yojana, for providing ease of living to urban migrants/poor in the industrial sector as well as in the non-formal urban economy so they could get access to dignified, affordable rental housing close to their workplace. Earlier, in 2018, the government granted infrastructure status to affordable housing which enabled these projects to avail of the associated benefits such as lower borrowing rates, tax concessions and increased flow of foreign and private capital.

Experts believe that all these policy measures were intended to strengthen the government's commitment to help build more homes for the weaker section and bridge the gap between demand and supply. They are of the view that more such initiatives will be called for in order to address the severe shortage of affordable houses in the country.

"The government has been focused on the housing sector because of the multiplier effect it has on the economy. The sector has seen a plethora of reforms such as implementation of RERA, GST, etc. The CLSS schemes under the government's flagship project, PMAY have helped immensely to move towards the goal of 'Housing for All'. The government also announced a host of measures to support the real estate sector such as granting infrastructure status to affordable housing besides tax concessions to homebuyers and developers. The real estate sector has become structurally stronger over the years and is on an upcycle. The demand for housing will remain resilient going forward given rising income levels and relatively low interest rates," says Renu Sud Karnad, managing director, HDFC Ltd.

However, enumerating some of the challenges faced by the industry, she says that a critical challenge that needs addressing is how land cost can be reduced. Currently, only non-bank financial intermediaries and private equity funds are permitted to fund land transactions, which adds to the cost. "A long-standing recommendation is to allow banks and housing finance companies to fund land transactions, which would in turn help reduce the costs for homebuyers. A property-owning democracy gives more confidence to its citizens," she adds.

SANJAY BORADE

"The Indian real estate sector has metamorphosed significantly in the last decade, further accelerated by a slew of reformative steps taken by the central government. A new regulatory environment has been created with the implementation of various policies like RERA, GST, REITs, the Benami Transactions (Prohibition) Amendment Act, 2016 and the PMAY, among others. These policies have brought in greater transparency and accountability, financial discipline, and increased efficiency in the sector. Most importantly, a spate of policy reforms and schemes for the affordable segment has resulted in increased new supply and demand in this category in the last five to six years," says Anuj Puri, Chairman, ANAROCK Group.

Policy interventions

"The real estate sector will continue to play a key role in India's journey towards becoming a five trillion-dollar economy. Several structural reforms such as RERA and GST brought in by the government have restored buyer confidence by streamlining the sector and making it more transparent. These reforms have brought in some much-required discipline in the way business is done. It resulted in two things: essentially industry consolidation and better value for money for the end customer. It is a matter of pride that even through the worst pandemic, when every industry sector including MSMEs and manufacturing took a hit, the real estate sector continued to contribute substantially to the Indian economy," states M Murali, CMD, Shriram Properties CMD.

"Real estate has always been a valuable asset. As the country celebrates its 75th year of independence, real estate in India has also embarked on a significant journey. The sector has played a very crucial role in building blocks for an economy that is accelerating and providing employment opportunities. The 100 per cent FDI in real estate met the capital-intensive housing sector's massive funding needs. To provide a fillip to the housing sector, schemes like the Affordable Rental Housing Complex Scheme, RERA, GST and the Benami Transactions Act were launched and implemented. All this, in turn, has boosted positive sentiments in the market," states Venkatesh Gopalakrishnan, CEO, Shapoorji Pallonji Real Estate.

Backed by these policy interventions in the last few years, the Indian real estate market has not only become more transparent but also gained in depth. The market looks more matured and broad-based with the emergence of new sub-asset classes both within residential (co-living, student housing and senior living) and commercial (co-working, logistics, industrial, and date centres) segments. Not only are institutional investors finding the market more favourable and attractive but for retail investors too, there are now avenues, in terms of REITs and fractional ownership, to invest in commercial properties. In fact, REIT is a game changer for the Indian real estate industry. SEBI came up with REIT regulations in 2014.

Foreign investors are betting big on this reformed market scenario. During 2017-21, foreign capital flows in real estate jumped three times to $24 billion as compared to the preceding five-year period, as per a Colliers report: 'Foreign Investments in Indian Real Estate Turn a Corner' released in association with FICCI. Over the last five years, global investors have shown an increased inclination towards investment in Indian real estate, buoyed by the regulatory reforms introduced in 2016. Foreign investors, who had previously refrained from investing in the Indian real estate market due to lack of transparency, started investing in the country with greater optimism in 2017. The share of foreign investments in Indian real estate has grown to 82 per cent during 2017-2021, compared to 37 per cent in the preceding five-year period. During the period, alternative assets saw an inflow of about $1 billion, with a majority of this coming during the pandemic years, says the report.

A large chunk of institutional money has gone into commercial real estate, particularly office space. Retail and hospitality segments of the value chain have also attracted investments. More recently, the industrial and logistics sector has attracted a lot of attention from foreign and domestic investors. In 2021, the most sought-after asset class in the real estate space was industrial and logistics, with investments reaching a five-year high of $1.1 billion, a five-fold increase from 2020. Data centres are another emerging area which have seen increased activity. As of January 2022, the country witnessed a 5.5-time year-on-year growth in PE investments in data centres, to $2.2 billion from $396 million in 2020, as per a Knight Frank India report.

"In the last 75 years, India has witnessed exponential development and growth. We are currently witnessing the transformation from a roti-kapada-makaan ideology to aspirational and global Indian businesses. The real estate sector continues to play a critical role in the development economy. The commercial real estate sector including office, warehousing and data centres absorbs nearly 100 million sq ft annually. We are likely to see sales of over 3,20,000 residential units in 2022," says Sanjay Dutt, Managing Director and CEO of Tata Realty & Infrastructure.

While the last decade, in particular, has been quite eventful for the Indian real estate sector, stakeholders are of the view there is a need to streamline the entire approval process, as this has affected the overall development process. "While the government has been on the right track to boost the real estate sector, some additional initiatives such as single window clearances and input tax credit reinstatement are needed. The government could also introduce a labour welfare scheme which would include medical, nutrition and monitoring mechanisms, to avoid disruptions by the labour workforce," avers S Vadudevan, CMD-Ozone Group.

Positive impact

"One of the most poignant steps was the enactment and enforcement of RERA in 2016 which paved the way for transparency and accountability in the sector. This brought in better corporate governance standards in the sector. It sought to protect the rights of homebuyers, a redressal mechanism which was virtually non-existent till now. However, on the flipside, over the decades while each successive government has focussed on affordable housing, there has been little progress, with much left to be desired. The sheer magnitude of demand for affordable housing and the tight unit cost economics have been challenges in attaining the desired level of success," says Ramesh Nair, CEO, India and MD, Market Development, Asia at Colliers.

As per Murali of Shriram Properties, while the reforms introduced by the government in the real estate sector have had a positive impact, with the sector witnessing significant growth, it would be a win-win situation for developers, buyers as well as the government if there is further impetus on the affordable housing sector. Some initiatives that the government might consider to realise the Prime Minister's dream of housing for all, include reducing the tax burden on affordable housing, reinstating input tax credit and removing stamp duty for affordable housing. These measures will encourage more people to consider affordable housing, which would significantly contribute to the economy.

"The Indian housing sector has remained largely resilient despite significant policy changes. However, despite a vibrant housing sector, a few issues must be addressed simultaneously to maintain the growth momentum. As an increasing number of urban people are looking for homes, this is expected to add to the pressure on the existing infrastructure, which needs to be upgraded. Additionally, as we move forward to a more cautious business landscape, incorporating ESG into the heart of the planning process should be integrated throughout the lifecycle of the projects for a sustainable future," says Anshuman Magazine, Chairman & CEO, India, South-East Asia, Middle East & Africa, CBRE.

"Despite the improvements of transparency, customer demand increase for homes and consolidation towards larger listed and trusted developers, the environment remains challenging today in our sector. The single biggest challenge faced by developers remains the GST – starting with the removal of input tax credit on construction cost since 2019, and the recent overnight increase in the applicable GST on construction of affordable housing (from 12 per cent to 18 per cent). The lack of predictability in the regulatory environment has a negative impact on our industry due to the long gestation period of the product cycle," says Pavitra Shankar, executive director, Brigade Enterprises.

Despite being faced with these challenges, the Indian realty sector has, no doubt, shown a great deal of grit and determination. During Covid, the industry exhibited an exemplary resilience and that clearly shows the kind of maturity and depth it has gained over the years. With all the major policy interventions led by RERA, the industry is today much better placed than it was and is ready to commence its next growth phase in a more effective manner. ♦

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GUEST COLUMN

A new journey for workplaces

Offices are growing but their purpose is changing

RAMESH NAIR

India's real estate journey has seen impressive growth over the last 75 years. The sector and the economy have gone through various ups and downs over the decades – liberalisation, financial crisis, the birth of the great Indian middle class, regulatory revamp, etc. As we look back at the era since independence, the commercial office segment has seen a sea change, with MNCs descending into India from the 1990s. As workplaces kept evolving over decades, we are at a standpoint, where offices are seeing the biggest change ever brought stirred by the pandemic.

'Happy workplaces' is the new mantra in the commercial office sector. As the world came to a standstill in 2020, we saw many prophecies regarding workplaces. At the end of the two years, one thing is for certain – offices are growing but maybe their purpose is changing. It is all about the experiential workplace holding employee needs and an environment that reflects the organisation's future.

First, let us take a step back to understand the trajectory of the office segment over the last few years. In 2019, demand for office spaces touched a record high in the country, led by the growth in the technology sector. In 2020, pandemic-led lockdowns and a general sense of uncertainty led to delays in occupier decision-making. We also saw occupiers vacating offices. However, a year and a half later, as infections started waning and economic activities resumed, office demand started picking up in H2 2021. In fact, during the first half of 2022 itself, absorption surpassed more than 80 per cent of the total seen in the whole of 2021. Clearly, office demand is well-headed to reach close to 40 million sq ft during 2022. Resultantly, rentals are also likely to firm up in the next two quarters as the occupancy levels rise.

Expansion of global capability centres (GCCs), tech and fintech start-ups expanding services and entering newer geographies and flex operators leasing large spaces for India Inc will fuel office leasing in the coming quarters. Interestingly, job postings for research and development roles have risen by 42 per cent in May 2022, over the levels in May 2019. The growth in GCCs continues unhindered led by the deep tech talent in India. In current economic conditions, American and European companies may also face wage and cost pressures prompting them to look at India for expansion. India is home to over 1,300 GCCs, with the country having about 45 per cent of the global centres. Over the next couple of years, about 200 new global in-house centres are likely to be set up in India, giving an impetus to office demand in the country. Technology will continue to be the mainstay of office leasing with MNCs, taking up large blocks of space for their operations, despite hybrid working.

Occupiers are reimagining the future of work, with experiential workplaces being the mainstay. In the new normal, offices are becoming places for collaboration and brainstorming, while flex spaces are expected to cater to the changing demands in this evolving landscape.

Beginning H2 2021, occupiers' inclination towards having flexible leasing terms increased. During H1 2022, flex spaces leased 3.5 million sq ft of space in the top six cities of India – a four-fold rise over the same period in 2021. At the same time, reverse migration led to accelerated adoption of flex spaces in peripheral areas of metros and Tier II and III cities. With rising demand, the total flex space stock in metro and non-metro locations is expected to touch up to 60 million sq ft by 2023.

Offices will not be just limited to monotonously arranged desks, surrounded by concrete walls anymore. Occupiers are now leasing spaces for building next-generation offices. Employee well-being and health are a focal point for organisations, as they look for creating 'happy spaces' in offices for facilitating informal chats and collaboration.

The pandemic has significantly increased the reliance on technology in real estate including the workplace. Tech-enabled offices will result in enhanced employee productivity. Basic design interventions, which fulfil parameters on community, stress management and clean air, along with automated amenities and building management can elevate the employee experience.

Going ahead, distributed workspaces can become a preferred strategy, especially for larger occupiers, as it can allow occupiers to save time and cost for the organisation and, at the same time, help improve work-life balance for their employees. A survey conducted by Colliers & Awfis states that about 74 per cent of the occupiers are likely to opt for distributed workspaces. Occupiers will also make a serious commitment towards green offices and lower carbon emission goals. Over the next few years, developers and investors will make strides to build sustainable offices from scratch. However, for the widespread success of sustainable real estate, the industry needs to come together to understand best practices in this space. Collective strength in building resources and understanding the opportunity in this sphere will give sustainable real estate more momentum. ♦

The author is CEO, India, & managing director, market development, Asia, Colliers

IT

IT has transformed India

The sector has given the country a new global identity

SANJAY BORADE

Evaluating India's 75 years of economic journey could also lead to the perception that the country actually became independent on two occasions – freedom from colonial rule in 1947 and the decisive shift to a free-market economy model in 1991. Economic reforms are credited with the gradual unshackling of most sectors, taking them to unimaginable highs. Those who believe this also point to a common thread – the adequate support of a simultaneously growing Information Technology (IT) sector which eased this process for all stakeholders in the value chain. From the simple computing processes that defined the early 90s to the growing wave of ITeS which made India the back office of the world through BPOs in the following decade to the bedrock of a fast-evolving digital era, the Information Technology sector has been the real differentiator in the emergence of a new India. Recognised as India's key strength, the sector has simply given the country a new global identity. IT to India is what manufacturing is to China and in the coming decades, its importance is expected to grow. Facebook founder Mark Zuckerberg recently indicated this when he said India is going to play a huge part in building the metaverse, the 'next big thing' in the global technology sphere, aiming to bridge the gap between the real and virtual.

Journey since 1990s

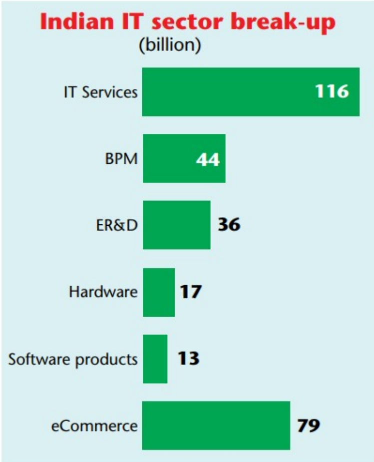
Historians will tell you that the IT industry had existed in a very nascent stage in the decades after independence. When personal computing had begun sweeping the world in the US and elsewhere, especially in the 70s, it also found reflection in the Indian market with a selective group of customers showing a propensity for its adoption, first for personal use and later for official use in the 80s. The realisation that computers were the future as well as the software systems supporting them in myriads of ways (especially networking) had also dawned on a select group of a new generation of entrepreneurs who had entered the market and stayed there almost for over a decade.

The opening of the economy and the advent of the internet later in the 1990s opened the doors for big-ticket growth of the IT sector. Indian IT engineers were in demand all across the world where the sector was registering galloping growth and built quite a reputation for India as the hub for IT talent. Lesser-known corporate entities like Infosys, WIPRO, HCL, TCS, etc caught the attention of everyone with their solution offerings. The people behind such enterprises – Narayana Murthy, Azim Premji, Shiv Nadar, Nandan Nilekanni – became more than exceptionally successful entrepreneurs. They were rather seen as new age icons of a changing society and mascots of Indian IT expertise.

The sector also got a major boost from a set of supportive policies like the setting up of Software Technology Parks (STP) and it increasingly turned into a magnet for drawing FDI in the late 90s and later. A clutch of states in South India led by Karnataka and Andhra emerged as the major IT hubs with serious fiscal sops and progressive policies. And sensing their changing profile, other states like Maharashtra and Tamil Nadu soon joined the race with their own promotions of the sector. Several observers underline that in the post-liberalisation era, states vied with each other for a greater share of the IT pie.

This battle for IT supremacy later reached a pinnacle and became the basis for a huge BPO industry around the beginning of the new millennium. And then it supported the first internet-based customer services like retail, payment, etc which later became the entry points for consumer-centric digital applications. The sector, which had a small share of 1.2 per cent of the GDP around the late 90s today has a commanding double-digit share of 10 per cent.

As per a recent estimate by NASSCOM, the Indian technology industry crossed the $200 billion revenue mark in FY2022 reaching $227 billion (See graph). It marked an increment of $30 billion over the previous year's figure with a hefty growth rate of 15.5 per cent – the highest single year growth trajectory in a decade. According to the report, most of the sub-sectors recorded double-digit growth while exports (including hardware) shot up to $178 billion supported by an annual growth rate of over 17 per cent. India's massive digital infrastructure played a key role in driving India's tech adoption with public digital platforms becoming the bedrock of India's digital advantage. Propelled by this enhanced domestic demand, the domestic IC revenue of the technology industry recorded a 1.2x growth over FY2019 to reach about $50 billion. Ecommerce recorded a growth of 39 per cent to reach $79 billion in 2021-22. The report adds that the share of digital revenue share stood at 30-32 per cent, recording an incremental revenue of $13 billion in FY2022E.



The sector has led to the large-scale employment of more than five-million people. And the companies carrying the baton are once again believed to be on a new growth journey (their growth pace had somewhat slackened before Covid). Early this year, six Indian IT companies – TCS, Infosys, Wipro, HCL, Tech Mahindra and LTI – found themselves in the list of the top 25 most valuable global IT services brands. TCS and Infosys notched second and third slots in the coveted list where Accenture occupied the numero uno position. According to an estimate, the cumulative earning of India's top 5 IT companies have now shot up to around $70 billion.

More dividend from differentiator

The digitalisation drive, which has been given a hard push by the current government – ranging from a host of smart services in the public domain to increasing digital led transactions between consumers and sellers of all kinds (even street side vendors) – has significantly added to the growth of the IT sector. A process that was decisively expedited when Covid-led restrictions demanded new adjustments. And this is slated to escalate the basic IT business to new horizons in the current decade which is often referred as a techade. "We are excited about the opportunities in the techade as we enter an era of exponential transformation. Technology has now become indispensable to progress," Rekha M Menon, Chairperson, NASSCOM recently commented.

The Indian IT industry as it stands today, has nearly half-a-dozen segments – services, BPM, ER&D, hardware, software products and e-commerce. And based on its strengths in these respective segments (hardware is the last sector where India is keen to make a mark with its Atmanirbhar programme), the country is looking to develop a digital economy of $1 trillion by 2025. On the exports front too, India has a similar $1 trillion target by the same date with the government expecting a major push from IT exports which already account for half of India's services exports. Speaking at the World Economic Forum earlier this year, Commerce and Industry Minister Piyush Goyal said that India can reach $1 trillion of services exports by 2030. And an optimism of this kind is obviously rooted in the IT exports from India heading for new heights.

Analysts and research reports cite a host of factors which will propel the growth of the IT sector in the techade at a brisk pace. The digital services' ambit will further expand (even telecom companies have begun calling themselves digital service providers) with the growing adoption of artificial intelligence, cloud computing, big data analytics, blockchain and the Internet of Things (IoT). The rollout of 5G in the next few years will give a further boost to this drive. In the near to medium run, the industry is projected to maintain a growth trajectory of 11-14 per cent and touch an annual revenue figure of $350 billion by FY2026. Things remaining normal, the decks once again seem to be clear for the Indian IT industry to aim at new milestones. ♦

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Azadi Ka Amrit Mahotsav

INDEPENDENCE DAY SPECIAL

BUSINESS INDIA ◆ THE MAGAZINE OF THE CORPORATE WORLD

GUEST COLUMN

A testament to the people

India's digital transformation is unprecedented on the world stage

SHAILENDER KUMAR

As we reflect on 75 years of Indian independence, we would be remiss, if we didn't acknowledge the national economic renaissance of the past two decades, made possible by the relentless technology-centric innovations of the country's dynamic companies, visionary policymakers, and ambitious people. India is today the fastest-growing major economy, expanding at a rate almost three times the world average and on track to become a $5 trillion economy before the end of the decade.

During a speech at a virtual business forum in June, Prime Minister Narendra Modi noted that the digital transformation driving much of that expansion is unprecedented on the world stage, predicting that the value of India's digital economy alone will surpass $1 trillion as early as 2025.

If anything, the Covid-19 pandemic accelerated India's digitisation. For example, in 2021-22, Universal Payments Interface (UPI) processed more than 46 billion transactions, breaching the $1 trillion mark, as consumers concerned about face-to-face transactions turned to e-payment methods. The target for UPI is to process a billion transactions a day in the next five years. We also saw the introduction of innovative digital health platforms, such as the open source CoWIN vaccination registration and monitoring system used by millions of citizens across India.

Why is India such fertile ground for such a digital proliferation? Among the favourable conditions are the country's deep pool of technically educated professionals; its enterprising culture, now being liberated by more favourable regulations; its bold, government-supported digital programmes; its highly competitive domestic economy, fuelled by an expanding middle class; and its fast-growing ecosystem of digital start-ups.

We used to hear about a lag in India when it came to adopting the latest technologies, but no longer. Today, Indian businesses and consumers are at the forefront of tech invention, development and adoption -- whether it's with 5G wireless, artificial intelligence, blockchain, high-performance computing, or other advanced technologies.

Vibrant ecosystem

The country's vibrant start-up ecosystem, is now the third largest in the world, after the US and China. The number of newly recognised start-ups in India, most of them digitally focussed, increased to more than 14,000 in 2021-22, from only 733 just five years ago, according to a report by the Department for Promotion of Industry & Internal Trade (DPIIT).

One promising start-up, the Bengaluru-based Aindra Systems, is using cloud-based high-performance computing to lower India's staggeringly high death rate from cervical cancer. Another exciting start-up, a winner in a recent Start-up Idol competition, is DeepVision Tech, another Bengaluru-based developer of an AI platform, which enables easy two-way communication between speech- and hearing-impaired individuals, who use sign language and those who don't know it.

Of the more than 1,000 "unicorns" worldwide – pre-IPO companies valued at $1 billion or more – 74 are based in India, according to the latest list compiled by CB Insights. As recently as 2012, no unicorns were based in India.

Government's hand

At the centre of the country's economic renaissance are Central, state and local government agencies, whose aggressive digital initiatives, coupled with a softer regulatory touch, have created a framework for companies in all sectors to thrive. No Central government programme is more comprehensive than Digital India, which is spreading high-speed digital infrastructure, digital government services, and digital literacy to even the most remote areas of the country.

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The author is senior VP and regional managing director, Oracle India & NetSuite JAPAC

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Through initiatives such as Aspirational Districts Programme, the government of India is embracing technology to improve people's capacity to participate in the country's economic development and help improve the quality of life of citizens in 112 of India's most backward districts. Data-driven decisions, fully backed by technology, are helping identify the strengths and weaknesses of these districts and pave the way for their progress.

One other ambitious new government programme, supported by multiple technology players, including Oracle, is Open Network for Digital Commerce (ONDC), established by DPIIT to create open standards and thus lower the barriers to ecommerce market entry for retailers, grocers, travel agents, boutique hotels, and other small companies. Another initiative, called Secured Logistics Document Exchange (SLDE), aims to move the country's federal ministries and state governments, as well as myriad industry players, towards a standardised digital transport and delivery infrastructure. The SLDE pilot service, developed by Hyderabad-based startup, Cargo Exchange, using cloud and blockchain technology, promises to improve the security and transparency of import/export transactions in India, simplify and accelerate their execution and lower their costs.

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Meantime, Indian governments at all levels are trying to make it easier for companies to set up and transact business in the country, in part by lightening regulations on foreign direct investment, outsourcing, corporate borrowing, hiring, working from home, and other areas, while also making it easier for businesses and consumers to apply for permits and pay their taxes. In his recent remarks, Prime Minister Modi called out India's 'innovation-friendly' policies in areas, such as space, blue economy, clean energy, drones, and geospatial data.

'Can-do generation'

If there's a common thread to India's digital transformation, it's the ubiquity of cloud computing, giving businesses of all sizes affordable, on-demand access to the very latest technology advances. All the major industry players now operate cloud data centres in India, including Oracle, out of Mumbai and Hyderabad.

But India's extraordinary digital transformation is first and foremost a testament to its people: a rich matrix of high-achievers for who change is a constant. In remarks last year prefacing India's celebration of 75 years of independence, Prime Minister Modi placed special emphasis on India's young people, the most technically educated and intellectually curious individuals the country has ever groomed. The Prime Minister called them the 'can-do generation' – one that is laying the digital foundation for generations to come.

TEXTILES

Weaving a strategy for an impressive future

The Indian textile industry is set to emerge as a formidable force

SANJAY BORADE

The textile industry in India is traditionally the only industry that has generated huge employment for both skilled and unskilled labour. Moreover, it offers employment to a large pool of women (in the garment sector). It has a unique position as a self-reliant industry, from the production of raw materials to the delivery of finished products. With its rich heritage, the textile industry enjoys favourable conditions such as the easy availability of abundant raw material from natural fibres like cotton, wool, silk and jute to manmade fibres like polyester, viscose and others. In fact, India has emerged as the largest producer of cotton in the world. It is also the largest jute producing country.

As it celebrates its 75th year of independence, India's textile sector has also undergone a transition over the decades. In fact, the process of transition is still taking place, backed by the government's recent policy initiatives which are aimed at removing fiscal and structural anomalies, making the textile value chain more competitive and robust. Experts believe that the domestic textile industry is currently very favourably placed and is set to leave a mark on the global market. As per the report of Wazir Advisors, the $140-billion textile industry, which has grown at a CAGR of 8.3 per cent in the last few years, is expected to grow at a CAGR of 11 per cent to reach $225 billion by 2026.

The recently-announced Production-Linked Incentive (PLI) scheme for the textile sector has the potential to transform the industry into a vibrant setup. With a total budgeted outlay of ₹10,683 crore, the Union government has designed the scheme with a view to provide a much needed fillip to the man-made fibre and technical textile segments of the industry.

The PLI scheme, in conjunction with RoSCTL (Rebate of State and Central Taxes and Levies), RoDTEP (Remission of Duties and Taxes on Exported Products) and other government facilitated initiatives in the industry such

Schemes like PLI will not only help our manufacturing base move up in the value chain but also help enlarge our share in the global market

SANJAY JAIN
Chairman, ICC National committee on Textiles & MD, TT Ltd

as providing raw materials at competitive prices by removing anti-dumping duties on PTA (the raw material for polyester) and viscose staple fibre; skill development, like the National Technical Textile Mission and PM-MITRA textile parks (which will bring scale to the sector) and so on, will definitely usher in a new era in textile manufacturing and help create a more robust production base to meet the requirements of the global market.

Skewed policies

Currently, manmade fibre-based textiles and apparel production account for just 30 per cent of the total textile and apparel production in India. As against this, the global textile trade is dominated (65 per cent) by manmade fibre-based products, even as India's textile production continues to be heavily skewed in favour of cotton. Over the years, while global trade has shifted in favour of manmade fibres, in India, our lopsided policy interventions in favour of cotton have not allowed market forces to play their true role, leading to the creation of a production base which is failing to produce textile products at competitive prices, especially since demand for these products has dropped in the present market scenario.

As a result, the Indian share of global trade is restricted to only 5.5 per cent. In fact, in spite of India being the second largest producer of manmade fibres in the world, the country's share in MMF garments is a mere 2 per cent. It is dominated by China (34 per cent, followed by Vietnam and Bangladesh). Recently, Vietnam has overtaken Bangladesh in RMG exports. India loses out to other countries due to lack of cost-competitiveness and the absence of trade agreements with major trade blocks like the EU and US.

"Our skewed policies in favour of cotton have adversely impacted our textile manufacturing base. While over 60 per cent of global textiles is manmade fibre-based, we have continued to manufacture cotton-based goods and that has severely blunted our competitive edge in the global market. Now with this PLI scheme and other fiscal incentives in place, we are going to see more investments taking place towards the creation of large capacities for the production of relevant and value-added textiles. This will not only help our manufacturing base move up in the value chain but also help enlarge our share in the global market," says Sanjay Jain, chairman, ICC National committee on Textiles and managing director, TT Ltd.

"By focusing on these two high potential segments, the PLI scheme for textiles is expected to bring about structural changes in the textile sector. With the introduction of such a scheme, the foremost intention of the government is to boost the country's export value by building large-scale production of downstream products, which has higher value-addition potential. The PLI scheme will enhance India's manufacturing capabilities by increasing investment and production in the textile apparel sector, especially in the MMF segment and technical textiles," states Gurudas Aras, former director, ATE Group and strategic advisor to ITA Group (Germany), Rabatex Industries, and Piotex Ventures.

All these years, Indian exporters have been at a disadvantage in the EU and UK markets in terms of import duty treatment as compared to countries like Turkey, Vietnam, Sri Lanka, Bangladesh, Pakistan and Cambodia. Bangladesh, Sri Lanka and Vietnam enjoy duty-free access to the UK and the EU, whereas Indian textiles attract an import duty of 9.5 per cent. India has been doing much better than other textile exporters in markets such as the US where it is not at a duty disadvantage.

In the last couple of years, the Indian government has been actively pursuing free-trade agreements (FTAs) with its major export destinations. The

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>
> **AHUL MEHTA**
> Past President, Clothing Manufacturers' Association of India

India-UAE CEPA came into effect in 1 May, 2022, while the India-Australia ECTA (interim trade pact) was signed into force on 2 April, 2022. Meanwhile, India-UK FTA negotiations entered a third round in April this year and new industry and business taskforces were created in May to support a trade deal by the year-end. Finally, the EU has sought to reach a trade deal with India by 2024, before the next electoral cycle. The first round of India-EU FTA negotiations concluded in New Delhi on 1 July, 2022 and will be followed by another round at Brussels in September this year.

"Due to the duty disadvantage, our apparel exports have grown rather slowly over the years, even as countries like Bangladesh, Sri Lanka and Vietnam have increased their share significantly in the global apparel market. Now with these FTAs getting signed we, as a country, should gain quite considerably at a time when many of our export destination countries are following the China Plus One policy," says Rahul Mehta, past president, Clothing Manufacturers' Association of India.

Positive results

Meanwhile, the recent efforts have already started showing positive results as India recorded its highest-ever textile and apparel exports in the financial year 2021-22 at $44.4 billion. The exports tally, which also includes handicrafts, indicates a substantial increase of 41 per cent and 26 per cent over the corresponding figures in FY21 and FY20, respectively.

Backed by the China Plus One sentiment globally, India's textile exports are expected to grow 81 per cent to $65 billion by 2026 from the pre-Covid level of around $36 billion in 2019, says a report by the Confederation of Indian Industry (CII) and global consulting firm Kearney. This jump is likely to generate 7.5-10 million new jobs.

A large chunk of this targeted increase, or around $16 billion, may come from the China Plus One sentiment due to India's relatively large strategic depth compared with Vietnam or Bangladesh. "We believe that with the right actions of the industry majors and robust execution of government schemes, India can hit $65 billion in exports by 2026. This, coupled with growth in domestic consumption, could propel domestic production to reach $160 billion," says Siddharth Jain, partner, Kearney.

"Covid-19 has triggered the redistribution of global trade shares and a recalibration of sourcing patterns (China Plus One sourcing), providing a golden opportunity for Indian textiles to stage a turnaround and regain a leadership position as a top exporting economy. We believe India's textile industry should target 8-9 per cent CAGR during 2019–2026, driven by domestic demand growth and a significant growth in annual exports, reaching $65 billion by 2026," says Neelesh Hundekari, Partner and APAC Head of Lifestyle Practice at Kearney.

However, experts believe there is a lot left to be desired. The textile industry employs almost 45 million people in the farming and manufacturing sectors. However, the country's recent performance in global trade has not been commensurate with its abilities. Exports declined by 3 per cent during 2015-2019 and by 18.7 per cent in 2020. And yet during the same period, other low-cost countries such as Bangladesh and Vietnam have gained share.

No doubt things are certainly turning in favour of the Indian textile industry, backed as it is by favourable policy measures and other geopolitical factors. However, for gaining a global share, the industry will have to create world class capacities across the value chain. While India has fairly large and modern spinning capacities, weaving and processing continue to be weaker links and that has not helped the industry produce high-value textiles. ◆

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GUEST COLUMN

Incomparable growth

The Indian textile industry has played its role in determining India's socio-economic development

As we approach *azadi ka amrut mahotsav*, the evolution of the Indian textile sector, from pre-colonial times to today, is an inspiring story, and the entire supply chain has played a critical role in this. India has a rich heritage of textile and, now, we are one of the world's largest textile producers.

DIPALI GOENKA

Significant contribution With the establishment of the first textile mill in Calcutta in 1818, our country entered the modern era. Thanks to a solid base of raw materials, years of extensive experience and a sizable and expanding domestic market with sufficient labour strength, the textile industry in India is now on the path of profound growth and changing with reforming times. By 2029, it is expected to grow by more than $209 billion.

The textile industry today employs about 45 million people directly and over 60 million people indirectly, including rural labourers, with a fair proportion of women. It also offers the second largest employment opportunities to the people after agriculture.

Growth and transformation The textile industry has undergone rapid transformation, by developing world-class manufacturing infrastructure, modernising technology to foster innovation, improving skills and utilising the sector's historical advantages in line with the objective of ensuring inclusive and participatory development in India. The employment to investment ratio in the textile industry is now positive and favourable.

Welspun has a direct relationship with farmers and is dedicated to assisting them with agronomic knowledge, improving yields, and obtaining better prices. Our Wel-krishi initiative assists about 16,148 farmers and 85,000 farm workers in 387 villages in growing the most sought-after sustainable kind of cotton. For the benefit of the farming community, such interdependence between farmers and industry must be encouraged. With a clear plan and objectives, we have already implemented proactive changes to our company strategy and operating style to align with the ESG principles.

Government support Our nation is making great strides towards reclaiming its dominance in the global textile sector, with the establishment of the production-linked incentive (PLI) scheme, which has an approved budget of ₹10,683 crore over a five-year period and other policy measures. With the combination of PLI, RoSCTL and the structural change in the sourcing strategy of the international retailers, India is well-positioned to establish itself as a reliable and competitive source for textiles on a global scale.

Free Trade Agreements (FTAs) would also provide a level playing field for the Indian industry in various markets and significantly enhance the competitiveness of the Indian textile sector. The policy prerogative of entering into FTAs with various countries, including advanced economies, such as the EU nations and the UK is a positive one for the entire industry, including the textiles sector. The increased market access would further complement the efforts to boost domestic manufacturing capacity and help industry players to transform themselves into leading global players.

Bright future From the traditional outlook of skilled artisans using manual spinning wheels with the primary goal of manufacturing high-quality textile, the focus for businesses in the space has broadened substantially. ESG is a crucial consideration as companies look for ways to implement sustainable practices and governance framework to be environment conscious. I'm delighted to see how corporate leaders are collaborating to make sure the 17 SDGs are accomplished by 2030. Given the nature of the business, which uses significant amounts of natural resources and has an influence on the environment during manufacturing, this is especially important for textile enterprises.

In my opinion, ESG is a significant factor for the textile industry to take into account as manufacturers are becoming more aware of their carbon footprint. Consumers want to live sustainably in the fast-paced world of today. Sustainability in the textile sector is now more than simply a trend; it is a new movement and a benchmark.

India needs to create 90 million non-farm jobs by 2030 and our textile industry is well-prepared to contribute towards this goal. We are excited to collaborate and leverage India's inherent textile strengths to drive the growth towards a $5 trillion inclusive economy. Employers are making workplaces that are meant for the future, by emphasising topics like diversity and inclusion, equal pay for equal labour, worker upskilling and the empowerment of women. These factors will still be important for the sector in the future. The Indian textile industry has grown incomparably from its humble origins and we are delighted to be a part of a sector that has played a significant role in determining our nation's socio-economic development. ◆

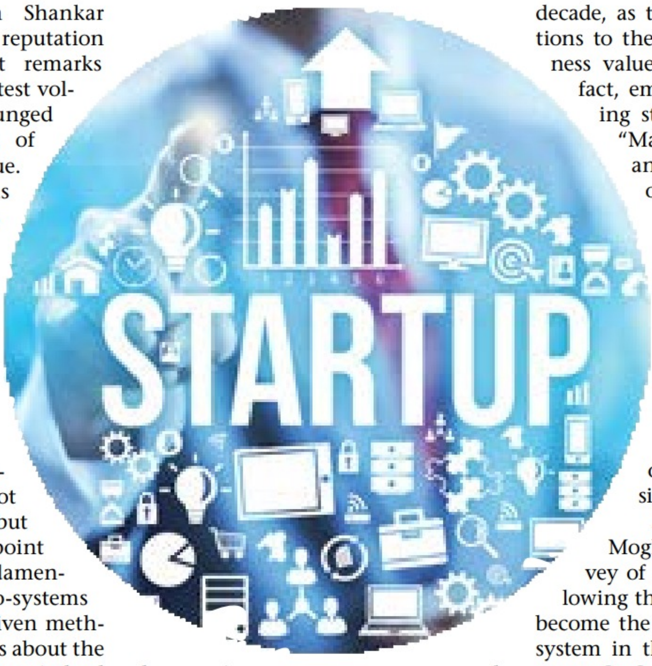
The author is CEO & MD, Welspun India Ltd

START-UPs

On a sound wicket?

The future of the start-up culture looks promising and encouraging

Stock market veteran Shankar Sharma has quite a reputation for making poignant remarks every now and then. His latest volley, when Zomato scrip plunged heavily in the last week of July, was in such a league. He equated the continuous plunge in the share prices of one of the best known start-ups with a famous dialogue of Amitabh Bachchan in 1975 flick Deewar. *"Mar to woh bees saal pehle gaya tha. Aaj to sirf ussey jalaya ja raha hai.* It was game over on listing itself," he tweeted.



The promoters and investors in the company may not take this comment kindly but it definitely raises a larger point pertaining to the fundamental flaws in the startup eco-systems driven by the valuation driven methodology. It also raises doubts about the resilience of start-ups, when judged by the usual parameters applied on brick and mortar entities for decades. Zomato, a popular food delivery and a front line start-up, backed by a line of prestigious investors, had made it to the bourses with much fanfare, with its IPO oversubscribed by 38.25 times in July 2021. The shares, which were offered in the ₹72-76 band, had opened at ₹115 at the bourses. It later shot up to ₹169, its 52 week high.

But since then, Zomato shares consistently lost its sheen crashing to a little above ₹40 around this August beginning. Its current market cap is in the range of $5.5 billion, which had touched a peak of over $16 billion last November. But Zomato is not alone in the start-up powerhouse bracket that is finding it difficult to bear the hard-nosed evaluation mechanism of market pundits. PayTm, another big name, has been at the receiving end as well since its enlisting last November with share price now trading in the ₹700-800 range, as against the opening band of ₹2,000-2,150. Needless to say, the drubbing of the leading new age players in the stock market has created nervousness all around.

But, as an expert points out, start-ups all over the world including India, which has emerged as a commercial hotbed, are now in a serious transitional phase, where the successful ones will have to leave behind their cash burning attitude and show similar deftness in cash earning capabilities. As far as ecosystem goes, the start-up growth story still has many interesting chapters, which are waiting to be added.

Expanding stage

Thanks to its expertise in technology and the resultant ease in the advent of the digital era, start-ups in India have come into prominence in the last decade, as they introduced new solutions to the stakeholders in key business value chains. The country, in fact, emerged as one of the leading startup turfs in the world.

"Major economic reforms and the rise of the technology industry has set the foundation for the surge of entrepreneurship in the country," says Sujeet Kumar, co-founder, udaan. "With proven tech prowess, the start-ups entrepreneurs identified and took advantage of the huge opportunity that a country like India offers -- both in terms of size and young population".

Adds Rahul Garg, founder, Moglix "The Economic Survey of 2021-22 suggests that, following the US and China, India has become the third-largest start-up ecosystem in the world. Fintech, e-commerce, SaaS and marketplace players are giving established giants a run for their money". According to Samson David, CEO & managing director, Soroco, the boom witnessed in the Indian start-up world has its roots in the late 1980s and early 1990s, when the first wave of IT behemoths such as Infosys, Wipro, HCL & TCS opened the doors to innovation. "Over the last 10 years, we have seen unprecedented growth, with 100+ active incubators fostering and nurturing the start-up ecosystem," says he.

While some early movers had arrived around 2010, the real push to the sector is believed to have come after the government got into the play. During the Independence Day speech from the Red Fort on 15 August 2015, Prime Minister Narendra Modi had envisioned a new India, which taps on the entrepreneurial potential of its young people, well-versed in technology. The following year, a programme was set afoot to build a strong ecosystem for nurturing innovation and start-ups in the country. And industry observers acknowledge that the contribution coming from the government intervention has changed the scene for the Indian start-ups, with the country becoming the third largest ecosystem.

According to a recent release from The department for promotion of industry & internal trade (DPIIT), while the initial 10,000 start-ups were recognised in 808 days, the latest 10,000 were achieved in only 156 days. "With more than 80 start-ups getting recognised per day – the highest rate in the world -- the future of the start-up culture looks promising and encouraging," says the release. Meanwhile, the DPIIT has recognised the presence of 75,000 start-ups in the country. While about 12 per cent of them cater to IT services, 9 per cent serves healthcare and life sciences, 7 per cent are in education, 5 per cent with professional and commercial services and 5 per cent in agriculture. "An impressive, 746,000 jobs have been created by the Indian start-up ecosystem, so far, which has seen a 110 per cent yearly increase over the last six years. The fact that about 49 per cent of our start-ups are from Tier II and Tier III today is a validation of the tremendous potential of our country's youth," the release further emphasises.

Shifting gears

The government's assertion of rapid fire expansion of the start-ups ecosystem in the last over half a decade is endorsed by several reports and stakeholders. A report pegs the total investments flowing in the new age businesses in India in the vicinity of $70 billion during 2014-20. "Over the past four years, the number of unicorns has been increasing exponentially, with a whopping 66 per cent y-o-y growth in the number of other unicorns added every year. This very year, on 29 June 2022, India became a country with 103 unicorns, with a total valuation of $335.8 billion. We are right now in an excellent phase, when India is becoming a powerful start-up ecosystem," observes Shyam Sundar Singh, co-founder & director, DeHaat. In terms of fund raising, 2021 has clearly been the best year, as 44 start-ups attained unicorn status with a cumulative valuation of $93 billion.

But it is this valuation system, something that has been a key calling card of the start-ups everywhere, which is under threat now. The word on the start-up street is: investors are now asking the entrepreneurs to shift gears and adopt unit economics business model (the direct costs and revenues associated with a business model on a per-unit basis) and a better corporate governance regime. There has been a perceptible slowdown in fresh fund raising this year, forcing many big names of the start-up space to resort to modest level layoffs. As per data compiled by global layoff tracker in start-ups layoff, 43,399 start-up employees have been laid off across the world since April this year. Over 13 per cent of these were fired by Indian startups. This is obviously one of the pitfalls of slowdown in capital raising.

During 2021, the Indian start-up eco-system had seen fresh capital infusion to the tune of $42 billion. And, while the first quarter of the current calendar year was equally impressive for them in terms of capital inflow, the months of April and May saw a steep fall. In May, the total fund raised stood at $1.6 billion, which marked a 53 per cent decline vis-à-vis the previous month. "Recent investor sentiment has been tepid due to global macro-economic factors, including geo-political tensions, monetary policy tightening public market slump, especially in the US, and the underwhelming performance of some new-age companies on the bourses. Increasingly PE and growth investing firms are looking more at the profitability roadmap and efficiency metrics while evaluating the investment prospects," points out Suhail Sameer, CEO, BharatPe.

But stakeholders in the fray, mainly part of the top bracket of the ecosystem now, do not feel that current troubles will brew into a serious existential crisis. At the most, it is being viewed as transitional pangs, which will make the start-up entrepreneurs more agile and efficient in managing their respective shows. "The rapidly changing environment has set new challenges for the Indian start-up ecosystem but businesses that are sustainable, scalable and agile will survive and thrive. We are increasingly witnessing this trend in the Indian start-up ecosystem, and I am confident that these start-ups will continue to contribute immensely to the India growth story," asserts Sujeet Kumar of udaan. "I believe that a lot of unicorn start-ups have scalable business models and hence, will set new milestones in terms of growth in the times to come," adds BharatPe's Suhail Sameer. Observers, however, believe that successfully bearing this transitional pang would be easier said than done. The change in operational modalities is likely to expedite the process of separating men from boys of this ecosystem which, nobody doubts, will have a critical role in the country's future economic growth. ◆

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GUEST COLUMN

Breaking conventions

Limitless achievements, feats and triumphs lie in store for India

RAHUL GARG

On her diamond jubilee of Independence, India is setting the pace for science, technology, manufacturing and a collective rise in the quality of living for the world to follow. When we won our independence in 1947, the share of national investment in science and technology was 0.1 per cent of the GDP. After a fractious partition and centuries of a colonial hangover, we immersed ourselves into a mode of nation-building that can serve as an example for any young nation today.

Digital nirvana enabled by startups

As more quintessential Indian consumers shift to a digitally native approach, startups are fulfilling this transformation by addressing the consumer experience gap. Food, fashion, education, entertainment, health and wellness, real estate and even mobility and logistics have experienced fundamental disruption by Indian unicorns. The B2B and D2C category provides a secondary business substrate to a new generation of creators with unlimited reach. Startups are at the heart of India's service-oriented economy's transformation into a product-led behemoth.

When the Government constituted the Science, Technology and Innovation Policy (STIP) in 2020, it heralded a new intent towards reclaiming the scientific and R&D edge present in the country from the days of the Vedas. Unsurprisingly, the number of Indian unicorns has grown 15X from 7 in 2019 to 105. In 2022 alone, unicorns have raised over $24.7 billion in a stellar show of growth potential when global funding freezes signal a harsh winter for startups. For a billion user market, it makes sense that the Indian unicorn list is dominated by e-commerce, logistics, healthcare, education and SaaS startups.

Building up an appetite for greatness

As I pen this article, India has moved up to the 4th position in the Commonwealth Games 2022, a remarkable achievement considering the pandemic interference in training schedules. The last 3 editions have seen India finish 2nd, 5th and 3rd, respectively. Regarding Ease of Doing Business Rankings, India has taken a decade to rise from 132 to 63 amongst a pool of 190 national. The PSLV space program and launch in 2014 cost us about $73 billion, much lower than established counterpart space programs of the world.

India is blessed with remarkable talent creation, and more than 2 million skilled engineers, technicians, researchers and scientists are added to the workforce each year. Access to capital, exposure to global demand and our ability to envisage growth at scale are serving us well in the sprint to pole position on international development indices.

Evidence of our exponential growth sparkles across the entrepreneurial world. Name the sector, and chances are that India's business mavens have left their mark there. Drugs & pharmaceuticals, automobile manufacturing, IT services, engineering goods, and many more segments. It is no surprise that at this critical juncture when the global economies are unravelling, India's exports at $35.24 billion in July and its foreign exchange reserves, at almost $572 billion, still command an outsized position compared to its peers.

India's manufacturing might

Post-liberalisation, India's economy had witnessed exponential growth compared to the 60s when domestic manufacturing was limited to niche hubs populated by a few elite players. Decentralization of innovation, access to credit and technology have changed the game since.

Today, India's manufacturing heft rivals the might of developed economies and ranks in the top five globally. A million MSMEs, startups and industry players propel the cause of an Atmanirbhar Bharat. The PLI scheme has also been helping 14 key industrial segment players boost their competitiveness and dramatically cut back India's import dependence. The National Infrastructure Pipeline (NIP) has an opportunity pipeline of more than $753 billion, making it one of the most ambitious infrastructure dreams of any country in the history of the world.

All guns blazing for the centennial

India has reaped the benefits of technology and digital transformation; the next 25 years will be the turn of Bharat. As startups reach the heartland, they will realize the proverbial fortune at the bottom of the pyramid, accelerating growth. The startup ecosystem will continue to break conventions and make its presence felt in core industries, driving the GDP forward to the magical $10 trillion mark. Agriculture technology, electric mobility, governance and civic infrastructure, disease management, and water and food security for our billions are the next bastions that startups will disrupt in the coming decades. ◆

The author is CEO & founder, Moglix

GUEST COLUMN

Celebrating Digital India

It's time to harness the innovation ecosystem that we are known for using technology and data

PUNEET GUPTA

Today, as we celebrate a milestone of celebrating 75 years of Independence, this is the time to not only bask in the glory of our achievements, but also reflect on where we are headed.

India's tryst with technology goes back a long way. Today, the services we take as a given, were not as easily available even 20 years back. For instance, our lives have transformed when it comes to citizen services like birth and death certificates, land records and payment of property taxes, water & electricity bills, income tax filing and refunds, passport issuance, filing of company returns, and railway ticketing & reservations.

It was with the clarion call issued by the government of India in 2015 to build a Digital India that the country embarked on a significant transformational journey. This journey was about the impact of technology on every Indian and a dream of bridging the urban-rural divide. With this, the influx of digital services has taken markets by storm and businesses across industries are generating a never-before amount of data. Increasingly, the businesses understand the power of data and harness its potential -- particularly in key sectors like financial services, telecom, healthcare and government undertakings.

Financial services

The backbone of businesses and the business of money, our financial services industry has seen technology making a massive transformation in citizen services. Today, India has truly achieved the vision of atmanirbhar Bharat in this sector. Emergence of Unified Payment Interface (UPI) and several other similar platforms as payment infrastructure for our citizens and banks have changed the way we live. Covid-19, cruel and devastating as it was, pushed people into adopting technology in their everyday life.

Adopting an application-and-infrastructure-modernisation strategy has been the key to the change. Apart from evaluating which applications to move or transform to the cloud or which should stay on premises, the building of a cloud-like agile data services platform on premises is essential. The future of financial services is to be able to drive new revenues, protect existing business and be the new innovators through digital transformation. This transformation relies on modernising and cloud connecting existing data centre infrastructures, leveraging multi-cloud and ecosystem capabilities to build a silo-less, secure, flexible, and compliant hybrid cloud data fabric.

5G and Telecom

Following a record auction, 5G is set to become a reality sooner than we had imagined. The 5G services will bring high speeds -- roughly 10 times faster than 4G -- as well as new services and business models. With a 5G network and robust data tech, data can be processed at the edge, closer to where it is produced. With this, businesses can derive the most value from its data by quickly and easily moving it where it needs to be -- whether that is in a private cloud, on premises, or in a hyper-scaler.

Digital India initiative

When India embarked on its Digital India initiative, no one could have predicted the speed at which this would become a part of our daily lives! Many of the ambitious projects, which were envisioned, such as Unified Payments Interface (UPI), Aadhaar, Ayshuman Bharat, and CoWin have already transformed our day-to-day experiences. But that is not all – it is only the tip of the proverbial iceberg.

From citizen documents and weather forecasting to top secret intelligence, data is a critical strategic asset that government agencies use to meet objectives and carry out missions. The government (is and) should continue to invest in an IT infrastructure that provides the performance and scalability required for AI to drive advances. In a highly regulated government environment, striking the right balance between data movement needs and compliance requirements is especially challenging. With the right public-private partnerships, we can sail through these problems.

As we plan for the next 25 years, India's growth story will hinge on its ability to extract maximum value from data that is generated. To see this through, both the public as well as private sectors need a partner that can help them analyse and understand these huge volumes of data. One such way is by adopting products that automate cloud infrastructure and give their workloads the most scalable infrastructure that is available in a cost-effective manner.

According to estimates, data and AI could potentially add up to $500 billion to India's GDP by 2025. Even if we are to mine a portion of data in a trusted ecosystem exchange between the public and private sectors, there lies an enormous scope for innovation. ◆

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AGRICULTURE

A tale of two extremes

From food deficit to food surplus nation, India has come a long way

SANJAY BORADE

With the supply crunch in basic commodities (especially wheat) in the international market due to the Russia-Ukraine war since the beginning of the year, several countries and agencies like the IMF have, in recent months, been repeatedly urging India not to impose strict import restrictions on commodities like wheat and sugar. To rein in inflation due to supply disruptions, as many as 30 countries have imposed export restrictions and India too has resorted to this strategy. "I do have an appreciation for the fact that India needs to feed nearly 1.35 billion people and I do have appreciation for the heat wave that has reduced agricultural productivity, but I would beg India to reconsider as soon as possible because the more countries step into export restrictions, the more others would be tempted to do so and we would end up as a global community less equipped to deal with the crisis," Kristalina Georgieva, IMF MD had commented around the end of May. While the comment certainly underlined a grave global situation, to an Indian it could well have delivered a moment of pride. For a country that, especially in the first two decades after its independence, could barely feed its people, Kristalina's comment confirmed a dramatic change in scene.

Considering the equation then and now, it does indeed appear to be a tale of two extremes, as an analyst points out. From acute shortage to self-sufficiency to a surplus situation in many commodities, the Indian agriculture journey has been quite a story notwithstanding the fact that the reforms of the1990s gave preference to services and manufacturing. Even the recent attempts to liberalise the farm sector by way of new legislative laws failed to take off, with vehement protests by some farmers' associations. However, there have been strong undercurrents of both quantitative and qualitative growth, probably best exemplified in the tremendous growth of the horticulture sector which is now bigger than foodgrain. The future seems promising, with the prospect of technology delivering major changes in production dynamics. However, some

Production of agricultral commodities and cultivated area in the country in 1950-51 and 2021-22

Commodity	1950-51	2021-22	Times increase
Food grains (mt)	51	314	6.2
Vegetables & Fruits (mt)	25	333	13.3
Milk (mt)	17	210	12.4
Egg (billion)	1.8	122	67.8
Fish (mt)	0.8	14.2	17.8
Net sown area (Mha)	130	140	1.1
Gross sown area (Mha)	150	198	1.3

structural challenges still remain to be addressed and a much bigger issue would be to save the sector from the increasing vagaries of climate change.

Reaching a commendable base

Nobody even talks about this today but in India's recent history, food security has been a major challenge. Between the 18th to the early 20th century, famines used to be a usual occurrence, as the main occupation – agriculture – was mostly dependent on rainfall. Historical accounts suggest that the country suffered nearly a dozen large scale famines in the stated period, resulting in millions of deaths. "There have been several periods in Indian history, when food shortages had a serious impact on civilization. In pre-independent India, agriculture had been heavily dependent on climate. Unfavourable monsoons, particularly the southwest monsoon, caused droughts and crop failure. Such droughts, sometimes in consecutive years, led to famines. Famines in India resulted in more than 30 million deaths over the course of the 18th, 19th and early 20th centuries," underlines a recently published report by the Indian Council of Agriculture (ICAR).

At the time of independence, the food security scene was in bad shape, with the foodgrain production level in the range of 50 million tonnes. It is no secret that in the first couple of decades, managing food security was a massive challenge for the government, often turning into moments of serious embarrassment. The famous quote of India's first Prime Minister Pandit Jawaharlal Nehru that "everything can wait but agriculture" aptly reflects the major concern of the then dispensation which ultimately culminated in the initiation of the Green Revolution in the 1960s. The clarion call of 'Jai Jawan, Jai Kisan' given by the then Prime Minister Lal Bahadur Shastri, underlined the imperative of giving a hard push to agriculture with earnestness and precision. The green revolution worked and many observers call it a major turning point. The white revolution of the 1970s further supplemented gains in the agri- and allied sectors. "From the hand to mouth condition of the 1950s to the current state wherein you have also developed some export strength – this is a remarkable turnaround story," says Anil Ghanwat, farmer leader and president of the Shetkari Sanghatana. "It is the toiling work of millions of our farmers, scientists and the planners that transformed India from a food deficit country to a food surplus and net food exporter nation," says a senior analyst.

According to an ICAR report, food grain production, which was merely 51 million tons (Mt) in 1950/51 increased over six times to over 314 Mt in 2022. The country has also become the largest producer of milk, pulses and jute and the second largest producer of rice, wheat, cotton, fruits and vegetables in the world. India is also one of the leading producers of spices, fish, poultry, livestock and plantation crops (refer to the gfx – production of agricultural commodities). The report underlines that India, which was food scarce till 1950, transformed itself into a 'food shortage' one by 1960, a 'food sufficient' one by 2000, and a 'food secured' one by 2010. From 2010 it has been a 'food surplus' country. The most remarkable growth has been in the horticulture domain, where production has shot up 13 times since 1950 – 333 million tonnes now (more than foodgrain) from 25 million tonnes. And much of this has happened without any massive corresponding increase in the cultivated area which means that advanced processes have come into play across the spectrum.

Future scene

Analysts believe that despite the failure of the government to bring in transformative laws which were primarily aiming at creating more markets for farmers to sell their produce, Indian agriculture stands a good chance of further consolidating its position. While a strong section of farmers expects the government to give its nod to a guaranteed Minimum Support Price (MSP) regime to over 20 commodities, many in the government feel that agriculture's business balance is tilting in favour of horticulture where food and FMCG firms are increasingly joining hands with growers directly by way of technological support and assured procurement. Currently playing out at a low scale, the trend is slated to become stronger as crop diversification happens on a larger scale spearheaded by progressive and technology-attuned farmers.

The arrival of AgTech firms (agriculture start-ups) is slated to be a gamechanger for the farming community as they help farmers with better market access and the adoption of improved cropping methods in different pockets of the country. Agri-techs now figure among the leading start-up domains which are attracting the interest of investors – they had drawn $636

SUMEET SAWHNEY

million in 2021 and $539 million so far in 2022. New age concepts like hydroponics and precision farming have begun to take root in the country and the government too is giving a serious push to link the agriculture sector with the evolving digital one. Besides, there are a set of measures which the government has initiated (these include consolidating schemes which have existed for quite some time). Some of these are: supplementary income transfers under the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme; soil health cards for rationalising the use of fertilisers; 'per drop more crop' initiative through drip/sprinkler irrigation for optimal utilisation of water, thereby reducing cost of inputs and increasing productivity; Kisan Credit Cards (KCC) offering production loans to even dairy & fishery farmers (besides agricultural ones); formation and promotion of 10,000 FPOs; adoption of drone technologies in agriculture which have a potential to revolutionise the Indian agriculture scene, and so on.

Battling challenges

But there are some serious challenges which are also structural in nature. "Indian agriculture continues to battle several intimidating challenges. These include increasing productivity, profitability and resilience against the backdrop of an increasing population, depleting the natural resource base, aggravating climate change and reducing farm income," says the report by ICAR while pointing out that in agriculture practices, the target in the medium run should include reducing fertiliser use (25 per cent) water use (20 per cent), increasing use of renewable energy (50 per cent), reducing greenhouse gas emission intensity (45 per cent) and rehabilitating the extent of degraded land (which stands at 26 million hectares). As per a report, climate change is going to disrupt the production pattern in over 150 districts in the coming decades and the government is currently working on a plan to encourage a new farming strategy in these pockets. Stakeholders also point at diverse sets of issues which Indian agriculture will have to deal with to emerge stronger. "Low investment, small land holding, over-dependence of rural India on agriculture, low income for actual growers, depleting ground water, etc are some of the basic challenges which will have to addressed in the coming years," says Chaudhary Pushpendra Singh, President of Kisan Shakti Sangh which was recently in the forefront of opposition to the farm bills. Siraj Chaudhary, Chairman, National Collateral Management Services and a commodity sector veteran in the country strongly believes that production in the future should be strictly governed by business metrics. "Demanding an appropriate production pattern is what we will need. Producing more with less using advanced scientific techniques, should be the guiding strategy," says he.

Even as the government's recent emphasis on natural farming is dismissed by most stakeholders saying it can be pursued only in selective pockets, farmer leaders like Anil Ghanwat believe that in horticulture, India has enormous scope in the future. "With the right kind of backend infrastructure support, India can rule the world in horticulture," says he. During the course of this decade, the country is expected to witness the emergence of a revolution in an allied sector – the blue revolution which will propel the fortunes of stakeholders in India's vast marine sector. Interestingly, in the past 75 years, the highest share of agriculture in GDP was recorded around 1970 when it had touched a peak figure of 43 per cent. Since then, it has been in a declining mode, dipping to even less than a fifth of the total economy. However, since 2017-18 an uptick has been noticed and as per government data, it crossed the 20 per cent mark in 2020-21 after more than two decades. So, are we noticing the beginning of a serious reversal in agriculture vis-à-vis its contribution to the national economic growth? It is probably too early to reach a definite conclusion. ◆

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GUEST COLUMN

The past, present and future

India's objective is to become the largest dairy nation in the entire world

R.S. SODHI

The Indian economy has been witnessing steady growth in the last four to five decades, which has had a huge positive impact on critical sectors of the economy, such as agriculture, manufacturing, and services. Post-independence, the focus was on ensuring food security for the country's growing population, as India was surviving on food aid from various developed countries.

India's former Prime Minister Lal Bahadur Shastri's voyage of discovery in Anand and subsequent discussions with Verghese Kurien led to the formation of a national milk grid under Operation Flood, which propelled India to its current position of eminence in the world dairy scenario. The dairy & animal husbandry sector has become a primary source of income for 100 million rural families and has assumed the most important role in providing employment and sustainable livelihood, particularly for marginal and women farmers. Out of the agricultural economy, about 30 per cent – ₹8.5 lakh crore ($115 billion) – is contributed by dairying. The total value of milk production is more than the total value of all pulses, wheat and paddy put together. Today, India brims with evident pride as it boasts its *atmanirbharta* in the dairy sector, along with many other sectors, achieved through a self-created, indigenous business model.

The Amul co-operative movement eliminated middlemen in the value chain and ensured that farmers retained control over the entire value chain. The Indian dairy industry has worked primarily on two philosophies:

- **Value for many**: Ensuring maximum remuneration to our farmers for the milk poured by them. Almost 80 per cent of the consumer's rupee will flow back to the farmers, quite unlike countries like the US or even Europe, where farmers get 35-40 per cent of consumer's dollar; and
- **Value for money**: The dairy sector has grown because of its ability to strike a chord with India's lower middle class and middle class, by providing quality products at a reasonable price. The average customer understands the importance of milk nutrition and the co-existence of both private and co-operative brands in the market ensures affordability for him.

When co-operatives are there in the business, they take care of both, the producer, and the consumer. Co-operatives have become a benchmark, which the private sector tries to match with. Apart from the monetary aspect, Indian dairy industry has also become the epitome of efficient supply chain management and end to end technological integration of services.

It has also shown exemplary performance in product innovation, contemporary marketing, and cost efficiency. The biggest example for this is the sale of fresh milk across the length and breadth of India in durable pouches with minimum production overheads.

Milk production in India has increased from 17 million tonnes during 1950s to 209 million tonnes during 2021-22, contributing to 23 per cent of the world production. Milk also contributes about 30 per cent of agriculture GDP and 5.1 per cent to the national GDP. Going forward, India's political leadership and policy makers need to consider few aspects to sustain the growth momentum in cooperative milk production. As per projections in Niti Ayog's report, milk production in India is likely to reach 330 million tonnes by 2033, contributing 31 per cent of the total world milk production by that year. In the next few years, India is set to become a dairy to the world. To sustain the growth, it needs to get budgetary resources equivalent to its contribution to the country's GDP.

A massive growth is projected in the organised dairy sector as well. The economy sees a creation of 6,000 new jobs for every 100,000 litres of milk processed through the organised sector. By that estimation, the organised dairy sector will require an investment of ₹1 lakh crore in next 10 years, which leads to the creation of at least 13 million new jobs in the country. The task ahead lies in making agriculture or dairy sector enticing for the next generation.

Like every industry, dairy industry also faces challenges such as the reluctance of the new generation to work in agriculture and dairy, the threat of Free Trade Agreement, wrong propaganda by vegan lobbyists to derail the industry growth, etc.

For next 10 years, our objective is not only to become the largest dairy nation in the entire world but also ensuring health, nutrition and wellness of people across India, as also across the world, thereby ensuring continuous prosperity and remunerative livelihood for Indian dairy farmers. Further, India is not only the largest dairy nation of the world but also 'Dairy to the World', where everyone looks up Indian dairy industry for production, procurement, processing, marketing and technological expertise. ♦

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INDEPENDENCE DAY SPECIAL
BUSINESS INDIA ◆ THE MAGAZINE OF THE CORPORATE WORLD

GUEST COLUMN

Agriculture @75

At 75, India can cheer its success with Green Revolution and, at 100, it should cheer similarly the Income Revolution

ASHOK DALWAI

At independence, Indian agriculture was burdened with the colonial anomaly of non-food crop orientation, when food security was the demand. It also suffered from structural challenges. Now, there is food security and the National Food Security Act 2013 makes it a legal right. Food security is best ensured when there exists 'Food System', defined as "the complex web of activities involving production, processing, transport, and consumption of food."

India's food system has been graduating through the four phases of evolution (explained below), but is yet to become fully system-compliant. The inadequacies include food loss & waste, simultaneous centres of surplus & deficiency and persisting malnutrition.

Phase-I

The *pre-Green Revolution* enacted land reforms including the Zamindari Abolition Act 1950, securing ownership rights and stake for the tiller. Production and marketing received policy and programme support -- integrated agriculture district/ area programmes, credit through PACSs and market regulation through APMCs. The public investments grew steadily as in irrigation. Yet, food deficit persisted highlighting the continued system weaknesses.

Phase-II

The years *1965-1990* marks a watershed. Buffer stocks were built riding on the technology-led and policy-supported Green Revolution. Multiple Cropping dovetailed with HYVs (1967-68) stimulated yield jumps. The system of MSP and procurement incentivised the paddy and wheat farmers. System institutionalisation happened through Agriculture Price Commission, FCI and Central Warehousing Corporation. Food was now available, but accessibility and affordability remained a challenge. The Public Distribution System was yet vulnerable.

Phase-III

The period of *1991-2015* registered higher growth rate and diversification resulting in surpluses (cereals in particular) and price fluctuations. The already delayed market liberalisation took off in the new millennium with abolition of Storage Order of 1964, Model APMC Act 2003, derivative marketing and Food Safety & Standards Act 2006. The reforms were, however, not taken to logical conclusion.

Renewed productivity-centric initiatives under NFSM (crops), National Horticulture Mission (2005-06) and schemes for livestock & fishery yielded record outputs, with food grain at 264 million tonnes in 2013-14 was matched for the first time by horticulture, gaining further momentum under Mission Integrated Development of Horticulture. Horticulture now at 335 million tonnes surpasses that of food grains (315 million tonnes).

However, lopsidedness remained, with shortages in edible oil & pulses and food loss due to poor post-harvest management.

Contemporary phase

The years *2015-22* has brought attention on farmers' income and welfare, recognising the paradox of high production and low farmers' income. The 'doubling farmers' income' strategy has introduced an ecosystem approach, guided by nutrition security, income security and production sustainability. Emphasis is also on deficit commodities (pulses & oilseeds), livestock and fisheries. Adopting a value chain approach, monetisation of agri-produce is the focus -- hence, the initiatives to strengthen agri-logistics, food processing, and market competitiveness. Contract farming, FPOs, higher profit-margins under MSP & broad-based procurement are addressing some structural concerns.

Agriculture @ 100: the journey ahead

India @ 100 in 2047 will still have largest section seeking livelihood in Agriculture. Welfare of the farmers and landless rural society will hence remain a core engagement. This warrants transformation of the hitherto production-centric agriculture into an agri-enterprise, which is a mature food system and is creating productive jobs and profitable incomes -- and, all of this while nurturing the ecology.

Departing from the past, a confident agriculture will need to deliver on its new mandate. This entails ability to predict risks and uncertainties – both production and post-production -- as well as negotiate them to minimise loss of output and income.

Restructured agriculture implies industrialisation around the food sector. This also includes prioritising consumption of fresh food and

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SANJAY BORADE

processing to integrate with far range territorial markets over space and time. Equally critical is non-food processing, so that non-consumable parts of the plant, animal and fish produce are converted into biomaterials, bio-enzymes and bio-fuels; expanding functionally the agricultural markets to create new demand and price discovery options, as also supplementary jobs. New Age Agriculture shall become the basis of India's bio-economy supported by bio-technology, bio-processing, bio-engineering and emerging digital technologies. The latter being disruptively labour-substituting and with a growing population (1.65 billion by 2050), the demand for jobs can only get more aggressive, which pre-requisites the liberalisation of both input and output markets. New laws to improve 'Ease of Doing Agribusiness' will entail reforming the domains of bio- and chemical-inputs, land, and agri-output. The system has to engender competitive environment for rationalising input prices & improving their quality, and promote a seamless pan-India market.

In a demand- and market-led system, the farmers with poor financial & negotiating capacity will need protection of a robust regulatory and safety net mechanism. And, they must necessarily be considered as weaker of all the stakeholders.

Climate change will be a major challenge. Hence, science & technology will have to respond through climate-resilient & climate-smart technologies, as also management. Amelioration of the already compromised natural resources must also be its concern to break free of yield-stagnation. Indoor-farming (aeroponics & hydroponics) as also urban & peri-urban agriculture bear great potential.

Land being inelastic and diversion for non-arable purposes becoming inevitable, land-use efficiency is a must. Of equal importance is water management. Agriculture will have to economise on water-use and release some share for non-farm activities.

Integral to value chain will be digital technology and geo-spatial applications. These will determine success of resource use efficiency, forecasting risks and uncertainties, FPOs, produce aggregation, pan-India market, track & trace, quality standards, integrated databases etc.

The new paradigm will demand predictability of supply and demand with high degree of confidence, and maneuverability the way manufacturing sector does. Simultaneously, this market-led path must be accompanied by policy and welfare support for the farmers.

At 75, India can cheer its success with Green Revolution, and at 100 it should be looking back to cheer similarly the Income Revolution. ◆

INDEPENDENCE DAY SPECIAL
BUSINESS INDIA ◆ THE MAGAZINE OF THE CORPORATE WORLD

GUEST COLUMN

India's tech prowess continues...

... solving the issues of access, cost and scale of education

Over the last few decades, technology has become the lynchpin at the centre of global transformations, which is why our collective idea of the future has been constantly shifting. When we view its role in the context of education, digital technology is a goldmine of potential in crafting sustainable, long-term solutions, to make learning accessible, cost-effective and scaled-up for millions of learners.

The impact of technology on transforming India's education landscape, however, has perhaps been the most tangible tenet. For centuries, our classrooms have followed a set pattern. And, while technology impacted other sectors early on, its application in education has proliferated at scale only in the last few years. Even as the edtech sector in India was maturing, the true test of its potential was realised during the pandemic, putting the spotlight on the incredible power of technology in making education accessible. Our classrooms began to change and revolutionised how we learn, teach, and build learning solutions.

The burgeoning digital economy, accompanied by this tech crusade, has also generated a slew of jobs across newly created domains that are transforming the nature of India's workforce. The opportunity to leverage technology in preparing India's significant young population for these new jobs through tech-driven education and skilling is immense.

As we mark 75 years of India's independence, the nation finds itself on the precipice of global transformation, with applications of technology in education at the centre. The question remains how best can it be leveraged in the context of education.

ANIL GOEL

The context of scale The biggest use of technology, in all the fields it has made an impact on, is in its ability to bring scale. Education is no different. It is a sector that requires scale in both the creation and delivery of content. Live online classes, for example, are taking some of the best educators in the industry to students, at scale.

While the learning ecosystem is radically transformed when technology is used to scale up access to quality content, differentiated instruction, and opportunities for practice, having a sound product philosophy which focuses on listening to the end-user and enabling feed-back collection is critical for edtech platforms from a scaling and personalisation standpoint.

Engaging the learner But, when talking about scale and access, there is one thing we must remember: Online learning is not about taking aspects of offline learning on a digital platform, but about leveraging technology in the best and smartest way to make learning more engaging.

Today, edtechs and their adaptive learning platforms are leveraging data science to create highly detailed and dynamic learning profiles for every single student. This enables algorithms to understand learning patterns and create a personalised recommendation system that has the intelligence to understand the areas a student is struggling with, intervene and assist.

Learning for the masses While tech-driven education is critical for future-ready India, the physical inequities to education pose a systemic challenge, coupled with cost. Technology can solve this problem as the basis of an existing tech infrastructure sets the stage to provide quality education to students at a fraction of the cost that it takes to bridge the physical inequalities.

It is estimated that by 2025, India will have 320-325 million students learning at a K-12 and higher education level. But, not all of these students will have access to the best teachers in the education system. However, with deeper penetration of internet services in rural areas, providing devices becomes the only investment needed to bring quality teachers and learning content to students.

The possibilities for technology's integration into education are endless. But, perhaps the biggest impact that accessible, high-quality, tech-enabled learning programmes can create is preparing students for a future, where skills like problem-solving and critical thinking become a necessity.

The growth paradigm of the 21st century rests upon the youth, and their ability to leverage knowledge and digitised skills for growth. The convergence of education and technology is a vital ingredient in this process as is building a strong foundation of tech-driven, accessible, and personalised education at scale.

We are in an innovation era, equipped with the talent and resources to create revolutionary products, high-impact solutions, and world-class services. India is at the centre of this opportunity. As the nation's tech prowess continues to transcend borders, the talent pool expands and the India stack gains global prominence, I envision India's 100th independence day will be a true reflection of a cutting-edge and powerful Indian tech ecosystem that sets the narrative for global techonolgy roadmap. ◆

The author is president, technology, Byju's

DIAMONDS

Diamonds are forever

India has demonstrated to the world that it is capable of competing and controlling the industry

India is the largest processor, cutter and polisher of diamonds

In 1967-68, India's exports of diamonds stood at merely ₹18 crore – a small figure in the world market, which was heavily controlled by Belgium, Israel and the US. Up till mid-20th century, India was importing brilliant cuts from Belgium and was processing only flat cut and old Indian mitchell cut. It was only in the 1960s that some diamantaires in India commenced cutting of round brilliant diamonds.

In the initial years, Indian-cut diamonds were not that popular, due to poor cutting standards. However, with the passage of time, Indian gem & jewellery industry started improving steadily and accepting challenges posed by the international markets. Slowly and gradually, with improvement in cutting standards, India's exports, along with employment figures also went up. Parallelly, the industry started challenging the existing manufacturing centres as well.

First, the government of Gujarat, in its bid to support and boost this industry further, abolished value added tax (VAT) and did not introduce service tax on business, especially the smaller business units. This ensured uninterrupted, smooth and efficient processing of diamonds in the state. It is important to highlight here that, though diamond manufacturing started much earlier in Mumbai, due to the absence of trade-friendly fiscal and labour laws, a lot of business moved to Gujarat.

India demonstrated to the world the capability of competing and controlling the industry despite constant threats from giants like China, Israel, Asian countries and Europe.

Today, Surat boasts of 500,000 workers employed in diamond industry alone. Another 500,000 workers are employed in various other towns and their satellite villages, such as Bhavnagar, Palanpur, Visnagar, Navsari, Ahmedabad and other centres around Gujarat. Indian diamond industry has contributed considerably in the overall development, as well as raising the standard of living in Gujarat.

While the industry flourished globally, it also faced criticism from competing countries. There were allegations that India was using child labour in manufacturing diamonds. The Gem & Jewellery Export Promotion Council (GJEPC) immediately appointed Fergusson, a leading consultant, to study and map the prevalence of child labour in diamond industry. Its report established that there was no significant child labour involved in diamond industry -- it was less than 4 per cent. Nevertheless, the council undertook aggressive road shows with De Beers, to educate and eliminate even this small percentage of child labour. A second study revealed that child labour in the diamond industry has subsequently come down to less than 1 per cent.

Better working conditions

Later, there were allegations that the working conditions were not conducive to the health of the labour force employed in the diamond industry and that the factories resembled sweatshops. The Indian Diamond Industry Council, supported by De Beers, educated diamantaires the need to improve working conditions, the standard of living of the labour force and the importance of well-ventilated modern factories.

Over the years, Surat has transformed

to become one of the most modern manufacturing centres, which is quoted as having the best working conditions and the most luxurious factories. Not only are the working conditions of labour improved, but their living standards have witnessed a sea change too. They have good houses, they use motorised transport, their children are getting good education and they also have access to good health care facilities, largely through the philanthropic activities started by the diamantaires.

The Indian diamond industry has attained a strong reputation the world over. India is now not only looked up to as the greatest performer, but also expected to lead the industry worldwide.

The Ministry of Commerce too has been considerate, helpful and supportive to the needs and the requirements of the industry. The industry also needs fiscal policy support and paradigm shift in its approach towards providing a level playing field and also giving long-term visionary support.

Today, India is the largest processor, cutter and polisher of diamonds. India's exports of cut & polished diamonds during April 2021-March 2022 stood at $24.24 billion (₹1,80,618.06 crore), showing a growth of 48.8 per cent in dollar terms, when compared to $16.29 billion (₹1,20,151.19 crore) for the same period in 2020-21. "The diamond sector is a major contributor to the industry's immense growth," explains Colin Shah, chairman, GJEPC. "In 2021-22, diamond exports contributed more than 60 per cent of the overall gem & jewellery exports of $39.59 billion. This is despite the fact that India does not have a single diamond mine. The industry is a perfect example of 'Make in India'. We have been requesting the government to allow the sale of rough diamonds in the special notified zones in Mumbai and Surat, which would help in making India the world's biggest diamond trading hub", Shah adds.

At present, India is processing one billion pieces of diamonds, which translate in terms of value to about 24 billion dollars and, subsequently, into converting near gems into gems of quality and also into larger diamonds. This is despite a host of countries competing with us to

Shah: immense growth

grab the main stake, especially China, but they have been successful in snatching away only one particular quality of sawable and sawn variety of processing and manufacturing. Other countries have not been able to grow and are

INDIA'S EXPORTS OF CUT & POLISHED DIAMONDS
(2012-13 to 2021-22)

Year	Carat (lakhs)	% Growth wrt carat (y-o-y)	Amount ($ million)	% Growth wrt amount (y-o-y)
2012-13	368.38	-30.75	21.61	-18.99
2013-14	363.52	-1.32	24.50	13.38
2014-15	345.17	-5.05	23.16	-5.46
2015-16	335.13	-2.91	20.67	-10.76
2016-17	322.08	-3.89	22.78	10.24
2017-18	347.65	7.94	23.72	4.11
2018-19	303.08	-12.82	23.82	0.42
2019-20	257.11	-15.17	18.66	-21.64
2020-21	221.20	-13.97	16.29	-12.72
2021-22 (p)	307.40	38.97	24.43	50.00

Source: GJEPC, Computed from Customs Data

holding on their current level of manufacturing – countries such as Israel, Vietnam and other Asian countries. There has been increasing pressure from all these countries to re-snatch India's market share and India needs to be vigilant to safeguard this industry, which now employs about 1.5 million workers, and try to enhance the market share by offering better facilities.

Cutting and polishing

India has no worthwhile mining of diamonds and yet attained leadership position in cutting of diamonds of all kinds and polishing of small diamonds. Over a million people are engaged in this specialised occupation, making India the biggest diamond-cutting centre for small rough diamonds. Were it not for Indian artisans, these small diamonds would be put to low-value industrial use, rather than for jewellery. India is well-known for diamond processing and more than 65 per cent in terms of value of world's diamonds are cut and polished in India.

In this unique industry, the rough diamonds are imported by about 100 sight-holders of mining companies abroad and another 1,000 traders, who participate in open market sale of rough diamonds overseas. Out of these, a few of the importers/ buyers, which are India-based, sell rough diamonds after importing them in smaller quantities to several thousands of MSMEs spread across Gujarat, which in turn work on the rough diamonds imported through several processes. The final polished diamonds in smaller quantities are then sold to small traders in cluster areas, who then sell them to traders in Surat. These traders aggregate different quantities, assort them and sell to exporters, who finally export the polished diamonds. The goods change hands 5-6 times from import to final export.

There are about 50,000 traders in Gujarat alone, which are engaged in buying and selling of rough and polished diamonds. Also, there is an equal number of brokers and agents involved in multiple small transactions that take place every day. This structure has become so competitive that, despite repeated attempts by the competitors abroad, they have not been able to compete with this efficient structure.

Diamonds are processed and sold across the world through the marketing channels, which has strong NRI and Indian presence. It's their grip on the sales and services of polished diamonds to various jewellery centres around the world that is one of the reasons that despite paying the highest prices, India has been able to control the business. ♦

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GUEST COLUMN

A promising future

Mutual fund has emerged as one of the most transparent investment products in India

NIMESH SHAH

Over the past few years, market regulator SEBI has revitalised the mutual fund industry with its comprehensive and credible regulatory regime. These measures have brought about absolute clarity on the role, rules and regulations of the various stakeholders in the mutual fund landscape. As a result of all these developments, mutual fund has emerged as one of the most transparent investment products. At the same time, the regulatory regime has paved the way for a better distribution system, addressed issues related to investor protection and awareness, enhanced product accessibility among the masses, etc, all of which together has ensured that the mutual fund industry has emerged as one of the fastest growing and competitive segments of the financial system.

With increasing investor awareness, mutual funds have been successful in attracting investors given the professional management and potential to deliver better returns relative to traditional investment avenues. Today, investors may be certain their money is in safe hands given the robust disclosure requirements from AMCs, risk management frameworks set in place, etc. So, it is no surprise that retail investors have started to opt for mutual funds over alternative financial and physical modes of savings. It is heartening to see that, as an asset class, mutual fund is maturing in India with increasing geographical spread and broad-based investor participation.

Over the last five years the industry has created an edge in the retail personal finance space which is reflected in the form of a robust SIP book and increased retail participation. As a consequence, the industry's assets under management (AUM) have soared past the ₹35 lakh crore mark. The AUM of the industry has grown from ₹6.89 lakh crore as on 30 June, 2012 to ₹35.64 lakh crore as on 30 June, 2022, which is a more than five-fold increase over the past decade. While the road thus far has been encouraging, the future looks equally bright.

Given below are the reasons we believe the mutual fund industry is poised for the next leg of growth:

Changing Investor Landscape; retail participation is increasing Over the past five years, the mutual fund industry has seen a considerable shift in the sources of investment capital. There has been a significant rise in SIP inflows as a result of which DIIs could effectively counterbalance the FII outflows seen over the last 10 months. This was achieved at a time when only 3.36 crore individual PAN holders invested in mutual funds against a total of 43.5 crore individual PAN holders in the country.

As awareness levels of mutual funds as a viable long-term investment product among the masses have improved significantly, there has been increased participation in mutual funds from the hinterland as well. An early sign of this is already visible in the form of assets from B30 increasing from ₹5.56 lakh crore in June 2021 to ₹6.12 lakh crore in June 2022, representing an increase of 10 per cent. We believe this is one trend which is likely to continue wherein retail investment into equities will increase considerably.

Product Innovation The industry over the years has endeavoured to attract every type of investor ranging across conservative, moderate and aggressive, with its wide bouquet of offerings. We believe in the years ahead, there will be further innovation in terms of product offerings/features, to meet the requirement of investors at large. Innovative features such as Freedom SIP, Freedom SWP, Booster SIP and Booster STP have been introduced.

Owing to increased awareness, investors today realise that both active and passive offerings have a place in one's portfolio. In India, there has been an increased interest in passive offering since pandemic times. New-age investors are open to funds which are tailored as per some set rules such as the Asset allocation funds, Fund of Funds, smart beta offerings, passive multi-asset offering, etc. With most investments going digital these days, investors are increasingly getting comfortable with the idea of investing in solution oriented products.

Digitisation & Technology The future lies in digital innovation. As a means to reach a wider set of investors, the industry is constantly innovating in digitalisation and technology. Technology can enable the industry to target the three key parameters such as risk management, lower costs and improved efficiency and deliver seamless customer experience without compromising on any of them.

Technology in times ahead is likely to emerge as a key differentiator in the industry. We believe the industry in terms of transactions will move towards being fully digital in the years ahead.

The domestic financial market will continue to grow at a healthy pace on account of the expected growth of the Indian economy, rising consumerism and increased urbanisation. This implies that there is enormous growth potential for investment products such as mutual funds in India. ♦

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GUEST COLUMN

Democratising the market

As India Inc grows, the stock market is poised for a long growth trajectory

The stock market is all about sentiments and beliefs. This may seem incongruous with everything that's at stake and, make no mistake, the stake has never been bigger. The pot is well over $3.4 trillion in size now, going by the combined market cap of all listed companies in India. That's more than the size of the Indian economy itself!

And the beliefs are not apparent only during once-a-year auspicious affairs, such as the 'muhurat' trading session during Diwali. There are hundreds of such short stories about Dalal Street. Market veterans would recall the brouhaha around the 8x5 ft statue of the 'raging bull' installed at the Bombay Stock Exchange in January 2008 and how it was seen as a bad omen, when the market crashed the same month.

A few weeks from now, a new replica of the bull will be placed, along with that of the iconic 'common man', in a pedestrian zone in Mumbai. While this could become another selfie point in the country's financial capital, this will indeed have more significance, as it represents the democratisation of the stock market – the underlying theme of the evolution of the Indian financial system.

Cosy club We have all grown up reading about how a few Gujaratis and a Parsi would meet under a banyan tree at Town Hall to plant the early seeds of Dalal Street. That was around 168 years ago. While they formed a formal association two decades later, it wasn't until 1957 – a full decade after the independence – that the government recognised the BSE under the Securities Contracts Regulation Act. Even then, it remained a cosy club of the big 'daddies' of the market – the old business families who ruled the roost – and a small set of brokers, who dictated what went on the trading floor.

It was a world apart from the real India and not just in terms of the current discourse that revolves around Bharat versus India. In fact, it was separated from the people at large, even those living in urban centres. The commoners went about trying to save the little surplus they managed and pumping it mostly into bank deposits, gold or real estate. Wealth creation for the masses was, for all practical reasons, virtually absent barring the government-run national saving schemes.

To be fair, the start of the mutual fund industry in 1963, with the formation of Unit Trust of India (UTI), did provide a new channel, but just about. UTI functioned under the Reserve Bank of India for about 15 years and can be seen as an extension of the national saving schemes.

R. VENKATARAMAN

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At the end of 1988, when the BSE had a total market capitalisation of about ₹52,000 crore, UTI had ₹6,700 crore of assets under management (AUM). But the asset management industry got an impetus only in 1993-94, when private players were allowed to manage mutual funds.

Turning point The listing of Reliance Industries in 1977 was a turning point for stock markets in India. It showed how new-generation entrepreneurs could break into the big league. And it opened the eyes of retail investors on how they did have an alternative to not only save money but also to grow it over time. However, the real story of the Indian stock market, as we know it today, has a relatively short history of three decades. In many ways, the Indian stock market took off only in the early 1990s. And I say this not because I started my career at that time, but also because of a multitude of factors.

While the BSE's 30-stock benchmark Sensex was launched in the mid-1980s, it was the 1990s that heralded a transformation. The National Stock Exchange of India (NSE) and the Securities & Exchange Board of India (SEBI) came into the picture in the early 1990s. Private mutual fund managers and foreign portfolio investors were allowed to operate as the Indian economy opened itself to the rest of the world.

Around the same time, the Sensex grew four-fold, thanks to the touch of Harshad Mehta, who rocked the still fledgling stock markets. But the scam that was later unearthed shook the faith of the common investor and laid bare the loopholes in the systems and processes. It was followed by a lost decade for the stock market, if we discount the dotcom boom that was quickly, followed by a bust. And then, the Ketan Parekh scam and the collapse of UTI 64, the eponymous mutual fund scheme, had a debilitating impact on sentiment.

The Indian stock market did manage to correct its course with the start of another bull run about two decades ago, only to be hit by a global avalanche in 2008. The global financial meltdown had a strong filtering effect on the good and bad of India Inc but, with the bounce-back thereafter, the local markets set themselves for sweet 'some things'.

The surge in the Indian bourses since then has been nothing but dramatic. Take the NSE, for instance. It is now the world's largest derivatives exchange by trading volume (contracts) for 2021, according to the Futures Industry Association. It was ranked fourth in the world in cash equities by the number of trades for 2021, as per the World Federation of Exchanges (WFE).

If we look deeper, there are several inherent changes shaping and reshaping the wealth juggernaut that is the Indian stock market. Let me expand on five such trends.

Asset class switch For decades, real estate was the go-to savings mode for those looking beyond the national saving schemes. Whether it was vacant land or a built-up property, it was the asset class of choice for the risk-averse, who had a surplus and wanted to go beyond the plain-vanilla debt products. The asset price bubble in real estate was disrupted in November 2016, when the government demonetised 86 per cent of the currency overnight. This was a defining moment for the stock market.

Demonetisation is often berated by pundits for its economic cost and debilitating impact on several businesses. One of these was its repercussions for the real estate market. Demonetisation sucked out the black money from real estate, and channelled a vast amount of money into stock markets.

This propelled the Indian stock market to new highs. This also had a secondary effect.

Offshore vs onshore drivers The Indian market is dominated by companies controlled by promoter families who, typically, do not buy and sell their own shares that often – at least on record. In such a scenario, foreign portfolio investors became liquidity machines and dictated the direction of the local bourses as key institutional investors trading stocks. But, over the last few years, mutual funds have seen a surge of inflows from retail investors. Now, slowly but surely, mutual funds have begun matching FPIs – and many a time counter-balancing when offshore investors pull out. This also explains, at least partly, the resilience of India's stock market in recent months, despite crude oil prices touching record highs and the US Federal Reserve raising interest rates.

Reliance went public more than four decades ago, and it is now considered as a legacy company. But what it did decades ago is still showing the way to thousands of new-generation entrepreneurs. The stock market has gained muscle not only because existing listed companies have grown earnings and valuation but also because hundreds of new companies – buoyed by liquidity in the system – have floated public offerings.

This has not just created a much bigger pool to pick from to grow one's wealth but also catapulted new champions among the most valued firms in the country. The government's own limited but consistent disinvestment drive has brought even old-world behemoths like Coal India and Life Insurance Corp into the investors' demat accounts. All this has broadened the market greatly.

Onshoring tech stocks Until a few years ago, it was the dream of every technology entrepreneur to ring the opening bell at NASDAQ and see their company's opening price and ticker symbol on the iconic New York billboard. Many still do. It's a different matter that, today, it's far easier to be on that billboard – even a relatively early-stage venture capital funding round can help a tech start-up attain the distinction. The liquidity generated domestically and the willingness of offshore investors to back such companies, even if they are listed on an Indian bourse, has injected additional oxygen into the system.

The broader trend sweeping the local stock market is evident from another example. Six years ago, the travel-tech start-up Yatra.com went to great lengths to get listed in the US through the backdoor route of a blank-cheque firm. But this year, Yatra filed for an IPO in India.

So, it's not surprising that nearly half a dozen tech ventures went public locally last year and many more are in the queue. The fear that investors in India are not sophisticated or mature enough to understand the growth trajectory of an internet business may not be as strong as it once was.

Regulatory oversight It would be unfair to talk about the evolution of the Indian stock market and overlook the regulators. In many ways, the regulatory bodies and SEBI, in particular, have been responsible for providing the backbone on which the markets grew. No doubt, SEBI faced brickbats early on due to the scams it missed. There were indeed lapses but the regulators have learnt the lessons and created enabling environments to push the case of the Indian stock market.

Needless to say, regulations are an ongoing exercise but, as long as they adjust and incorporate new developments to empower the market participants, they are serving their purpose. This provides a calming effect as investors understand that there are institutions out there to protect their interests.

The breakneck speed at which the Indian stock market has grown often perplexes pundits and stokes fears of a perfect storm. But there are solid pillars supporting the wider trend. Whether the market is fairly valued or needs another nudge to find its place under the sun is something that the invisible hand of the market will decide.

But a few things are clear. One, the market is much more mature today and ready to absorb the next horde of new-age champions into its fold and provide opportunities for more wealth creation domestically. Second, various factors over the years and, especially over the last three decades, have made the stock market more accessible to the common investor.

As India Inc grows its rank and file and expands the size of the business economy by attracting ever more entrepreneurs, the stock market is poised for a long growth trajectory. India's national bourses – BSE and NSE – have indeed arrived. But they are not done yet and there is a lot of steam left that can catapult the two national bourses further up among the most valued stock exchanges globally. ◆

TOURISM

India: Incredible and how

India is a potential tourism superpower, but there are challenges to overcome en route to achieving that status

The land of the Taj. Of Himalayas. Of fabled palaces, mighty forts and magical backwaters. Of a vast, myriad range of monuments and festivals. And a dazzling array of cuisines. Where unique wellness concepts are on offer. Even by just scratching the surface, it is – and has been – evident to the world for a while that India has immense potential to attract tourists. As the nation marks its 75th anniversary of independence, a significant way of expressing it has been through initiatives in travel and tourism. However, arguably, the real story in India's tourism and the related spaces of travel and hospitality has come from the private sector, which in recent years has grown manifold.

Indeed, according to the World Travel & Tourism Council, tourism generated ₹16.91 lakh crore ($210 billion) – 9.2 per cent of India's GDP in 2018 – and supported 42.673 million jobs (8.1 per cent of its total employment). The sector is predicted to grow at an annual rate of 6.9 per cent to ₹32.05 lakh crore ($400 billion) by 2028 (9.9 per cent of GDP). Covid-induced lockdowns may have put a temporary spanner in the sector's growth, but the challenging period – covering most of 2020 and

MILESTONES

1840 First modern hotel, Great Eastern, opened in Calcutta, now Kolkata.

1853 India's first passenger train operated by the Great Indian Peninsula Railway between Bombay, now Mumbai and Thane.

1863 Summer capital of the British Raj moved to Shimla, beginning the trend of hill stations.

1873 A horse-drawn tram service opened in Calcutta between Sealdah and Armenian Ghat Street.

1903 First Taj hotel opened in Bombay.
• The 'toy train' of Shimla began operations.

1908 Taj Mahal restoration work completed, garden remodelled with European-style lawns that are still in place.

1920 Electric signal lighting for railways introduced between Currey Road and Dadar in Bombay.

1928 India's first civil aviation airport founded at Juhu

1934 First Oberoi hotels open in Delhi and Shimla.

1936 Jim Corbett National Park opens as the first national park in India

1946 Tata Airlines became a public limited company under the name Air India.

1948 Tourist Traffic Committee, an ad-hoc body, set up to suggest ways and means to promote tourism in India.
• Air India's first international flight when on 8 June 1948, a Lockheed Constellation L-749A named Malabar Princess flew from Bombay for London.

1949 Tourist traffic branch was set up, with regional offices in Delhi and Mumbai, and in 1951, in Kolkata and Chennai.

1950 Chittaranjan Locomotive Works (CLW), electric locomotive manufacturer began.

1951 The organisation of Indian railways into regional zones began when the Southern, Central and Western zones were created. Fans and lights were mandated for all compartments in all passenger classes, and sleeping accommodations were introduced in coaches.

1953 Government of India purchased a majority stake in the carrier from Tata Sons though its founder J.R.D. Tata would continue as Chairman till 1977.

1954 First Institute of Hotel Management opened in Mumbai.

1955 Integral Coach Factory (ICF), manufacturer of rail coaches began in Perambur.

1956 First fully air-conditioned train, Rajdhani Express was introduced between Howrah and Delhi.
• Fares of railway passengers were standardised at 30 paise, 16 paise, 9 paise, and 5 paise per mile for 1st, 2nd, Inter, and 3rd class, respectively.

1958 A separate department of tourism under the government was formed, part of the Ministry of Transport and Communications.

1961 Government constituted a committee to find reasons for falling tourism that year. The committee attributed it to the Chinese aggression in the backdrop of the Sino-Indian War. As per the committee's recommendations, visa norms were liberalised.

2021 – also indicated an appetite for Indians to spend on travel. Not just for work, but also pleasure.

The previous years have seen enormous strides in tourism in the country. From just a trickle of tourists visiting in the early years post-independence to over 10 million annually since 2017 – 2020 and 2021 have been aberrations – there has been a manifold growth in the number of inbound tourists. Just as significantly, Indians have started travelling in unprecedented numbers domestically, both for work and pleasure. In certain destinations and states, tourism is the top or a significant contributor and employer already. Goa, Kerala and Rajasthan stand out as states that have become associated with tourism so much so that their brands benefit from the association. Many other states are striving hard. Notably, once India's top destination, Kashmir, plagued by political upheaval, has been adversely affected.

The Indian tourism sector has also grown in complexity. Once, the volumes came from pilgrim/religious tourism and visiting relatives which, while adding numbers, were not such a significant contributor economically. As India modernised from the early 1990s, increased disposable incomes, greater connectivity, easing of travel rules and awareness of global travel trends have led to an unleashing of the travel genie amongst the well-heeled Indians, as evidenced starkly when Covid restrictions on travel were lifted. Beyond the traditional tours, today many specialised segments have emerged, many of them high value indeed. These include MICE, especially incentive tourism, wedding tourism, leisure holidays, adventure tourism, wellness tourism, ecotourism, food and wine tourism, glamping, bleisure trips and many more. Of course, Indians are also crossing borders as never before, leading to global tourism bodies to offer inducements to Indians.

Challenges do remain, and India, despite its acknowledged potential, is still not globally at par with the top tourist destinations, whether in desirability, number of visitors, average visitor spends or even tourism infrastructure. Successive governments, both at the federal and state levels, have made attempts to lure tourists, but global comparisons are still not favourable. Most of the segments of this space, such as travel and hospitality, still do not have industry status, denying them access to capital. The

1965 India gets its first minister of tourism, Raj Bahadur. Intercontinental, now IHG, becomes the first international hotel chain to open a hotel in India with Oberoi Intercontinental, Delhi.

1966 India Tourism Development Corporation was established as an agency of the Department of Tourism.

1972 Wildlife (Protection) Act passed, which provided for the safeguard and protection of the wildlife (flora and fauna) in the country.
1973 Project Tiger is a tiger conservation programme launched by the government of India

1982 A National Policy on tourism was announced.

1983 First Indian sites on the UNESCO List of World Heritage Sites in India – Ajanta Caves, Ellora Caves, Agra Fort, and Taj Mahal.

1984 First metro line opened connecting Esplanade to Bhowanipur in Calcutta.

1986 Planning Commission set up the National Committee on Tourism to prepare perspective plan for tourism sector headed by Mohammed Yunus. Kerala Tourism subsequently adopted the tagline God's Own Country.

1987 Yunus report recommended that the existing Department of Tourism would be replaced by a National Tourism Board.
• Tourism Development Finance Corporation was set up

1988 National Committee on Tourism made to achieve sustainable growth.
• First Shatabdi Express was introduced between Delhi and Jhansi.

1991 Government de-regularises the civil aviation sector; East-West Airlines is the first national-level private airline to operate in the country.

1992 National Action plan for Tourism was announced.

1993 Existing Export Promotion of Capital Goods Scheme (EPCG) extended to tourism and related services.
• Jet Airways began operations.

1994 Air Corporation Act was repealed and private airlines could now operate scheduled services.
• Private airlines like Air Sahara, Modiluft, Damania Airways and NEPC Airlines among others commenced domestic operations
• Cochin International Airport is the first public–private partnership airport, owned by a public limited company called Cochin International Airport Limited, CIAL.

1996 Air India Regional was established as Alliance Air.

1997 New Tourism Policy announced, demarcating the roles of Central and state governments, public sector and private sector undertakings in the development of tourism.

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lack of training institutes and right skilling for the sector has often meant a lack of adequately trained personnel and also those who have little loyalty to the sector, shifting if opportunities in other sectors were better. Covid and the resultant lock-downs have dealt a considerable blow to the sector, and indeed the sector saw many closures and job losses. Indeed, as India keeps transforming to a more modern economy, it is estimated that both the share of the sector in the nation's GDP and percentage of people it employs will only grow.

Huge strides have nevertheless been made. Travel infrastructure has improved by leaps and bounds in recent years, with better roads and modern airports catering to ever rising volumes of travellers. Railways has been slower to change, but now looks set for makeovers, some incremental, others path-breaking. Civil aviation, with the advent of private airlines has been revolutionary in the way Indians travel. Policies permitting greater investment, especially from the private sector have been crucial in this regard.

Hospitality has covered the wide chasm that existed between luxury outposts in metros catering largely to the foreign guest and often seedy establishments in inner towns. Today, almost all major global chains are present in India and expanding fast. India is now estimated to have about 144,000 branded hotel rooms and, while this might be about the same as single cities such as Bangkok or Las Vegas, it is a huge increment when compared to just a decade ago. Also, the pipeline of expansion is considerable. The restaurant sector has also grown rapidly, and despite a rapid turnover rate, is still one of the most vibrant sectors of the Indian economy.

India's soft power, expressed in myriad ways – from yoga to cinema, food and even the smiles of its regular citizens – mean the land holds considerable allure. Concerted, sustained effort in the right direction should help India take its place as a tourism superpower. Or super destination! ◆

SUMAN TARAFDAR

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MILESTONES

1998 On 25 January, the first Indian Tourism Day was marked.

2002 Incredible India, an international tourism campaign, launched by government to promote tourism in India.
• National Tourism Policy announced, to position tourism as a major driver of economic growth.

2004 Air India launched a wholly owned low cost subsidiary, Air-India Express.

2006 Indigo airlines started operations, first flight from Delhi to Imphal via Guwahati.

2007 *Atithi devo bhavah* programme announced to complement the Incredible India Campaign; main aim was to create awareness about the effect of tourism and sensitise people about our country's rich heritage, culture, cleanliness and hospitality.
• Air India and Indian Airlines were merged under Air India Limited
• Air Sahara and Air Deccan were acquired by Jet Airways and Kingfisher Airlines respectively.

2009 Visit India 2009 campaign launched to boost the inflow of visitors and tourists after the terror attacks in Mumbai in 2008 as well as global economic crises.

2012 A study commissioned by the Corporate Affairs Ministry recommended that Air India should be partly privatised
Kingfisher Airlines shut down.

2014 Government implemented a new visa policy, allowing tourists and business visitors to obtain a 'visa on arrival' at 28 international airports.
• Air India became the 27th member of the Star Alliance, first Indian airline to be part of a global alliance.
• Tata Sons launches AirAsia India, a low-cost carrier operating as a joint venture with Air Asia and Vistara, full service carrier as a joint venture with Singapore Airlines.

2016 Government of India launched Udan-RCS scheme, which increased number of operational airports from 49 to 70 within first round.

2017 India registers more than 10 million arrivals for the first time.
• Mumbai Port Trust upgraded to be a cruise terminal.

2019 Ministry of Civil Aviation released a report – Vision 2040. The report predicts that air passenger traffic will increase six-fold to 1.1 billion by 2040 including 821 million domestic and 303 million international passengers.
• Indigo became the first Indian airline to operate 1,500 daily flights and to have a fleet size of more than 250 aircraft.

2021 Air India, along with its low-cost carrier Air India Express and 50% of AISATS, a ground handling company, were sold to Tata Sons.

GUEST COLUMN

Keeping the flag flying

The maritime industry needs to come together to chalk out a plan

CAPTAIN SHIV HALBE

The demography of India is unique; we have a diverse population, a large percentage of it being young, educated and ideal from an employment perspective. With the Indian government's focus on finding innovative employment opportunities and up-skilling the masses, we are headed for exciting times. Thus, when we consider the maritime sector, with ships in particular, we are addressing a niche market with huge employment prospects. The Ministry of Ports, Shipping and Waterways has drawn up 'Maritime Vision 2030' and an entire chapter is dedicated to making India an ideal destination for qualified maritime manpower, both for shore and sea.

At the dawn of Independence, the Indian fleet stood at 0.19 million GRT. A large number of Indian seafarers were employed on the British flag ships – mainly as ratings. However, we were blessed in one aspect, that we had visionaries like Sir Ramaswamy Mudaliar, Seth Walchand Hirachand and others, who impressed upon the British the need to set up a dedicated maritime training facility in India, and thus, gave birth to IMMTS Dufferin in 1927. This training initiative and a few for ratings, gave a big boost in supporting the growth of Indian tonnage post-independence. By 1964, the tonnage under the Indian flag reached 1 million GRT and today stands at 12 million GRT. With the decline of British shipping by the mid-60s and 70s, unemployment was somewhat curtailed as the tonnage under the Indian flag was increasing.

Before around 1985, the major employer of Indian seafarers was the Indian flag itself, ie ships operating under the Indian flag viz Indian shipowners. It was considered 'patriotic' to work for Indian companies, and there were many of them about which one could boast. In the early 70s, companies like Scindia Steam Navigation and Great Eastern were among the 10 biggest companies listed on the Bombay Stock Exchange, by way of asset portfolio! The top three private companies then – Scindia Steam Navigation, Great Eastern and India Steamships, owned and operated in excess of 100 ships between them, with a host of other (smaller) companies alongside, like, Dempo, Damodar Bulk Carriers, Chowgule Steamships etc.

To support the Indian 'flag', the Government of India operated two prestigious training facilities for the training of officers (namely TS Dufferin/ TS Rajendra/TS Chanakya for nautical officers and Directorate of Marine Engineering Training –DMET – for engineers) and three more for the training of ratings. All the 'pass outs' got placement and unemployment was unheard of.

The 'collapse' of the Indian flag in the mid-80s during the economic slump led to a most unexpected situation – that of unemployment amongst Indian seafarers. Fortunately, overseas owners came to the rescue by 1987, and as they started 'reviving' their ships from 'lay-up', they found a 'readymade' pool of excellent manpower available at attractive prices – Indian seafarers! The exodus to foreign flags was so intense in the late 80s, adversely impacting the operation of Indian flag ships, that Indian shipowners appealed to the Govt to invoke Section 87B of the MS Act, 1958, whereby there is an obligation of certain certificate holders to serve the Government or work in Indian ships!

This period saw the advent of 'management' companies, which were the main drivers of the employment boom for Indian seafarers, that extended well into the 2000s and continues to do so, for certain trades. Unfortunately, the Indian flag did not come out unscathed from the recession of the mid-80s. However, this held true for many other national flags too, for example, the British and German flags saw significant reduction. A change in global financial policies enabled 'third party flags' or 'flags of convenience' to register significant growth and the growth in employment of Indian seafarers was primarily on such ships.

Despite the numbers of Indian seafarers increasing multifold, why is it that there is a general perception that the industry is not attracting better talent? The causes are multiple, and could include:

- Lack of placement availability for new trainees who have completed shore-based training. The possible reason could be that we are 'churning' out far more than the numbers we can induct
- Lack of a career path for seafarers
- Poor image on social media – shipping only hits the headlines when something has gone seriously wrong on board a ship
- Despite providing employment to thousands of seafarers, the larger organisations do not come together to strategise a recruitment approach.

The Govt of India's Maritime Vision 2030 has set ambitious targets, for eg from the present level of 10 per cent of global seafaring manpower being from India, to increase to 20 per cent by 2030! The report also identifies areas and roadblocks which need to be tackled, as well as proactive measures to be taken.

The industry has a major role to play and needs to come together to chalk out a plan. ♦

The author is CEO of India's leading maritime association, The Maritime Association of Shipowners Shipmanagers and Agents

Breaking the glass ceiling

Senior scientist **Nallathamby Kalaiselvi** has been appointed director general, **Council of Scientific and Industrial Research** (CSIR) -- the first woman to lead the consortium of 38 research institutes across the country. Known for her work in the field of lithium ion batteries, Kalaiselvi is now director, CSIR-Central Electro-chemical Research Institute, Karaikudi, Tamil Nadu. She will also hold the charge as secretary, department of scientific & industrial research. Kalaiselvi has risen through the ranks in CSIR and broken the proverbial glass ceiling by becoming the first woman scientist to head the Central Electrochemical Research Institute (CSIR-CECRI) in February 2019. She had started her career in research as an entry-level scientist at the same institute and has made key contributions to the National Mission for Electric Mobility. She has more than 125 research papers and six patents to her credit. Hailing from Ambasamudhram, a small town in Tirunelveli district of Tamil Nadu, Kalaiselvi went to a Tamil medium school which, she said, helped her grasp the concepts of sciences in college. Kalaiselvi's research work of more than 25 years is primarily focussed on electrochemical power systems and, in particular, development of electrode materials and electrochemical evaluation of in-house prepared electrode materials for their suitability in energy storage device assembly. Her research interests include lithium and beyond-lithium batteries, super-capacitors, waste-to-wealth-driven electrodes and electrolytes for energy storage and electro-catalytic applications. She is involved in the development of practically viable sodium-ion/ lithium-sulfur batteries, as also super-capacitors. ◆

For a great cause

AAS (The American Association for the Advancement of Science), the world's largest scientific society, has announced an annual award for scientific breakthrough – the largest transformational gift in AAAS's history – the **Mani L. Bhaumik** Breakthrough of the Year Award. The $11.4 million pledge to the organisation will support a $250,000 annual cash prize for up to three scientists, whose fundamental research and activities best exemplify the Science Breakthrough of the Year, published by AAAS Each December. Recognising that the most significant developments in scientific research is a central philosophy of donor Bhaumik, a physicist with myriad contributions to the development of high-power laser as well as for AAAS and the Science family of journals. Bhaumik, 91, born in rural Bengal, earned his doctorate at IIT Kharagpur, before moving to the University of California, LosAngeles. His invention of efficient excimer lasers led to Lasik vision correction that has given new sights, literally, to tens of millions in the planet. ◆

Green mission

Two young Turks, **Viveak M. Palanivasan**, co-founder & CEO and **Sakthivigneshwar R**, co-founder & CTO, **Voltrix Mobility**, Chennai, introduced their first product, e-cycle Tresor for urban commuting. The Tresor offers a range of 60-80 km per charge, with a top speed of 25 kmph. "When you ride a pedal-assisted electric bicycle like Tresor, you give yourself a safe and effective cardiovascular exercise that's high enough to make a significant positive impact on your health. Electric-powered bicycles are much needed for our country to be a healthy 'young India', the way it used to be till the early 1990s, and I am confident that Voltrix will become a brand-new alternative for safe, enjoyable and healthy transportation for the urban population," says Palanivasan. "Our mission in this exciting journey is to inspire customers and Tresor, being our first product line from Voltrix, is designed and developed specifically for office-goers. We will be launching more products in the coming months catering to different customer profiles," adds Sakthivigneshwar. Tresor provides a range of 80 km per charge and it uses electricity of, say, 0.5 kWh (units), which costs about ₹3. In comparison, two-wheelers give 40km per litre (₹100). Voltrix is focussing on creating a vertical integrated platform that ensures fast-paced product development catering to various consumer and B2B segments. The company has two more products in the pipeline – e-bikes for general commuting and cargo e-bikes for last-mile deliveries. Both Palanivasan and Sakthivigneshwar are

confident they will overcome any initial hiccups that may occur and they are ready to go the extra mile to achieve their goals. ◆

The rich and the famous

Roshni Nadar Malhotra, chairperson, **HCL Tech**, has retained her position as the richest woman for the second year in a row, with a wealth of ₹83,330 crore. Malhotra is also CEO, HCL Corporation, a trustee of the Shiv Nadar Foundation, and founder-trustee, The Habitats Trust, as well as the chairperson and driving force behind VidyaGyan, a leadership academy for the economically underprivileged, meritorious, rural students of Uttar Pradesh. She has been working towards nurturing future leaders from rural India, who can be catalysts of change for their communities, villages and the nation at large. Passionate about wildlife and conservation, Malhotra established The Habitats Trust in 2018. The foundation aims to work towards protecting India's natural habitats and its indigenous species with the core mission of creating and conserving sustainable ecosystems through strategic partnerships and collaborations with all stakeholders, at every level. Also, Falguni Nayar, founder, Nykaa, a beauty and lifestyle retail company, has overtaken Kiran Mazumdar-Shaw of Biocon, to become the richest self-made woman in India, amassing a wealth of ₹57,520 crore. She was also the biggest gainer in terms of percentage growth, with her wealth shooting up by 963 per cent, revealed the Kotak Private Banking Hurun – Leading Wealthy Women List'. The cumulative wealth of the top-100 in the list had surged 53 per cent to ₹4.17 lakh crore last year and contributed 2 per cent of the country's nominal GDP. ◆

Small recognition

Indian advertising doyen **Ramesh Narayan** was conferred the IAA's Honorary Lifetime Membership Compass Award at the **IAA Leadership Awards**. "This is but a small recognition for his huge contribution to IAA," declared Srinivasan K Swamy, the previous chairman & world president, IAA Global. Added Megha Tata, president, IAA India Chapter: "It is really a well-deserved recognition to someone who worked so hard for our industry in India and internationally. He has contributed a lot to the India Chapter of IAA." Narayan said: "I am grateful to the World Board of the IAA for recognising my efforts in the area of meaningful initiatives in communication. I'll continue to identify issues where effective communication can help, and I'll make an attempt to involve all sections of the industry to help these causes. In the past, we have contributed to campaigns against domestic violence, sustainability (Save Soil), elder care, and other causes." He further stated: "In addition to the marquee events where sustainability is encouraged (Olive Crown Awards), leadership qualities are saluted (IAA Leadership Awards) and creative excellence is awarded (IndIAA Awards), we have started to appreciate the beauty and distinctiveness of our regional languages with the IndIAA awards in Tamil and Telugu. There is room for growth in this area. Additionally, we are the only group with a senior membership base associated with media, advertising agencies, and advertisers. We would be doing a big injustice to ourselves and to society at large if we couldn't use this base to do good." ◆

One million mark

Nissan Motor India has achieved a key milestone in exporting one million Nissan vehicles. Inspired by its philosophy of 'Make in India, Make for the World', Nissan has exported vehicles to 108 countries from its Renault-Nissan Automotive India plant in Chennai since exports commenced in September 2010. Commenting on the milestone, "We are proud to celebrate our one millionth Nissan vehicle exported from India to the world," said **Frank Torres**, president, Nissan India. "Nissan India is a key hub for the exports of completely built-up cars and for parts supply. This is proof of the competitiveness of our operations, including the Port facilities. We would like to congratulate all our teams involved for this great achievement and extend our heartfelt gratitude to the port officials and Union and Tamil Nadu government for their continued support." "Reaching the one million exports milestone is a proud moment for all of us. It is a testimony to Nissan's commitment to the 'Make in India' initiative. This achievement reinforces our focus on expanding and strengthening our market presence across global markets and establishes the Renault-Nissan plant in India as a hub of manufacturing excellence that will win more accolades and recognition." added Biju Balendran, MD & CEO, Renault Nissan Automotive India Private Limited (RNAIPL). ◆

'Under Modi, Bihar devolution increased'

Now that he has abruptly ended the Janata Dal (United)-BJP alliance in Bihar, the BJP has come out with all guns blazing against Nitish Kumar. Among those fielded by the BJP is Sushil Kumar Modi, former deputy chief minister and finance minister of Bihar, who was known to be close to Kumar. Modi, who is now a Rajya Sabha MP, claims that the BJP has received feelers from the Janata Dal (U) to make Kumar the next vice-president of India.

Is it true that the BJP was propping up R.C.P. Singh, former bureaucrat turned Union minister, to take on Nititsh Kumar within the JD(U)?
This is false propaganda and a lie. It was Nitish Kumar who proposed the name of R.C.P. Singh for a cabinet berth at the Centre. If he had not proposed his name, then how did Singh become a Union minister for about 1.5 years? When Home minister Amit Shah had asked one name of his party for berth during expansion of Union cabinet, Nitish Kumar had proposed R.C.P. Singh's name adding that Rajiv Ranjan Singh, his close aide, might get upset with this and he should also be taken care of.

Did the BJP get feelers from Kumar about his desire to become vice-president of India?
Yes, Kumar wanted to become vice-president of the country and, for this, several of his party leaders had approached BJP. Some JD (U) people had come to say 'make Nitish Kumar Vice-President and you rule the state'. But when BJP itself had the numbers, why would the party give the VP post to anyone. This must have angered Nitish.

So who back-stabbed whom?
We made Nitish Kumar chief minister of the state five times but RJD made him CM twice. We had relations with Kumar for 17 years but he severed ties with BJP twice. He (Nitish Kumar) won't get that respect from RJD as he got it while being with BJP. We made him CM despite having more seats and never tried to break his party. As for who was dependant on whom to pull the votes, in 2020, we got votes in the name of Narendra Modi. Had we received votes in Nitish Kumar's name, we would've crossed 175 seats and he wouldn't have just stopped at 43. When it seemed the situation wasn't good, Narendra Modi did 3-4 rallies in one day. The 2020 mandate was for Narendra Modi.

But JD (U) leaders are saying that BJP wanted to repeat Maharashtra in Bihar...
This is again false propaganda. Shiv Sena in Maharashtra was not ally of BJP, it was the ruling party there. JD (U) were our ally and BJP has never ever broken any of its allies. BJP never betrayed anyone. In Maharashtra, Shiv Sena betrayed us and faced consequences.

How do you foresee the future of the Mahagathbandhan?
The new government of Mahagathbandhan will fall before next polls. Nitish Kumar will ditch RJD and try to split it, taking advantage of Lalu Prasad's ill health. Already he is under pressure to choose people who have been charge-sheeted in corruption cases. We will like to see how the new Bihar government functions with Tejashwi as *de facto* CM; it will fall before next polls.

Aren't you worried that the parting of ways by Nitish Kumar, who is popular among the most backward communities (MBCs), which account for 30 per cent of the population of Bihar will hurt the BJP?
Actually, Kumar has betrayed the MBC community of Bihar. The MBC community considers Narendra Modi as their leader and they have voted for the BJP in large numbers. In 2020, we got votes in the name of Narendra Modi. By betraying Narendra Modi, Nitish has betrayed the MBC community.

But Kumar has said that the outcome of 2024 for Narendra Modi will be different from the outcome of 2014...
Narendra Modi of 2022 is different from Narendra Modi of 2014. His popularity has increased many fold and the poor of the country have faith in his leadership.

Has Bihar got a raw deal from the Modi-led Centre?
Central devolutions to Bihar during the last financial year (2021-22) jumped by 52.60 per cent, over 2020-21. The state received ₹91,352.62 crore from the Union government as its share in Central taxes during 2021-22. In 2020-21, Central devolutions to Bihar was only ₹59,861.41 crore. The huge rise in tax collections by the Centre has helped in higher central devolutions this time. This is a big boost for the state economy and will help in funding state and central schemes. The state also received ₹9,000 crore additionally as GST compensation devolved from the Centre in last 2021-22, which is counted as grants. ◆