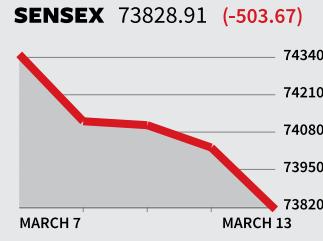


# thehindu businessline.

**IN FOCUS**

	Week's close	Week's change
Nifty 50	22397.20	-155.30
P/E Ratio (Sensex)	20.55	-0.14
US Dollar (in ₹)	86.99	+0.12
Gold Std 10 gm (in ₹)	86495.00	+781
Silver 1 kg (in ₹)	98322.00	+1598

**CORPORATE FILE.**

**How Naveen Jindal** drives global expansion, strengthening his steel and power empire with strategic buys p7

BENGALURU - CHENNAI - COIMBATORE - HUBBALLI - HYDERABAD - KOCHI - KOLKATA - MADURAI - MALAPPURAM - MANGALURU - MUMBAI - NOIDA - THIRUVANANTHAPURAM - TIRUCHIRAPPALLI - TIRUPATI - VIJAYAWADA - VISAKHAPATNAM  
Regd. TN/ARD/14/2012-2014, RNI No. 55320/94

QUICKLY.

**IPO BLUES**

Half the firms listed since Jan '24 underperform



**Mumbai:** Market volatility has taken a toll on companies that debuted on the bourses in the last one year. Half of the 100 companies that listed on the mainboard since January 2024 are trading below their offer price, according to data from PRIME Database. Sixteen of these companies have lost over a third of their market value; five of the last 10 companies that listed on the bourses are trading in the red. p2

**FARMERS' FEAR**

J&K apple growers fear impact of import duty cut

**Srinagar:** Reports of the Centre considering a reduction in import levies on apples, walnuts, almonds, and cranberries have alarmed local cultivators in Jammu and Kashmir. Growers fear that the move could undercut local produce by allowing cheaper imports to flood wholesale markets, threatening their livelihoods. p3

## India not to rush into enacting Digital Competition Bill: Govt

**ACTION PLAN.** Talks on, to proceed after thorough assessment: MoS for Corporate Affairs

**KR Srivats**  
New Delhi

**Mumbai:** Market volatility has taken a toll on companies that debuted on the bourses in the last one year. Half of the 100 companies that listed on the mainboard since January 2024 are trading below their offer price, according to data from PRIME Database. Sixteen of these companies have lost over a third of their market value; five of the last 10 companies that listed on the bourses are trading in the red. p2

**Speaking at the 10th National Conference on Economics of Competition Law, organised by the Competition Commission of India in New Delhi, Malhotra emphasised the need to study global best practices, particularly those adopted by the EU, Japan, and Australia, in regulating anti-competitive practices in digital markets.**

"We must examine how these frameworks can fit into India's regulatory ecosystem and whether modifications are needed to make them more effective for our requirements," he said.

Malhotra also stressed the importance of real-time market monitoring for competition enforcement. "We are not in any great hurry to bring this Bill. The government wants to introduce it

**INDIA'S APPROACH**

- Need further review of best practices of digital markets regulation by EU, Japan and Australia
- MCA received over 100 suggestions on draft DCB, awaiting MeitY report
- Centre sees ensuring 'fair competition' as a national responsibility
- Digital Competition Bill tipped to introduce proactive (ex-ante) regulations for digital gatekeepers



after following a due process," he added.

When asked whether the government was aiming to introduce the DCB in the Monsoon session of Parliament, Malhotra told *businessline* that it was too early to confirm. "Our draft Bill in the Ministry website has received a lot of suggestions, and deliberations are still ongoing," he said.

**STAKEHOLDER INPUT**

Malhotra highlighted that the Ministry of Corporate Affairs (MCA) had already received over 100 suggestions on the draft DCB, which were published for

public consultation. Additionally, the government is awaiting a report from the Ministry of Electronics and Information Technology (MeitY), which has conducted independent stakeholder consultations.

"We are committed to ensuring a level playing field in digital markets. Small and emerging players must be protected from any abuse of dominance by large firms, including global tech giants. Ensuring fair competition is not just a legal and economic necessity — it is also our national responsibility," Malhotra said.

"The digital world is fast-

moving — things change within one or two months. There should be no adverse impact of monopolies on our 140-crore consumers. Fair competition is essential for a healthy economy," he added.

**REGULATORY SHIFT**

The proposed DCB is expected to grant the CCI preemptive powers to regulate digital gatekeepers — large platforms that control critical digital infrastructure such as e-commerce, search engines, and app ecosystems. The Bill is designed to introduce measures ensuring algorithmic transparency, data portability, and non-discriminatory practices.

Malhotra's comments come amid speculation that the government's initial urgency to enact an *ex-ante* framework for digital markets has slowed after a strong push, following a December 2022 report by the Standing Committee on Finance.

The MCA subsequently formed a panel on digital competition law in February 2023 to review the issue. The panel had prepared a draft Bill and submitted a report.

**RISE IN FOOTFALLS**

New car launches have begun attracting customers at dealerships p1

**BANKING.**

**What the RBI means by cutting short board-approved extended tenures of private bank heads** p9

## Automakers ready to scorch the roads with new launches

**Aroosa Ahmed**  
Mumbai



Automobile enthusiasts, prospective car owners and those looking to upgrade are set for a treat, as over the next two years, more than 40 models with multiple powertrains are expected to be launched in the Indian market. Automakers are seeking to attract customers and increase sales.

Some launches have been eagerly awaited, such as the Tata Harrier EV and MG Cyberstar, both expected to be unveiled this year.

Other launches include the Hyundai Creta EV, revived versions of Tata Sierra with both EV and internal combustion engines (ICE), new Skoda Kodiaq, Skoda Superb, E Vitaro, Citroen C3X, C3 Aircross, Mahindra XEV 7E, XUV700 Ebony edition and Kia Syros.

"We will witness new launches across segments by Indian automakers in 2025. Automakers will also launch a slew of electric vehicles throughout the year," Manish Raj Singhania, Chairman, of Research & Academy, FADA, told *businessline*.

**THE LAUNCHES**

Hyundai has around five new launches planned over the next couple of years, including a refreshed Alcazar.

Apart from the Harrier and the Sierra, Tata Motors will also be launching the electric Avinya, produced at its Tamil Nadu facility.

Mahindra & Mahindra has four launches scheduled for this year, while Nissan has four major ones, including

the X-Trail and an affordable EV. Luxury carmakers are also introducing new cars for the Indian market. German luxury car maker Mercedes-Benz introduced its electric G class and will be launching the Mercedes-Maybach SL 680 Monogram.

Audi India recently rolled out the Audi RS Q8 while Swedish luxury carmaker Volvo introduced the XC90.

In FY25, the domestic passenger vehicle industry is expected to grow up to 2 per cent.

"New model launches, cost of ownership, disposable income, remain neutral or favourable drivers for the Indian automobile industry. Accordingly, the base for the industry continues to remain high. The PV industry volume is expected to grow at a moderate 4-7 per cent in FY26," according to market rating agency ICRA.

The new launches and discounts offered by original equipment manufacturers will fuel PV sales, said dealers.

"The PV segment in March is expected to gain traction, fuelled by attractive schemes, the impact of preponed festival sales and fiscal year-end advantages," according to the Federation of Automobile Dealers Association.

## A SIGH OF RELIEF



**SPACE REUNION.** Sunita Williams and other astronauts greeting each other after the SpaceX capsule docked with the International Space Station on Sunday. Butch Wilmore and Sunita Williams will strap into their own SpaceX capsule later this week, one that has been up there since last year, to close out an unexpected extended mission that began last June p1

## SEBI plans higher penalties for algo, high-frequency traders

**Akshata Gorde**  
Mumbai

The Securities and Exchange Board of India (SEBI) is planning to increase penalties on algorithmic and high-frequency traders for high orders against executed trades and refine computation methods of the order-to-trade ratio (OTR), according to sources.

The regulator tracks the ratio of total orders — including modifications and cancellations — to the number of trades executed by an algorithmic trading member within a specific period, as their trading strategies often lead to scope for market manipulation with large numbers of orders and few executed trades.

SEBI plans to increase the penalties imposed on such high OTRs, which were last revised in 2020. A consultation paper on the same is expected soon, sources said. An email query sent to the regu-



**TRADING OVERHAUL.** SEBI is planning to refine computation methods and exclusions of the OTR framework, said sources p1

lator seeking comment went unanswered. OTR is the ratio of the volume of orders punched into the total trades executed. OTR limits are in place to prevent bulk ordering by traders to check price manipulation and system clogging. Penalties are imposed on traders for exceeding these limits.

**PENALTY HIKE**  
The penalty for a ratio of daily algo orders to trade between 50 to 250 is pro-

posed to be increased to 10 paise from the current fine of 2 paise per order. The next slab, between 250 and 500, may see fines double from 10 to 20 paise.

For OTRs between 500 and 1,000, the penalty might rise from 1.5 paise to 25 paise, while the 1,000-2,000 bracket may face 50 paise per order, up from 20 paise.

The highest category — 2,000 and above OTR — could see penalties triple from 25 paise to 75 paise.

However, only orders beyond 0.75 per cent or 0.50 per cent of LTP, whichever is higher, may be considered.

The cool-off action of prohibiting traders with a ratio of 2,000 or more on three occasions in the previous 30 trading days, will also likely continue.

**COMPUTATION TWEAKS**

SEBI is also planning to refine computation methods and exclusions of the OTR framework, said sources. The ratio is proposed to be computed based on orders beyond 0.75 per cent from the last traded price (LTP) instead of both the strike price and LTP.

Additionally, options contracts with a last traded price below ₹6.50, even a single tick away from LTP, may be treated as 0.75 per cent away from LTP. This adjustment stems from the fact that 20-25 per cent of index options and 40-45 per cent of stock options trade lower than ₹6.50, said sources.

The move forms part of the regulator's broader efforts to reduce manipulation and risks in the futures and options (F&O) market. The rapid growth of the derivatives market has led to increased speculation and potential manipulation, particularly by algo and high-frequency traders, market experts said.

"On a given day, around 70-80 per cent of total contracts available are not traded, all of which gets included as part of OTR computation," said a source. The parameters to be used in the Black-Scholes model will likely be decided jointly by the stock exchanges.

The move forms part of the regulator's broader efforts to reduce manipulation and risks in the futures and options (F&O) market. The rapid growth of the derivatives market has led to increased speculation and potential manipulation, particularly by algo and high-frequency traders, market experts said.

## EPFO enrolment in under-21 years group sees sustained fall

**Yashaswini Chauhan**  
Chennai

India's EPFO enrolment data reveal a positive shift in workforce participation patterns. Net enrolment in the under 18 and 18-21 age groups is showing a sustained annual decline.

Experts think this could be due to higher education and skill training taking precedence.

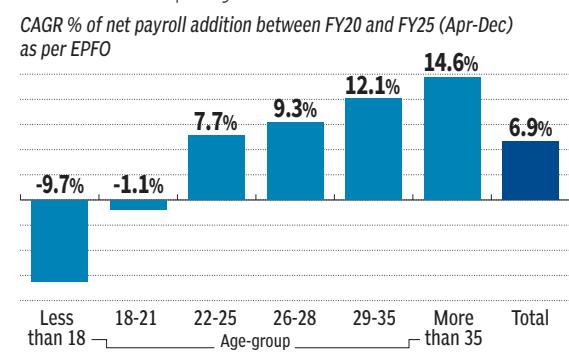
**DATA FOCUS.**

A *businessline* analysis of the compounded annual growth rate (CAGR) in net enrolment of workers between FY20 and FY25 (April to December) shows that the under-18 group witnessed a de-growth of 9.71 per cent and those in the 18-21 age group de-grew 1.14 per cent.

In contrast, older age groups, particularly those

### Youth participation in formal employment declines

CAGR % of net payroll addition between FY20 and FY25 (Apr-Dec) as per EPFO



continuing their education rather than entering the workforce.

In line with this trend, the data for all other age segments has been increasing, except for a slight aberration in the 18-21 category."

At the same time, the 22-25 age bracket has witnessed a 7.65 per cent annual in-

crease, indicating that the bulk of fresh workforce entrants are shifting to slightly older age groups, possibly after completing higher education or skill training programs.

The annual increase in EPFO enrolments for individuals above 35 (14.61 per cent) suggests a structural

shift in employment patterns. Kartik notes that policy intervention and compliance requirements have encouraged employers to enrol older workers, particularly in industries that rely on skilled labour.

From a long-term perspective, this trend is positive,

as it brings experienced professionals into the organised sector, leading to higher labour productivity.

State-wise trends further highlight the regional disparities in EPFO enrolments.

Karnataka (21.1 per cent)

and Haryana (17.23 per cent)

have seen the highest annual

rise, largely due to growth in IT services, manufacturing, and construction sectors.

Maharashtra (14.67 per cent)

and Tamil Nadu (12.8 per cent)

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QUICKLY.

**Karur Vysya Bank expands branch network to 880**

**Chennai:** Private sector lender Karur Vysya Bank announced on Sunday that it has inaugurated three new branches — one each in Andhra Pradesh, Karnataka, and Vellore — taking its overall network to 880. The bank recently opened new branches in Ongole (Andhra Pradesh), Bengaluru (Karnataka) and Bagayam in Vellore. A press release stated that with these additions, KVB has inaugurated 38 branches during the current financial year. PTI

**DVC's ₹1,500-cr push to modernise power supply**

**Kolkata:** Damodar Valley Corporation (DVC) launched a ₹1,500-crore project to modernise power supply in its command area to ensure round-the-clock quality power and to reduce aggregate technical and commercial (AT&C) losses, an official said on Sunday. DVC will deploy 12 E-houses, 8 conventional indoor-based 33/11 KV substations, and 4 GIS-based prefabricated substations. PTI

# Amid volatility, half the firms listed since Jan '24 trading below offer price

**LACKING LUSTRE.** Sustained selling by overseas investors, Trump factor have muddied the waters for IPOs

**Ashley Coutinho**  
Mumbai

Market volatility has taken a toll on companies that debuted on the bourses in the last one year. Half of the 100 companies that listed on the mainboard since January 2024 are trading below their offer price, data from PRIME Database showed. Sixteen of these companies have lost over a third of their market value; five of the last 10 companies that listed on the bourses are trading in the red.

## DOWNTURN TREND

Popular Vehicles & Services, which is into sales and service of automobiles, has seen its stock slide 67 per cent. The other top losers include Carraro India and Godavari Biorefineries, both down 55 per cent from the offer price.

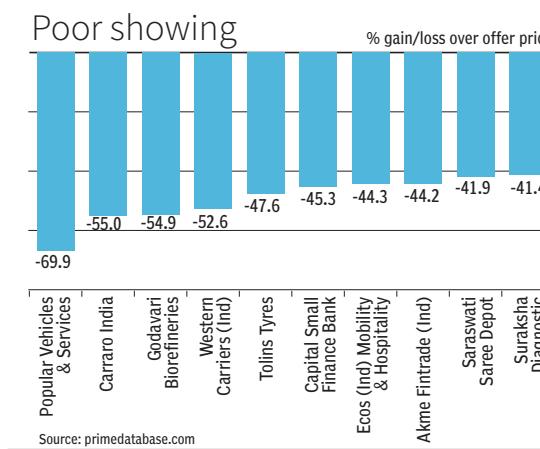
Three IPOs hit the market in February compared with

six in January and 15 in December, hinting at a slowdown, in the backdrop of a volatile secondary market that has seen the Nifty slip over 14 per cent from its all-time highs.

Sustained selling by overseas investors and the Trump factor has muddied the waters for IPO launches, especially for companies that depend on the US market for revenues or raw material. Uncertainty from global geopolitical tensions and fluctuating interest rates has made investors more cautious, while higher bond yields and a tighter monetary environment have reduced excess liquidity, impacting risk appetite.

## TREAD SLOWLY

“Concerns over high valuations have led many companies to delay their listing plans, fearing a lack of investor enthusiasm. Stricter SEBI regulations on disclosures



and pricing have also made companies reconsider their IPO timelines,” said a note by Bajaj Broking Research. The influx of IPOs last year has made investors more selective this year. IPO activity could pick up in the second half of this year, if market conditions stabilise and interest rates soften.

“Despite receiving SEBI

approvals, some companies have delayed or paused their IPO listings due to market volatility, weak investor sentiment, and unfavourable valuations. Factors such as global economic uncertainty, fluctuating interest rates, and sector-specific challenges have made firms cautious about their public debut. Many are waiting for

**Despite the current slowdown, the IPO pipeline remains robust, with past two months seeing 43 filings**

improved market conditions to ensure better pricing and investor participation,” the brokerage said.

Despite the current slowdown, the IPO pipeline remains robust with 43 filings in the last two months. Also, 47 companies have regulatory nod for IPO, while 68 firms are awaiting approval. Together, these could potentially raise ₹1.82 lakh crore. With 30 of the 47 companies having received the go ahead in the past three months, they have another nine months to launch, given validity period of one year.

**ISD mechanism must for firms with branches in multiple States from Apr 1**

**Shishir Sinha**  
New Delhi

Starting April 1, the GST system will witness a major change as the Input Service Distributor (ISD) mechanism will be made mandatory. Experts say such a change aims to ensure that State governments receive their rightful share of taxes on common services procured at a single location.

The mandatory mechanism was provided through an amendment in the CGST Act by the Finance Act (Number 1) of 2024. The ISD mechanism allows business with branches in multiple States to receive invoices for common input services (domestically procured or imported) centrally at one branch or the head office, and distribute the related input tax credit amongst the branches availing such common input services.

According to Samsuddha Majumder, Partner (Tax Practice) at Trilegal, broadly speaking, input tax credit is distributed in proportion of the turnover of each such branch.

Prior to the amendment in the CGST Act, businesses had the flexibility to distribute common input tax credits through either the ISD mechanism or a cross-charge model. ISD registration was optional, and credit could be allocated using cross charges wherever applicable. Post-amendment, ISD mechanism has been made mandatory for offices receiving tax invoices towards receipt of input services (including RCM transactions) for or on behalf of distinct persons.

**SEVEN-POINT LIST**  
Harpreet Singh, partner with Deloitte, suggested a seven-point checklist to ensure timely compliance with the ISD provisions and smooth transition.



First, taxpayers need to obtain ISD registration for offices (to be identified) receiving tax invoices towards receipt of input services (including RCM transactions) for or on behalf of distinct persons.

Second, expenses incurred by the head office which are common for all locations would have to be identified. Third, post identification of common expenses, vendors to be transferred to ISD registration would have to be identified.

Fourth, once the ISD registration is obtained, the selected vendors would be informed to issue invoices on ISD registration going forward.

Fifth, implementation of ISD mechanism may require some IT system modifications such as updating procurement module for purchase orders.

Sixth, training session would be required regarding booking of ISD invoices, following up with the vendors, onboarding new vendors under ISD, etc.

Finally, post implementation, ISD registration would be required to reconcile credit with GSTR-6A, distribute credit to the branches and file GST return in GSTR-6 on monthly basis.

Singh said post implementation, “It is crucial for businesses to correctly identify input services to be distributed, as any errors or excess distribution of credit may be subject to scrutiny by tax authorities.”

## Centre boosts critical mineral exploration in Naxal-hit areas with 25% hike in incentive to promote development

**Abhishek Law**  
New Delhi

The Mines Ministry has decided to hike monetary incentives by at least 25 per cent to promote critical mineral exploration in 12 of the “most” Left Wing Extremism (LWE) affected districts in the country. Two projects are already underway in recent months, sources said.

The details of the scheme specify that companies carrying out exploration in the Maoist-hit regions will be re-

funded ₹125 per ₹100 spent towards field activities, exploration, installation of machinery and equipment and other select work taken up in their projects.

**PROJECTS UNDERWAY**  
The two projects include one for exploration of lithium-niobium reserves in Chhattisgarh; and a second one relating to magnesium block mapping in Jharkhand.

Both projects have begun “a few months back”, with disbursements yet to be made.

Chhattisgarh, Jharkhand, Odisha, West Bengal, Andhra

Pradesh, Telangana, Maharashtra, Madhya Pradesh and Kerala are considered Maoist-affected to varying degrees.

## SCHEME COVERAGE

As per the Mines Ministry orders, the “most affected areas” for which this special assistance scheme has been implemented cover seven districts in Chhattisgarh - Bastar, Dantewada, Bijapur, Sukma, Kanker, Narayanpur and the Mohalla - Manpur - Ambagarh Chowk region; Jharkhand’s West Singhbhum; Madhya Pradesh’s Balaghat;

**The move is expected to attract private investments to Maoist-hit backward areas**

Maharashtra’s Gadchiroli; and Odisha’s Kalahandi and Kandhamal.

“The law and order situation in the LWE affected districts had an adverse effect on smooth execution of the exploration activities. In view of the above, 1.25 times of the normal Schedule of

Charges for carrying out field component of the exploration work shall be provided to exploration agencies,” an office memorandum of the Ministry reads.

“This is also expected to provide private investment in these generally backward areas,” a Ministry official said.

**FUND RELEASE**  
Funds will be released through the National Mineral Exploration Trust (NMET), an autonomous body that receives contributions from mining lease and

prospecting licence holders, equivalent to 2 per cent of the royalty paid, to accelerate mineral exploration activities.

“Some more projects will be considered and the scheme will also be put up for review at an appropriate time,” a Ministry official said.

According to a Ministry official, it had first attempted a similar special assistance programme for the North-Eastern States and the hilly terrain of Himalayan region that are “endowed with limited infrastructure.”

## Regulators must guard against AI use in anti-competitive practices: CCI chief

**KR Srivats**  
New Delhi

Competition regulators must stay ahead of the curve in the artificial intelligence (AI) era to tackle algorithmic collusion, identify hidden anti-competitive behaviour, and protect consumers in increasingly AI-driven markets, said the Competition Commission of India (CCI) Chairperson Ravneet Kaur.

Speaking at the 10th National Conference on Economics of Competition Law, Kaur emphasised that AI is a dominant force in shaping modern markets. “AI is influencing pricing strategies, decision-making, and operational efficiencies across industries,” she said, adding that while AI brings efficiency and innovation, it also introduces new risks that require proactive regulatory intervention.

According to Kaur, AI has enabled new forms of collusions including cartels without human communication; Price coordination without explicit agreements; and algorithmic discrimination under the garb of dynamic pricing.

**GROWING CHALLENGE**  
Kaur warned that many of these issues are harder to detect due to the opacity of AI decision-making. “Regulators must strengthen their capabilities to identify and

address these emerging threats before they become entrenched,” Kaur asserted.

Kaur highlighted the need for regulators to move from reactive enforcement to proactive regulation, which focuses on anticipating market distortions before they escalate into systemic failures.

Kaur stressed the importance of market studies in competition enforcement, stating that they serve as an early warning system.

“By identifying emerging risks early, we can intervene before problems escalate, ensuring markets remain competitive and fair for consumers,” Kaur said.

Kaur provided an update on CCI’s enforcement record, noting that the Commission has handled cases across diverse sectors such as real estate, automobiles, financial services, pharmaceuticals, entertainment, IT, petrochemicals, aviation, power, and

steel. Since the Competition Act, 2002, came into effect, CCI has received over 1,300 anti-trust cases, with a 90 per cent disposal rate (1,180 cases resolved). In 2024 alone, 42 new anti-trust cases were filed.

Among them, a *prima facie* violation was found in eight cases, leading to full investigations.

## MERGER CONTROL

The Commission has also strengthened its role in merger regulation, reviewing transactions across sectors such as financial markets, healthcare, IT, automobiles, power, and food processing. Since merger control provisions were notified, CCI has reviewed 1,254 cases, disposing 1,233 (98 per cent disposal rate). In 2024, 128 merger cases were filed, with 126 resolved. Two cases were approved with remedies to safeguard competition.

**THE CIRCULAR**  
The circular seeks to provide guidance on the application of the PPT provision under India’s Double Taxation Avoidance Agreements (DTAAs) is not intended to interfere or interact with anti-abuse rules. It also said that the government remains committed to ensuring consistency in tax law interpretation while upholding the existing legal framework.

PPT is part of the international tax rules to prevent the misuse of tax treaties. Under the Base Erosion and Profit Shifting (BEPS) framework, the PPT checks whether a business arrangement is genuine or created to avoid taxes. If the primary purpose is tax-saving, treaty benefits can be denied. The

board came out with a detailed circular in January. Now in a statement, the board said the January 21 circular seeks to provide guidance on the application of the PPT provision under DTAAs, wherein such a provision exists. Therefore, this circular shall apply to the PPT provision in only those Indian DTAAs wherein such a provision exists,” it said. Further, it is not intended to interfere or interact with any other provision of the Indian DTAAs, including such provisions that may be

invoked for examination of treaty entitlement or denial of treaty benefits, other than the PPT.

## ANTI-ABUSE RULES

“The circular is not intended to interfere or interact with anti-abuse rules under the domestic law, such as General Anti-Abuse Rule (GAAR) and Specific Anti-Abuse Rules (SAAR), and Judicial Anti-Abuse Rules (JAAR) reflected in or resulting from judicial interpretations,” it said. Also, it added that such rules shall continue to operate prospectively.

## Ola Electric’s unit faces two insolvency pleas over vendor dues

**Bloomberg**

A unit of Ola Electric Mobility Ltd is facing insolvency petitions from two of its key vehicle registration service providers over unpaid dues, adding to the EV maker’s mounting troubles.

Rosmerta Digital Services Pvt and Rosmerta Safety Systems have separately filed insolvency pleas against closely held Ola Electric Technologies Pvt, citing unpaid invoices, people familiar with the matter said.

Ola Electric Technologies is a wholly-owned subsidiary of Ola Electric Mobility and accounts for the bulk of the parent’s revenue.

Rosmerta Digital and Rosmerta Safety Systems declined to comment. Ola Electric referred Bloomberg to the stock exchange filing when asked for a comment on the petitions against its unit.

just over ₹22 crore, while Rosmerta Safety Systems has sought nearly ₹2.5 crore in payments, the people said.

## OLA DISPUTES CLAIM

Ola Electric informed stock exchanges late Saturday night that Rosmerta Digital had filed an insolvency plea against its subsidiary in the National Company Law Tribunal in Bengaluru, where it is based.

The company said it strongly disputes the claims and is seeking legal advice on the matter.

Rosmerta Digital and Rosmerta Safety Systems declined to comment. Ola Electric referred Bloomberg to the stock exchange filing when asked for a comment on the petitions against its unit.

## Telangana's Mudumal Megalithic Menhirs site shortlisted by UNESCO for heritage tag

**KV Kurmanath**  
Hyderabad

The Mudumal Megalithic Menhirs site, 190 km from Hyderabad, has been shortlisted for a potential heritage tag by UNESCO. It is among six sites chosen by the UN agency for inclusion on its World Heritage Tentative List for 2025.

“The 80-acre site on the banks of the River Krishna comprises menhirs (*niluvu rali*) meaning upright stones (in Telugu), offering a glimpse into the perspective of ancient builders who aligned the menhirs with celestial bodies, marking the solstices, equinoxes, and star patterns. It is an ancient observatory,” UNESCO said, explaining why it has chosen the site in its tentative list.

Dating back to 3,500-4,000 years, the site stands as a significant remnant of the megalithic tradition in South Asia. The site is notable for its unique arrangements of menhirs, carefully positioned to align with celestial events.

“The site stands as a remarkable testament to ancient human ingenuity and the timeless connection between earth and sky,” it said. KP Rao, Honorary Professor with the Department of History at the University of Hyderabad, and his team have researched and documented the site’s importance.

## EXCAVATION PLANNED

Vedakumar Manikonda, Chairman of the Deccan Heritage Academy Trust, and his team took part in a UNESCO event in Delhi a few months ago to showcase

the site’s features. “We documented 4,500 acres of the site area and mapped all the boulders and stones,” Vedakumar said.

The State Government has sought permission from the Archaeological Survey of India to initiate excavations at the site. A response is awaited from ASI.

Jai Makthal Trust, campaigning for global recognition, called UNESCO’s selection a proud moment for Telangana and India’s cultural legacy.

“It’s time to celebrate this achievement; however, we must remain cautious and focused until we achieve our goal of securing the UNESCO World Heritage status. The journey ahead is challenging and demands greater dedication and effort,” Sundee Kumar Makthal, who leads the campaign, told *businessline*.

## IIT-M's hyperloop tunnel will be world's longest'

**Press Trust of India**  
Chennai

The ambitious Hyperloop project under development at the Indian Institute of Technology Madras will feature the longest

QUICKLY.

PM to inaugurate Raisina Dialogue on Monday



New Delhi: Prime Minister Narendra Modi will on Monday throw open the three-day Raisina Dialogue, India's flagship conference on geopolitics and geo-economics that will be joined by delegates from 125 countries. New Zealand Prime Minister Christopher Luxon, US Director of National Intelligence Tulsi Gabbard and Ukrainian Foreign Minister Andrii Sybiha are among those attending the 10th edition of the conclave. In a first, a delegation from Taiwan is also attending the deliberations, sources said. *pti*

EIL, MECON, 4 others eye RBI's currency project

Mumbai: Engineers India and MECON as well as four private entities are in the fray for the project to comprehensively revamp RBI's currency management infrastructure in order to cater to future cash needs of the country's fast growing economy. The four entities are: Accenture Solutions; Colliers International (India) Property Services; PricewaterhouseCoopers and The Boston Consulting Group (India). *pti*

# Barring some areas in Rajasthan, wheat crop in good condition

**LOOKING UP.** Timely sowing, varieties that can withstand climate change are key factors

**Prabhudatta Mishra**  
New Delhi



**THE OUTLOOK.** Government has estimated wheat production to exceed 115 million tonnes (mt), while millers expect it to be around 110 mt *pti*

price (MSP)," an official source in Jaipur said.

## HARVEST ON

Madhya Pradesh and Rajasthan have announced a bonus over and above the MSP of ₹2,425/quintal. As a result, the average wheat prices in neighbouring Gujarat are ruling at around ₹2,550/quintal.

Sources said wheat harvesting has been completed in 30 per cent of the wheat areas in Gujarat, 20 per cent in MP and about 10 per cent in Rajasthan. The Rajasthan government has procured about 40 tonnes soon after launching the purchase. Madhya Pradesh and Gujarat are expected to begin procurement from the weekend.

Farmers across wheat growing States and agriculture scientists are unanimous about higher production than last year as per the current crop condition.

Sunil Mukhati, a farmer from Dewas in Madhya Pradesh, was happy harvesting his wheat crop on Thursday. There are two reasons. One, open market prices for his superior quality wheat used for making rotis (flat bread or chapatis) are ruling at ₹2,800-3,000 a quintal. Two, the yield is higher this year compared to last year.

"I may get 2-2.5 tonnes per acre this year. Last year, I got 1.5-1.6 tonnes. I went for varieties that can withstand climate change," he told *businessline* over phone. Mukhati also said farmers in his neighbourhood and across the State are reporting a good crop.

"We planted our crop early this year," he said.

Similarly, Anand Singh Anjana of Ujjain in Madhya Pradesh said he planned to harvest the crop in the next two weeks. "My crop looks good, and I expect better yield this year," he said.

Sukhvinder Pal Singh, a farmer in Sri Ganganagar district of Rajasthan, said the crop is in very good shape and will be harvested soon. There is no report of any shrivelling of grain from any place in the district as well as in neighbouring districts, he added.

## USING SEA ROUTE

"The expectation is that price will not fall below what is prevailing now, as both MP and Rajasthan are paying bonuses. While stockists are active, there is also demand from flour millers from Kerala who have been buying wheat from Gujarat via sea route," said Bhavesh Kotcha, a grain trader from Gujarat.

Flour millers from Karnataka, who purchase wheat from Madhya Pradesh at ₹2,950-3,000 per quintal (mill-gate delivery) said they would prefer to bring the grain either by rail or road than via sea as logistics costs are high to move from Mangaluru.

(With inputs from Subramani Ra Mancombu, Chennai)

# Diversifying crude import sources helps India navigate trade turmoil, US sanctions

**Rishi Ranjan Kala**  
New Delhi

As the world struggles to adjust with the evolving trade and geopolitical scenarios, India's strategy to diversify its crude oil import sources aided domestic refiners to source barrels from Africa and South America during February as US sanctions impacted Russia's seaborne oil cargoes.

According to the trade numbers from global real-time data and analytics provider Kpler, Indian refiners, for the first time in last six months, turned to countries such as Argentina, Algeria, Gabon, Libya and Congo.

India's crude oil import dynamics are evolving amid shifting geopolitical landscapes, said Sumit Ritolia, Kpler's Lead Research Analyst for Refining & Modeling.

A top government official said: "India's pivot to countries such as Argentina, Gabon and Guyana is part of its long-term strategy to diversify procurement sources and explore avenues for domestic E&P firms to invest in producing assets in these regions, which offer huge untapped hydrocarbon resources."

**NEW ALTERNATIVES**  
For instance, India, for the first time, procured Argentina's Medanito, a light sweet grade of crude oil, which is equivalent to the US' West Texas Intermediate (WTI). It also procured the heavy-to-medium grade Etame from Gabon, which can act as an alternative to heavy crude



**NEW SOURCES.** India's pivot to countries such as Argentina, Gabon and Guyana is part of its long-term strategy to diversify procurement sources

such as Venezuela's Merey, the official added.

In November 2024, Prime Minister Narendra Modi travelled to Nigeria, Brazil, and Guyana, highlighting the push to diversify energy sources and expanding partnerships in hydrocarbon trading. Last month, Oil Minister HS Puri said India diversified its crude procurement sources from 27 to 40 with Argentina being the latest addition.

In the last six months, Kpler data show that India imported crude from African countries such as Cameroon, Algeria, Libya, Congo and Gabon. In South America, imports came from Argentina. The world's third largest importer also sourced stocks from Asian nations like Turkey and Brunei.

West African crude oil grades being cheaper than Middle Eastern also helped

push up imports from Africa, albeit marginally, trade sources said.

As shipments from Russia slipped to a low of 1.45 million barrels per day (mb/d) last month, Indian refiners increased cargoes from Africa to 304,000 b/d and South America to 461,000 b/d provisionally. Middle East was the main supplier at around 2.44 mb/d.

## ENERGY DIPLOMACY

Kpler's Ritolia pointed out that India's crude basket diversification is evident from BPCL's procurement of Medanito crude from Argentina and the increasing inflows of US crude — signalling renewed energy diplomacy between Washington and New Delhi.

"West African and Latin American suppliers are also gaining traction as refiners hedge against volatility in Russian barrels. Additionally,

US tariffs on Mexican and Canadian crude imports into the US could redirect volumes to India. Major private refiners in India, which have experience processing these complex crudes, may take advantage of this opportunity, further diversifying India's crude sources," he explained.

Ritolia noted that Russia remains India's top supplier in 2025.

"However, with India's total crude demand starting the year strong — reaching 5.26 mb/d in January — diversification efforts will likely continue to ensure supply security amid ongoing market uncertainties," he added.

## EVOLVING LANDSCAPE

Higher imports from Middle East is also reflective of state-run refiners fulfilling term volumes in Q4 (FY25) to meet MoU commitments, Kpler indicated.

Looking ahead, said Ritolia: "Expectation of lower Russian arrivals in March and April is set to benefit Middle Eastern suppliers, particularly Iraq and Saudi Arabia, given their ability to provide medium sour grades as alternatives to Urals. While near-term Russian volumes are unlikely to reach the peaks observed in 2023-24, refiners and traders will adjust accordingly, seeking competitive alternatives."

Besides, the stance of the Donald Trump administration on Ukraine-related sanctions will be a key factor influencing Russian crude's competitiveness, he explained.

Meanwhile, on March 14, the Minister of Power and Energy of Sri Lanka, Kumara

## TODAY'S PICK.

### Mazagon Dock Shipbuilders (₹2,315): BUY

**Gurumurthy K**  
bl. research bureau

The short-term outlook is bullish for Mazagon Dock Shipbuilders. The stock has been very good support around ₹2,200 over the last one week. The price action during this period also indicates the absence of strong sellers to drag the price below ₹2,200. There is a cluster of supports in the ₹2,200-2,180 region which can continue to limit the downside.

A fall below ₹2,180 may need some strong negative trigger. Mazagon Dock Shipbuilders can rise to ₹2,600-2,700 in the coming weeks. Traders can go long now at ₹2,315. Accumulate



on dips at ₹2,240. Keep the stop-loss at ₹2,140. Trail the stop-loss up to ₹2,380 as soon as the stock goes up to ₹2,440. Move the stop-loss further up to ₹2,460 when the share price touches ₹2,520. Exit the long positions at ₹2,580.

Note: The recommendations are based on technical analysis. There is a risk of loss in trading

**Prabhudatta Mishra**  
New Delhi

The Centre has rolled out a pilot project aimed at reducing broken grain share in the rice stock managed by the Food Corporation of India (FCI) to 10 per cent from current up to 25 per cent, which will improve the quality of rice distributed through ration shops.

The plan, if successful, will also reduce leakage in the public distribution system, increase the availability of rice for ethanol production and reduce storage costs.

Besides, the current rates of broken rice is also likely to rise as export has also been opened now, the source added.

from rice mills. The government has allocated 24 lakh tonnes (lt) of rice from FCI for ethanol until October 31, 2025.

## RATE RISE

"When FCI rice in current form (with up to 25 per cent broken mixed) is supplied at ₹22.50/kg, there remains a possibility of diversion of it to market by sourcing 100 per cent broken rice from mills at lower cost. Once 100 per cent broken rice will be supplied from FCI, distilleries won't be able to make any change," said a source.

Besides, the current rates of broken rice is also likely to rise as export has also been opened now, the source added.

According to the pilot launched last month, FCI asked some mills in Punjab, Haryana, Telangana and Andhra Pradesh to segregate the 15 per cent broken rice separately from 10,000 tonnes of paddy to be processed under the custom milled rice, in each state. Those 15 per cent share of broken rice will be directly sold to distilleries from mills.

## RICE SHARE

Explaining the plan, sources said out of 67 kg of rice processed from 100 kg of paddy, the broken grain share is up to 25kg, which will now be reduced to 10 kg as 15 kg of broken will be segregated from it separately. "As FCI

# Govt to raise PDS rice quality by cutting broken grain share

has 458.75 lt of paddy stock as of March 1, if the segregation is made at mill gate, FCI will get delivery of 238 lt of rice, which will have 10 per cent broken rice and another 69 lt of broken rice may be sold from the mill to distilleries," sources said.

## CHARGE SHARE

Explaining the plan, sources said out of 67 kg of rice processed from 100 kg of paddy, the broken grain share is up to 25kg, which will now be reduced to 10 kg as 15 kg of broken will be segregated from it separately. "As FCI

# J&K apple growers fear import duty cut will hurt local produce

**Gulzar Bhat**  
Srinagar



**TARIFF WOES.** Farmers say the move would impact over 7 lakh families associated with the apple industry *pti*

Reports of the Centre considering a reduction in import levies on apples, walnuts, almonds, and cranberries have alarmed local cultivators in Jammu and Kashmir. Growers fear that the move could undercut local produce by allowing cheaper imports to flood wholesale markets, threatening their livelihoods.

Reports about a possible reduction in import duties on Washington apples, walnuts, almonds and cranberries, before US President Donald Trump's reciprocal tariff are rolled out on April 2, have raised significant concerns with growers' federations in the Valley beginning to voice their worries.

## THE IMPACT

Zahoor Ahmad Rather, president Apple Farmers' Federation of India (AFFI), J&K chapter, said the move would impact apple growers across the region through separate communications," Rather said.

"Our farmers cannot compete with those in the US, where farmers receive over 32 per cent in subsidies, while ours receive no more than 3.5 per cent," said Rather.

The Kashmir Valley Fruit Growers Cum Dealers Union (KVFGDU) wrote separate letters to Prime Minister

Narendra Modi and Union Minister for Agriculture and Farmers' Welfare, raising their concerns over the reduction in import duties on the Washington apple.

"Washington apples will flood Indian markets if the government lowers import duties on them," said Bashir Ahmad Bashir, chairman KVFGDU.

He said that they had serious apprehensions about the government even making the Washington apples duty free. "We have conveyed our concerns to the Prime Minister and Union Minister for Agriculture through separate communications," Bashir said.

He said that the move would impact over 7 lakh families associated with the apple industry.

Over the last few years, the apple industry suffered heavy losses due to frequent closure of Jammu-Srinagar following elaborate roadworks, Covid-19 induced

lockdowns and climate change. The apple farmers had for long been demanding 100 per cent import duties on the US and Iranian apples. However, in 2023, the Union Government waived 20 per cent additional retaliatory duty imposed on premium Washington apples in 2019, prompting the farmers to protest against the move.

## ECHOES IN ASSEMBLY

On March 12, the legislators in the Assembly raised concerns over the government's plans to lower the import duty on apples, walnuts and almonds.

National Conference MLA, Tanvir Sadiq, drew the attention of the House to the issues, arguing that the move would severely affect the livelihood of thousands of families.

Many legislators, particularly from the apple-rich districts of south Kashmir, rose from their seats to express their concern.

centers in the southern part of the country.

In its February letter, Adani Green had said: "With the exception of Mannar Environmental approval and an associated Supreme Court case, we have procured almost all clearances. Similarly, we have worked on lands for the project, as well as associated transmission system. Till date, the company has spent about \$5 million on the pre-development activities."

## businessline.

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(Corporate Contracts Department, 5th Floor Station B)

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## Pulses story

Calibrated imports can balance stakeholder interests

The Centre has extended duty free imports of urad and tur till next March 2026, and yellow peas till this May — while imposing a 10 per cent levy on lentils import. The key issue here is managing the undeniable demand-supply gap through imports in a way such that the grower is not discouraged from cultivating these crops.

If untimely imports depress prices below minimum support levels, as is the case at present, it is likely to reduce acreage in kharif pulses to begin with (urad and tur), accentuating the demand-supply gap. Further imports would have the same effect, undermining self-sufficiency efforts. Yet, an absolute squeeze on imports by raising duties could deprive consumers of a crucial source of protein. Therefore, the quantity and timing of imports should be calibrated to ensure that interests of producers and consumers are met. Current data suggest that pulses output in FY25 will marginally exceed the FY24 level of 24.3 million tonnes. While the rabi estimates released recently point to an output of 15.8 million tonnes (led by chana at 11.5 million tonnes and lentils at 1.8 million tonnes), kharif pulses has been pegged at 7.1 million tonnes. Pulses imports in FY25 have been estimated at over 6.5 million tonnes (led by yellow peas at over three million tonnes, which is used as a substitute for chana and other pulses).

Declining output since FY22 (when an all-time high output of 27.3 million tonnes was achieved) has also meant that inventories are declining, raising imports. Meanwhile, a rising population as well as a dietary shift away from cereals have led to higher demand for pulses, of which, sadly, there are few official estimates. Studies such as those by ICAR about a decade ago and one by NABARD-ICRER suggest a current demand of at least 28 million tonnes (based also on an ICMR-determined nutritional norm of 52 grams per capita per day). Therefore, at current levels of output and inventory, imports of over five million tonnes does not come as a surprise. But to manage imports smoothly in future, getting a fix on the demand scenario is a must, and the Centre must conduct a survey to this end. Reliable estimates on output too would go a long way in managing the needs of all parties concerned.

If the supply-demand gap as well as inventory levels are known (the latter should be placed in the public domain by procuring agencies, as in the case of rice and wheat), market forces would operate optimally to the benefit of all stakeholders. Alongside such data transparency, a knee-jerk approach to slapping or lifting duties on imports should be avoided. Predictable policy would aid overseas growers and curb speculation. It may be worth considering a liberalised approach to imports, with the government conducting 'market intervention operations' to stabilise prices. As for improving yields and output, pulses must be promoted as a main crop in irrigated areas, while providing cheap phosphatic fertilizers.

## OTHER VOICES.

## THE WALL STREET JOURNAL.

EUROPE

**Don't cry for the Education Department**  
Republicans have been calling to raise the US Education Department essentially since Jimmy Carter opened the doors in 1980, and President Trump is now actually trying to do it. After 1,300 lay-offs announced Tuesday, its staff will be down nearly half, and news reports say Mr Trump is considering an executive order to dismantle the remainder. The lay-offs are being handled in the blunderbuss way typical of Mr Trump and the Elon Musk efficiency operation. Education Secretary Linda McMahon told the Senate during her confirmation hearings that her department was set up by Congress and "clearly cannot be shut down without it." But Mr Trump can tell Ms McMahon to quit doing everything that isn't required by law. If he does, the public shouldn't mourn this damaging bureaucracy. (NEW YORK, MARCH 14)

## 讀賣新聞

THE YOMIURI SHIMBUN

## Trade war: Japan should be on higher alert

The high tariff policy of US President Donald Trump has sparked a full-scale trade war, and it has begun to shake up financial markets. The Japanese government needs to deal with the situation while anticipating any developments. On Wednesday, the US government imposed an additional 25 per cent tariff on steel and aluminium products from all countries and regions, including Japan. This is the first time that new tariff measures have been applied to imports from Japan during the second Trump administration. This month, the United States has already imposed 25 per cent tariffs on many imports from Canada and Mexico, and it has also raised the additional tariff on imports from China to 20 per cent. (TOKYO, MARCH 15)

## Trump's 'shock and awe' tactic

His current high tariffs policy would deepen distrust of the dollar and cost America massive reputational damage

LINE &amp; LENGTH.



TCA SRINIVASA RAGHAVAN

Many people view Donald Trump as a villain. But is he also a fool? In the answer lies the likely course of his trade strategies after, say, July.

It's absolutely impossible that he doesn't understand the economic impact of higher tariffs. They are blindingly obvious.

The most important of these is the effect that a stronger dollar will have on other currencies. They will weaken because the demand for them will decrease. Trump is being told by some economists that he should tax inflows to weaken the dollar! Talk about nuts.

This sounds bad but actually a weaker currency means cheaper exports. Thus, depending on how much a currency weakens, the effect of the higher tariff will be negated.

Trump surely knows this. After all he saw it happen in 2018 in China's case. He raised tariffs on some Chinese products and the renminbi weakened. In the end the impact on Chinese exports to the US was negligible. So the same question once again: why is he doing this tariffs thing? And the answer has to be that it's a tactic, and not a strategy. A tactic has short term objectives while a strategy seeks to achieve longer term goals.

In cricketing terms what Trump is doing is what Mark Greatbatch of New Zealand started in the 1992 World Cup: score as fast as you can in the first 15 overs and take the game away from the opposition by the 20th. Later Sanath Jayasuriya and Kaluwitharana of Sri Lanka did the same thing with massive success.

It's a tactic that's used in war also. If you are planning to invade you start by massive artillery barrage and aerial bombing. It usually works by seriously damaging enemy morale. Colin Powell who commanded the US attack on Kuwait in 1991 called it a 'shock and awe' tactic.

**THE GORILLA IN THE ROOM**  
But what works for cricket and the military need not necessarily work for



the economy. Financial markets can go into wildly gyrating disarray. That's fine except the consequences can be very severe for the dollar. History bears witness. The problem today is that two successive presidents, Messrs Trump and Biden, over nearly a decade, have done things that have led to countries questioning the very basis of dollar dominance: the trust they can place in the dollar as the global reserve currency.

Trump's current tariffs policy will only deepen that distrust. The loser will be America because its emphasis on tactics over strategy.

This, however, isn't the first time it is emphasising short term tactics over long term strategy. The first time was in 1971

**Most likely Trump will stop the shock and awe tactics** when he can conclude that he has done enough to satisfy his core constituency which would have got its cheap thrills

when another Republican president, Richard Nixon, arbitrarily and suddenly, announced that America would no longer back its currency with gold. The world was sold short.

The shock was so strong and deep that two years later it led to another massive jolt. It emboldened the oil producing countries of the Middle East, OPEC, to double the price of oil. It took a decade and a half for the global economy to recover from these two shocks of 1971 and 1973.

There was massive turmoil in the financial markets and although the dollar eventually re-established its primacy, it took 15 years. The fact that there was no rival currency also helped.

But that was then. Now there is the yuan/renminbi knocking at the door. China today has exactly what the US has always had, money and muscle. It will take time to give serious competition to the dollar but not as long as it took for the pound sterling to be dethroned, which was 75 years. And that slow eviction was because Britain had huge colonies which had no choice but to use the sterling.

**WHAT TO EXPECT**  
As mentioned above, Trump knows all this. He surely must. So the question really is how long will it be before he stops these shock and awe tactics.

Most likely it will happen when he can conclude that he has done enough to satisfy his core constituency which would have got its cheap thrills. But those thrills will cost America massive reputational damage.

Given the speed at which he is making announcements it is reasonable to assume that it will happen sooner rather than later, say by July or August. This "I will huff and I will puff and I will blow your house down" policy is good until the third little pig builds a house of bricks that can't be blown away.

He could have established the new order — isolation — by then and can turn to consolidating it because if he doesn't, his bullying will start looking like bluster and bluff.

His tactics would have succeeded thus but it's highly probable that the strategy will fail. America won't become great again because of the colossal loss of trust and reputation.

## Railway safety needs a 'Kavach' push

It is not enough to equip locos alone with anti-collision device. Track infra too needs it. AI use can bolster rail safety

Sudhanshu Mani

**S**afety on Railways (IR) dominates TV debates and media narratives whenever there is a major mishap. However, with no major railway accident in recent months — barring the unfortunate stampede at New Delhi railway station on February 15 — this is the time to rise above the din and relook at railway safety.

Whenever railway safety becomes a burning issue, critics claim IR prioritises optics over safety, while the government alleges sabotage by external enemies. Both narratives miss the mark. While accidents have declined, the sabotage theory, citing occasional obstructions on tracks, was never convincing as most cases were too trivial to cause a derailment. I have always maintained that while agencies investigate, jumping to conclusions only spreads panic.

A couple of recent railway safety developments went unnoticed. First, the Commissioner of Railway Safety, NE Railway, held IR's engineering department responsible for the Chandigarh-Dibrugarh Express derailment in Gonda on July 18, 2024, which claimed four lives. IR had earlier tried to attribute this accident to suspected sabotage, despite a lack of any telltale signs. Given that investigative

agencies, including the NIA, have not found sabotage in multiple cases they were engaged in, IR must stop looking for a sabotage excuse instead of addressing root causes and taking corrective measures.

## COMMITMENT TO SAFETY

Second, in the Upper House debate on the Railways (Amendment) Bill 2024, Railway Minister Vaishnav highlighted the government's commitment to safety, citing an annual investment of over ₹1 lakh crore and a dramatic drop in railway accidents — from 171 to just 30 in the last decade. While critics in opposition argue otherwise, the downward trend in accidents and fatalities is undeniable.

This improvement is not solely due to the current government but on account of decades of focused work: eliminating unmanned level crossings, enhancing track maintenance and renewal, upgrading signalling systems, and replacing outdated coaches with safer LHB models. It is also acceptable that the massive capital expenditure since 2014 has indeed accelerated these improvements. Bigger budgets for track, signalling, and rolling stock will surely enhance safety incrementally, but what about quantum leaps? One such measure is the Kavach signalling system. Parliament was informed that IR has

been refining Kavach since 2016, leading to the final approval of Version 4 in July 2024. It was stated that 15,000 km of track will be equipped with Kavach in five years. But despite a high-profile trial more than three years ago in media glare, not a single kilometre has been added beyond the existing 1,448 km in the Secunderabad area.

IR hastily latched onto the Commissioner of Railway Safety's recommendation following the Vizianagaram accident on October 29, 2023, which left 17 dead and 34 injured. The recommendation was to equip all locomotives with Kavach, even in non-Kavach territory, to improve safety through its non-signalling anti-collision feature. The spirit behind this was to keep locomotives in readiness pending ground installations, although

equipping the locomotive alone does not unleash the full potential of Kavach.

Yet, IR is pushing ahead with fitment on locomotives alone at an estimated cost of ₹8,000 crore, while progress on essential ground installations — telecom towers, control panels, optical fibre cables, RFID tags — remains excruciatingly slow. Work has dragged on for years on the Delhi-Mumbai and Delhi-Howrah corridors.

Another crucial vision for IR's safety must involve artificial intelligence (AI). Can India lead the world in AI-driven rail safety? With our vast skilled manpower in the area, this leadership is within the realm of possibility. IR has, however, been dabbling with AI-based applications for CCTV surveillance, crowd control, and passenger amenities, while bafflingly neglecting development of AI-enabled tools for real-time safety interventions.

Given the impossibility of manually analysing the vast digital data from station loggers and locomotive/train microprocessors, AI is inevitable for real-time collation and analysis.

If IR is serious about achieving near-zero accidents, these two areas — Kavach's full deployment and AI integration — must be its top priorities.

The writer is Retd. GM Indian Railways and Independent Rail Consultant



AI. Vital for rail safety

been refining Kavach since 2016, leading to the final approval of Version 4 in July 2024. It was stated that 15,000 km of track will be equipped with Kavach in five years. But despite a high-profile trial more than three years ago in media glare, not a single kilometre has been added beyond the existing 1,448 km in the Secunderabad area.

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## ◎ BELOW THE LINE



## TN Budget inputs

As Tamil Nadu presented its Budget for 2025-26 recently, the officials of the State's finance department shared information about an interesting source that helped them draft the budget proposals. Besides consulting with economists, financial sector advisors, think-tanks and more, social media was also relied upon to frame a few proposals, the State's Finance Secretary T Udhayachandran said. The officials said they came across reports in social media that there had been a surge recently in dropout

rates among tribal students in certain remote hilly regions of the State due to lack of access. After due verification, the State announced budgetary allocations to upgrade 14 high schools in select hilly regions in Dharmapuri, Erode, Kallakurichi, Krishnagiri, and other districts to higher secondary schools.

## ‘Muskeeters

India's telecom giants, Airtel and Jio, once staunch opponents of Elon Musk's Starlink, have now joined hands with the satellite internet provider — within 12 hours of each other. Previously, they fought against Starlink's entry, citing unfair spectrum allocation. Now, they're touting it as the key to bridging India's digital divide. What changed? A mix of geopolitical shifts, high-level meetings, and the realisation that fighting Musk's satellite juggernaut was futile. In business, there are no permanent rivals — only evolving interests.

## Summons on the menu

The Centre has forwarded the summons received from the US Securities and Exchange Commission to a sessions court in Ahmedabad for it to be served on industrialist Gautam Adani at his city address. If served, Adani or his legal team may have to step into a US courtroom. The Adani Group has dismissed the allegations as "baseless" and is readying its legal arsenal. Will Adani play defence, go on the offensive, or pull off a legal masterstroke?

## Heavy pulse

Last week, the pulses trade received a rude jolt when the Centre extended duty-free imports of yellow pulses till May 31, 2025. When the Centre did not issue any notification, the trade thought the duty-free imports had ended. Traders say yellow peas have been the primary cause for the current bearish trend in pulses. For example,

prices of urad (black matpe) have dropped despite a 25 per cent lower production in the kharif season.

A little bird says the family of a "powerful" retired bureaucrat working for a multinational company is behind this "sudden" u-turn.

## Sweet language

Amidst the three languages row in Tamil Nadu, Union Minister Ashwini Vaishnaw at a function near Chennai on Saturday had lots of praise for the Tamil language and Tamil culture. "Tamil is a very sweet language. We all respect Tamil culture, Tamil language and this is one of the assets of our country, also one of the assets of the world. Let's take pride in that. Let's take joy in that. Let's enjoy all the Indian languages. That is the spirit with which the Prime Minister is working today, making sure that every Indian language gets its big place under the sun," he said in the presence of TN Industries Minister TRB Rajaa.

## Metoric rise

Twenty years ago when Blackstone decided to invest in India, it had just \$50 billion in assets under management. Co-founder and CEO Stephen Schwarzman, in India last week to mark his firm's 20 years in India, reminisced how all those years ago sitting at his desk he was thinking of how to position the firm in India. "We were so small then, we didn't have consultants helping us with anything."

We just sort of made it up. And so I was sitting at the desk, I said, why don't we put a billion dollars into India? And so I wrote the press release, and we released it. That was a shocking number at that time. And it got everybody's attention, which is what it was meant to do." Now two decades later Blackstone manages assets of around \$50 billion in India while globally it manages assets of over \$1 trillion.

## Our Bureaus

## A staple through the ages

The book plates the fascinating history of rice

### BOOK REVIEW.

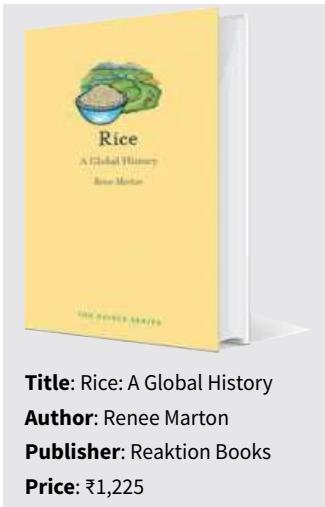
Sudhirendar Sharma

**B**y 2050, cities will feed 70 per cent of the world population, which will by then have reached 9 billion. Though maize is the most produced in the world, it is rice that is universally consumed. With a milled rice production volume of 522 million tonnes, rice is a staple food for over half of the world's population. It is particularly important for countries like China and India, who are not only its largest producers but consumers too. It is consumed in various forms, from steamed rice to rice flour, and is integral to many cultural cuisines and traditions.

Few foods are as universal as rice, yet its story is anything but ordinary. 'Without rice, even the cleverest housewife can't cook.' From the ancient paddies to kitchens and markets around the world, this unassuming grain has become both a dietary staple and a cultural cornerstone. In this engaging account, Chef Renee Marton unravels the rich history of rice, tracing its remarkable journey through centuries of trade, migration and culinary innovation. The origins of some of the rice dishes go as far back as the Moghul dynasties. Just imagine, rice is also a principal ingredient of Budweiser.

**CULTURAL, CULINARY VALUE**  
Spread over five chapters the book explores cultural and culinary value of rice, influence of ancient trade on rice, its spread in the new world, and the emergence of the modern consumer. Cultural customs and rice rituals are no less significant. Rice and fertility are almost synonymous, bride and groom have it as the first food eaten. *Rice* explores how rice has shaped societies and cuisines, from sustaining mighty empires to inspiring the arts. While Christ may not have ever talked about it, Krishna, Confucius, Buddha, and Muhammad had special liking for it.

Rice has a fascinating history which began in the foothills of the Himalayas, in Southeast Asia, southern China and Indonesia. Its domestication evolved in India and China, and subsequently spread in east Asia and the rest of the world. The rice grains were reported growing some 15,000 years ago, and were put to non-edible uses as well. Glutinous rice, cooked as thick paste and mixed with lime and sand, was used as mortar that made up the



**Title:** Rice: A Global History  
**Author:** Renee Marton  
**Publisher:** Reaktion Books  
**Price:** ₹1,225

Great Wall of China. In its journey through long history, rice also fed soldiers and prevented famines.

The importance of rice to society has been studied extensively. Rice has followed society wherever it went or evolved. For Chef Marton, the global history of rice is a valuable study of rice rituals and customs. Mouth watering and tantalising recipes from across the globe are not listed without reason, as these offer a captivating exploration of how this humble grain continues to define and connect us. Such has been the role of recipes that the widely popular *sushi* was acceptable as a form of tax payment, way back in 718 CE.

Rice is a highly adaptable cereal grass that grows in most environments. Irrigated rice accounts for 50 per cent of cultivated rice, and represents 75 per cent of the little over 700 million tonnes of rice harvested. Under the changing climatic situation, however, irrigated rice has come under serious question. Water is a limiting fact, and so is methane emission from irrigated paddy fields. Methane is more potent as a greenhouse gas, it traps around 120 times as much heat as carbon dioxide. Rice will have to go through these challenges in the coming years.

Demethanation has emerged as a new challenge for growing rice. Will rice be a less water guzzling crop, that will also promote demethanation is the million dollar question? The global history of rice does not address the emerging challenges. *Rice* talks about it as an ancient crop, and focuses on the changes it has gone through the new world. However, imminent climatic challenges are what will determine the future of rice.

The reviewer is an independent writer, researcher and academic

# When India leapfrogged into IT age

Sona Towers on Millers Road in Bengaluru was the incubation hub for a host of tech multinationals in the mid '80s

### BOOK EXTRACT.

**E**xtract from *The Sona Story: The Textile to Tech Journey of Chettiar Industrialist C Valliappa* by Chitra Narayanan, and published by Bloomsbury

On the leafy, tree-lined Millers Road, barely a kilometre from the majestic Vidhana Soudha in Bengaluru, stands a tall, white building without a nameplate. Its beautiful *jaali* facade has an old-world charm to it. A large banyan tree stands guard near the gate. Elegant yet unassuming, this is Sona Towers, which houses the corporate office of the Valliappa Group, a textiles-to-education-to-technology conglomerate. It holds a special place in India's glorious information technology (IT) story. It is here that India's software, telecom and consumer revolution story took off.

The reception area has elements of a Chettinad home. The flooring—made with vibrant and exquisite Athangudi tiles—stands out. Lending great character to the ceiling is an ancient wooden door that once graced the Valliappas' 140-year-old ancestral Chettinad home in Poolankurichi, now repurposed as an artefact. Behind the reception desk is a stunning tree-of-life sculpture in silver.

The museum vibes continue into the conference room, where the legs of the table are wooden pillars transplanted from Chettinad. But the centrepiece is a framed photograph circa 1985 of a bullock cart bringing a satellite dish to the door of Sona Towers hanging on the wall. Nobody remembers why a bullock cart, rather than a truck, was used to tow the satellite, but the picture is symbolic of India's leapfrogging from the bullock cart age to the information age.

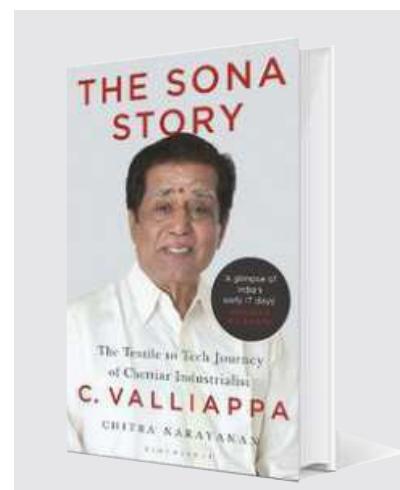
At that time Sona Towers had just been set up, a futuristic building for that

era, the development of which was painstakingly overseen by C Valliappa, a textile magnate, who was venturing into commercial real estate for the first time. The only construction experience he had was of building two state-of-the-art textile mills in Ramanagara, on the outskirts of Bengaluru, with some unique features like pillarless halls with a concrete roof, designed by a French architect.

### EARLY MILESTONES

Among the early milestones in India's IT story is the entry of the US multinational company (MNC) Texas Instruments (TI) into the country. And it was in Sona Towers that TI set up its software design centre. Sona Towers was the first private building in Bengaluru to install and use a satellite dish with uplinking facilities for all the IT companies there, with the organisation tasked with providing international communication services — Videsh Sanchar Nigam Limited or VSNL (then called Overseas Communication Services) — setting up an earth station here. Several black-and-white pictures of the executives of TI, along with then Karnataka chief minister Ramakrishna Hegde, then US Ambassador John Gunther Dean, TI India's first head, Charlie Simon, and Valliappa grace the walls.

Sona Towers went on to become the incubation hub for a host of multinationals such as Verifone, Oracle, Cisco and ANZ IT, igniting the IT boom in Bengaluru. The Centre for Development of Telematics, popularly known as C-DOT, had chosen Sona Towers as its corporate office. And it was from here that the C-DOT exchanges transformed the telecom landscape. Thus, in a sense, Sona Towers also catalysed telephony in India. The likes of APJ Abdul Kalam, N Vittal and Sam Pitroda, all passed through the doors of



**Title:** The Sona Story: The Textile to Tech Journey of Chettiar Industrialist C Valliappa

**Author:** Chitra Narayanan  
**Publisher:** Bloomsbury  
**Price:** ₹499 (paperback)

### MEET THE AUTHOR

**Chitra Narayanan** is a journalist and author. She is currently Editorial Consultant with 'businessline' and author of 'From Oberoi to Oyo'

the building as India's IT revolution and telecom boom took place.

Valliappa's eldest son, Chocko, remembers an event at Delhi's Taj Palace where Infosys co-founder and technocrat Nandan Nilekani was onstage delivering a keynote. Pointing to Chocko in the audience, Nilekani said, 'There is the man whose dad was the father of the IT revolution.'

Recalling those heady days, Nilekani says, 'The achievement of Mr Valliappa

was he was the first entrepreneur to work with a global multinational like Texas Instruments to put up India's first remote software development centre using satellites.'

Nilekani describes how, in the 1980s, Bengaluru, which had a long tradition of pioneering new technology (it was here that India's first electric pole was set up in 1905), had just begun to embrace software development.

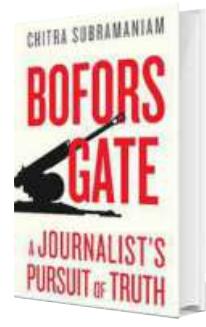
The IT hardware story had already taken off, with companies like DCM Data Products, ECIL and Patni Computers, among others. The new buzz was around software. Nilekani says, 'It was the latest cycle of technology in Bengaluru. And we led the cycle as Infosys had just moved to Bengaluru in 1983. The arrival of TI, the first multinational software development company in India, had its own impact. The fact that an American company from Texas was willing to come here gave a psychological boost to software development in the city. TI was a pioneer in remote development of software. The notion that sitting in an office in Sona Towers on Millers Road you could write software for a company in Dallas was a leap forward. There was an executive called V Mohan Rao in TI who was involved in the move.'

The IT czar says the earth station in Sona Towers helped unlock a government programme called Software Technology Parks of India (STPI). STPI is one of the most successful programmes of the government as it invested in buying more earth stations. These were under the Ministry of Electronics. One came up in Electronic City in Bengaluru and further fuelled the boom in software,' he says.

Valliappa recalls the excitement in Bengaluru those days, and how the whole ecosystem was geared towards enabling software development.

Excerpted with permission from Bloomsbury

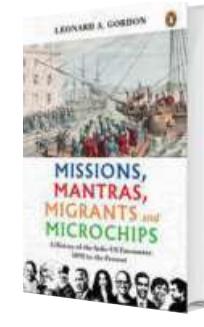
### NEW READS.



**Title:** BOFORSGATE: A Journalist's Pursuit of Truth

**Author:** Chitra Subramaniam  
**Publisher:** Juggernaut

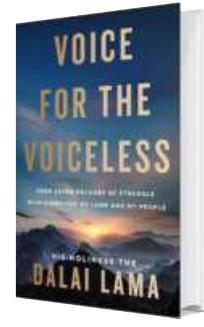
The book is more than a courageous memoir. It is an outstanding example of modern journalism, ethics, principles and tenacity



**Title:** Missions, Mantras, Migrants and Microchips: A History of the Indo-US Encounter, 1492 to the Present

**Author:** Leonard A. Gordon  
**Publisher:** India Viking

Deeply researched and engagingly written, this is a definitive account of Indo-US connection



**Title:** Voice for the Voiceless: Over Seven Decades of Struggle with China for My Land and My People

**Author:** Dalai Lama  
**Publisher:** William Morrow

A global icon shares his pain and his enduring hope in his people's quest for dignity and freedom

### Short take

## Implementing the aspirational districts programme

Kushankur Dey  
Jay Kumar Thakur

**I**nspired by the success of the Aspirational Districts Programme (ADP), Budget 2025-26 announced the launching of the Prime Minister Dhan Dhanya Krishi Yojana (PM-DDKY) scheme in association with the States, selecting 100 districts and benefiting about 1.7 crore farmers.

While the ADP covers agriculture and water resources as one of the five sectors, what is the rationale for launching a new scheme? Will it complement the ADP or remain a redundant one? An assessment report of ADP by the Institute for Competitiveness and Social Progress Imperative (2020) reveals that

agriculture, water resources and financial inclusion are challenging areas to drive change for most aspirational districts. Hence, it is imperative to implement the PM-DDKY as a dedicated scheme to boost agricultural productivity and growth in aspirational districts. With a renewed focus on pulses and millets, the scheme aims to promote sustainable agriculture, crop diversification, integrated farming systems/agroforestry, and high-yielding variety seed production.

District selection criteria for PM-DDKY include low productivity, moderate cropping intensity, and below-average credit offtake. So, PM-DDKY must adhere to the 3Cs framework of ADP: convergence of Central and State schemes, collaboration of Central and State-level

nodal officers and district collectors, and competition among selected districts using the "Champions of Change" (CoC) monitoring dashboard.

State governments can consider a district-level database curated by the International Crop Research Institute for the Semi-Arid Tropics and Tata Cornell Institute for selecting additional aspirational districts which are far away from achieving desired outcomes in the sector. This approach can reduce the district selection bias and duplication of areas of interventions.

Third, the ADP identified 49 performance indicators and 81 data-points, of which 10 indicators like net irrigated area, crop yield per acre, certified seed distribution, crop insurance, farmers' access to electronic markets and APMCs, livestock artificial

insemination, animal vaccination, and 12 data-points are considered for agriculture and water resources sector. This accounts for 20 per cent of total composite score used to rank district performance in agriculture and water resources. District administration should revisit the performance indicators or add some new indicators and their measurement for 'delta' ranking capturing period incremental change.

Implementing agencies, viz. NGOs, community-based organisations, and farmer producer organisations must put a concerted effort into planning, and executing the scheme in alignment with the ADP.

Dey is Associate Professor, and Jay Thakur a doctoral scholar, at IIM Lucknow. Views are personal

### thehindu businessline.

#### TWENTY YEARS AGO TODAY.

March 17, 2005

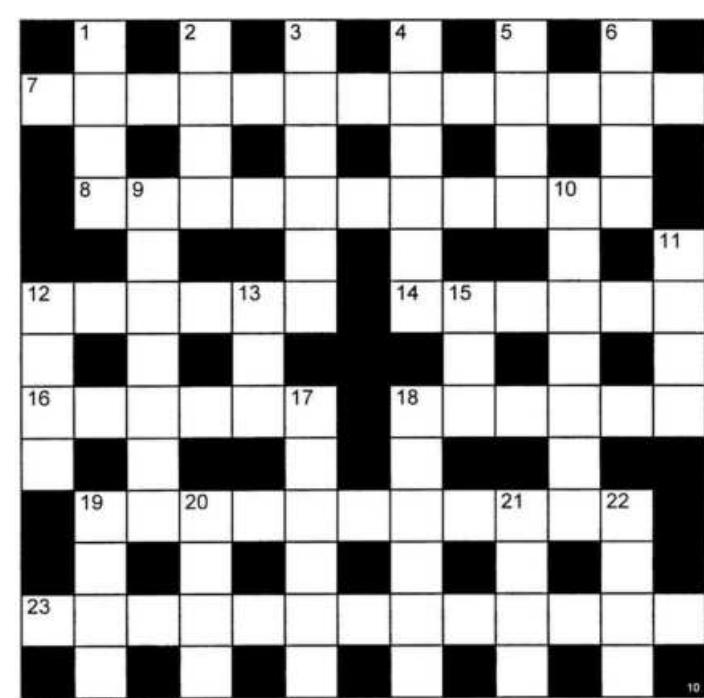
##### Turnover-based fee likely for commodity brokers

The Forward Markets Commission (FMC), the regulator for commodity exchanges in the country, is toying with the idea of introducing a fee for commodity brokers. Besides registration charges, a fee based on their turnover may also have to be paid by commodity brokers.

**BSNL, Tata, Reliance bag ₹8,000-cr rural phone project**  
Bharat Sanchar Nigam Ltd, Reliance Infocomm and Tata Teleservices have bagged the Government sponsored ₹8,000-crore plan to provide 8 million fixed line telephones to rural households by 2007. The project is being supported from the Universal Services Obligation (USO) Fund. The operators have quoted between ₹4,500 and ₹7,000 per line.

**'Delhi, Mumbai airports need ₹15,120 crore for revamp'**  
The global technical advisor for restructuring of airports has made a preliminary estimate that a capital investment of ₹8,720 crore would be required for Delhi, while for Mumbai, it would be ₹6,400 crore. An official statement issued today points out that these estimates do not include the cost of likely relocation of some of the assets and removal of encroachments.

### BL TWO-WAY CROSSWORD 2653



#### EASY

##### ACROSS

- 7. A wild guess (4,2,3,4)
- 8. Good fellowship (11)
- 12. Pieces of turf, accidentally raised (6)
- 14. Slipshod; wishy-washy (6)
- 16. Chess piece (6)
- 18. Started voyage (6)
- 19. Dejected, cast-down (11)
- 23. Seizing for military use (13)

#### DOWN

- 1. Stylish, elegant (4)
- 2. Particle of matter (4)
- 3. Breathes loudly during sleep (6)
- 4. Rebukes (6)
- 5. German river (4)
- 6. Pedigree (4)
- 9. Counsellor (7)
- 10. Sudden inclination to act (7)
- 11. Observed narrowly (4)
- 12. Pats at with cloth (4)
- 13. A brace (3)
- 15. Meadowland (3)
- 17. Protection of invention (6)
- 18. Divides equally (6)
- 19. 'Bald' water-fowl (4)
- 20. Trees (4)
- 21. Bait, enticement (4)
- 22. Religious sisters (4)

#### NOT SO EASY

##### ACROSS

- 7. As a wild guess, may have been executed during the night (4,2,3,4)
- 8. A dare, a crime – and perhaps a feeling of companionship (11)
- 12. Bits of turf dislodged in about four spots (6)
- 14. Slipshod way polyp's dealt with (6)
- 16. A warm drink for a man of the church (6)
- 18. Went to sea having declared the French get taken in (6)
- 19. Being dejected, centre's upset about Autumn (11)
- 23. Arbitrarily taking over the order ere gin can be mixed (13)

#### DOWN

- 1. Little bird without a tail, but such elegance! (4)
- 2. Particle of matter to be found in the forenoon (4)
- 3. Is sleeping soundly (6)
- 4. Rebukes one for the carbon one conceals (6)
- 5. German river that's alternative to them (4)
- 6. One of 20 may be found in the boot (4)
- 9. One giving counsel to six perhaps reads about them (7)
- 10. On this, one may be doing what comes naturally (7)
- 11. Narrowly observed the contents of phoney edition (4)
- 12. Fingerprints taken from fish? (4)
- 13. A couple needed to go around the West (3)
- 15. Grassland the French bring to a conclusion (3)
- 17. Shiny leather and what protects its copyright (6)
- 18. Equally divides one's investment perhaps (6)
- 19. Water-fowl gets company to turn up (4)
- 20. Poet's immemorial plants are large (4)
- 21. It may be seen as attractive to break the rule (4)
- 22. It's the ladies who may be in retreat (4)

### SOLUTION: BL TWO-WAY CROSSWORD 2652

**ACROSS** 1. A pig in a poke 7. Consign 9. Will 11. Louts 12. Direct 14. Intelligent 18. Deputy 20. Eases 22. Pate 23. Insured 24. Church bells  
**DOWN** 2. Penguin 3. Nine 4. Knife 5. Scold 6. Flats 8. Inspects 10. Singlets 13. Fly 15. Nostril 16. Adapt 17. Aside 19. Pitch 21. Pith

## NEWS SNIPPETS.

## Energy storage mission



Delhi-based think-tank Council for Energy, Environment and Water (CEEW) has, in a recent report, analysed India's battery energy storage system (BESS) and pumped storage hydro (PSH) needs, under high and moderate demand scenarios, if India sets up 500 GW and 600 GW of renewable energy by 2030. In the 500-GW moderate demand scenario, India will need 132 GWh of BESS and 100 GWh of PSH. However, in the 600-GW high demand scenario, the storage requirement will increase to 280 GWh of BESS and 100 GWh of PSH. This aligns with India's energy storage obligation for 2030. As of January 2025, the operational BESS capacity stands at 360 MWh. "The gap between existing and required storage capacity indicates the urgent need to fast-track investments in energy storage," says the CEEW report, titled 'How can India meet its rising power demand'.

## Cleaner, cheaper at 600 GW



The CEEW report also notes that setting up 600 GW of clean energy across more states could reduce generation costs by 6-18 paise per unit, eliminate the need for new coal plants, save ₹13,000-42,400 crore in power procurement costs, and create 53,000 to one lakh additional jobs — all while cutting carbon emissions by 9-16 per cent, compared with 2023-24.

Achieving 600-GW non-fossil fuel capacity would require significant investment in flexible resources such as battery storage (70 GW of four-hour battery energy storage systems), pumped storage hydro (13 GW), and retrofitting 140 GW of coal capacity to manage grid stability. The rapidly declining cost of battery storage favours a high RE pathway. For instance, in the last two years alone, tariffs for stand-alone battery storage have dropped by 65 per cent, without any subsidy support, the report says.

## BHEL's bid for floating solar



The public sector power equipment major BHEL is the sole bidder for building two floating solar plants on the Rengali reservoir in Odisha. The plants — 100 MW and 200 MW capacity, respectively — will be owned by a joint venture of the central public sector company NHPC and Green Energy Development Corporation of Odisha.

The project would have come up earlier, but Odisha's electricity distribution company, GRIDCO, did not accept the bid tariff of ₹3.56 a kWh. The tender was floated again in April 2023 and BHEL turned out to be the sole bidder. The bid is "under evaluation".

## ● CLIMATE OF WORRY

## Solar industry faces sundown challenge

**GLOOMY OVERCAST.** Extreme weather events are robbing the country's solar projects of their required share of sunlight, efficiency

M Ramesh

**H**ere is some not-so-good news for solar power developers. Every year, a Slovakia-based service provider, Solaris, comes out with a report on solar irradiance — how much sunlight falls on a square metre of earth's surface. It also records the difference between two parameters — global horizontal irradiance (GHI) and long-term average (LTA) irradiance.

GHI is a measure of the total sunlight received by a unit area, including direct and diffused light, which is used to determine the solar energy potential of a given spot.

What Solaris said about India is not encouraging. The difference between GHI and LTA has been reducing in the last few years.

"In 2024, most of India experienced a decline in solar irradiation by 3% to 10%, marking another year below average. India's 2024 monsoon season was one of the wettest in recent years, with rainfall exceeding the long-term average (LTA) by nearly 8%. While this was beneficial for agriculture and water reservoirs, it posed significant challenges for solar energy production," its report stated.

It further notes that "increased cloud cover, prolonged rainy periods, and extreme weather events reduced the availability of sunlight, particularly in regions like central India and the Western Ghats. Regions such as Gujarat and Maharashtra — key hubs for solar power — experienced extended periods of below-average irradiation due to persistent cloud cover".

## WAKE-UP CALL

The 10 per cent drop is worrying, because it means that solar generation can fall below 'P90 yield levels'



**DIM VIEW.** Reduced availability of sunlight is the 'hidden challenge' facing solar farms ISTOCK

— namely there is a 90 per cent chance that the actual energy yield will be equal to or higher than the P90 value, and a 10 per cent chance that it will be lower.

"This can trigger viability concerns, inability to service debt, breach of financial covenants, resizing of debt and also trigger minimum guaranteed generation metrics in the PPAs," says Vinay Pabba, CEO of Vibrant Energy, a renewable energy company.

People around the world have noted Solaris' numbers. "This is a crucial analysis and a wake-up call for the solar sector in India," says Susana Gutierrez, Managing Director of Kai Energy Capital, Columbia, who describes the numbers as "concerning".

So far, there is little evidence that generation per MW of installed capacity has fallen, but that could change in the future.

Many, including Pabba, attribute the falling GHI-LTA difference in India to climate change, which has upended precipitation projections. You never know when a region may get unexpected rainfall, dampening solar generation.

"Due to climate change, weather patterns are changing in many places," notes MK Singh, founder and CEO of Bengaluru-based cli-

mate consultancy Net Zero Think. "We did a modelling a few years ago and found that wind, solar and hydro — all weather-dependent resources — do not follow past trends," Singh tells *businessline*.

He cautions that it is imperative to factor in climate change before investing in renewable energy projects.

## TECHNOLOGY SELECTION

Solaris' 2024 analysis has shaken up the Indian solar industry.

Sujay Ghosh, Country Head, First Solar, a US-headquartered solar module (thin film) manufacturer with a factory near Chennai,

cautions that "overestimating the weather will adversely impact project returns for the investor". Ghosh says the Solaris report "brings into focus the diligence needed in technology selection to prioritise life-cycle energy yield versus initial nameplate efficiency".

"The variability in climate and departure from historically modelled trends will introduce some uncertainty in predicting solar energy generation," notes industry veteran Pashupathy Gopalan, who is now co-Chairman and CEO of Fenice Energy, a company that specialises in rooftop solar plants.

"Last year seems to have been lesser-than-expected solar irradiation in India because of heavier-than-normal rainfall. Investors will need to account for such variability and perhaps use P90 estimates when making investment decisions. This will marginally drive up the tariffs," he says.

So, what can one do? You cannot control the sun, nor can the climate change problem be addressed quickly.

In his LinkedIn post, Pabba describes the fall in solar irradiance as "the hidden challenge facing India's solar farms". Perhaps the first step in finding a solution is to recognise the problem.

The answer is to find and use technologies that raise generation at least to the extent of countering the falling irradiance.

High-efficiency modules, such as perovskite-silicon tandem modules, which absorb a wider spectrum of light and can pick up some energy even in diffused light, may offer a solution. The perovskite-silicon cells raise sunlight-to-electricity conversion efficiency from today's 22-23 per cent to above 30 per cent. While perovskite-silicon tandem cells are a good five years from hitting the market, heterojunction (HJT) cells may serve the industry's immediate needs.

## ● GREEN SCREEN

## 142 GW of RE projects coming up across India; Gujarat tops table

M Ramesh

**G**ujarat, with 46,441 MW of renewable energy (solar, wind and solar-wind hybrid) capacities under construction, is the highest contributor to the 1,42,667 MW of RE capacity being built, according to data from the Central Electricity Authority. India today has 1,67,709 MW of installed RE capacity (including about 12,000 MW non-wind and non-solar sources such as biomass and small hydro).

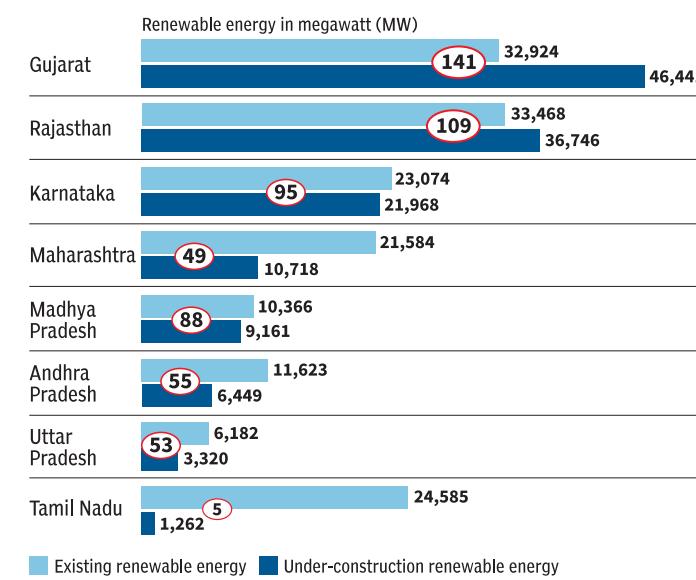
The under-construction capacity includes 82,348 MW of solar, 25,532 MW of wind and 35,787 MW of solar-wind hybrid — indicating that hybrid is gaining ground.

In contrast, among high RE states (those with over 20 GW of RE capacity), Tamil Nadu is the laggard, with 1,262 MW under construction.

Rajasthan follows Gujarat with 36,746 MW under construction. Gujarat and Rajasthan together account for 58.3 per cent of RE capacity being built, indicating an excess concentration of capacities in these states, with implications for evacuation infrastructure.

## Clean energy hotspots in India

Statewise comparison of new additions to renewable energy capacity



■ Existing renewable energy ■ Under-construction renewable energy

○ Under-construction as per cent of existing renewable energy

Source: CEA and MNRE

Uttar Pradesh, Madhya Pradesh and Andhra Pradesh are fast catching up. UP, which currently has only 6,182 MW, is set to add 3,300 MW

of solar capacity in 2025, of which 2,100 MW is scheduled to be commissioned in May. These are at Lalitpur (600 MW), Jhansi (600



MW), Chitrakoot (800 MW) and Mirzapur (100 MW). The 1,200 MW Jalaur plant is scheduled to go on stream in August.

MP will add 9,161 MW, almost doubling the existing capacity of 10,366 MW; AP, similarly, will add 6,449 MW to its current 11,623 MW.

A better part of the upcoming

142 GW is likely to be commissioned in 2025-26.

Four central public sector companies, under the Ministry of Power, are building 11,289 MW, or 8 per cent of the under-construction plants. NTPC tops with 5,417 MW, followed by SJVN with 3,848 MW and NHPC with 1,790 MW.

## Why have smart electricity meters not taken off in India?

From pushback by consumers worried over bigger bills to delays in supply and coordination, the smart meter project has faced its share of blips

K Bharat Kumar

**W**ith only about 2.3 crore smart electricity meters ticking across India, the country is nowhere near its targeted 25-crore installations by March 2026.

In December, a parliamentary panel urged the power ministry to expedite the roll-out of the smart meters, even while observing that funds utilisation remained 'sub-optimal'.

A survey of more than 5,000 consumers in Jaipur, conducted by Princeton University's School of Public and International Affairs, showed that their concerns were 'mostly about the accuracy of smart meters and the consequent impact on their electricity bills', in contrast to the worries over data privacy and security in developed countries.

In India, there have been protests against smart meters by users who claimed that their bill amounts increased post installa-

tion; connections were automatically cut off if the bill was not paid. Smart meters bill more accurately than the old, electromechanical meters.

## DYNAMIC TARIFFS

Smart meters, critical for the financial health of electricity utilities, enable the roll-out of dynamic tariffs based on supply bottlenecks and to nudge a change in consumer behaviour patterns. Smart meters also alert consumers about wasteful use of energy. The smart meter's optimal performance depends on factors such as metering (measurement of electricity consumption); communications (conveying meter data to a utility's server); and integration of data with applications such as billing, customer care, and apps that help with analytics.

## MULTIPLE DELAYS

"The slow pace of smart meter roll-out is due to multiple factors," says Reji Pillai, presid-

ent of India Smart Grid Forum. "Several companies have taken years for implementation because they didn't get everything right at the start," he adds.

"Studies on smart meter acceptance in developing countries highlight the interplay between socio-economic factors, technological infrastructure, and government policies," notes the

Princeton University study. "In India, between 2009 and 2013, the power ministry awarded 14 smart grid pilot projects across the country under the Restructured Accelerated Power Development and Reforms Programme (R-APDRP). Pillai says there were delays galore even in implementing small segments of the project — when companies

were tendered to supply and install 5,000 to 20,000 smart meters, it took 4-5 years to implement, though companies had agreed to do it in 18-24 months."

The use of 3G communication technology in smart meters added to the sector's woes. "When the country moved beyond 3G technology, meters that used 3G were made to fall back upon 2G, which had its own problems," he says. The Revamped Distribution Sector Scheme was conceived in 2019, and it set the 25-crore smart meter target for 2026. The Covid pandemic slowed down the roll-out quite a bit.

## PREPAID VS POSTPAID

Also, the decision to set all smart meters to operate as 'prepaid' meters, despite objections from most stakeholders, further slowed matters. A smart meter can be programmed to operate as post-paid or prepaid. Nowhere in the world have smart meters been installed purely as prepaid meters, without giving consumers a choice, Pillai observes. "About 75 per cent of revenue comes from high-value customers — those with connections in megawatt scale and pay crores of rupees per month. There is no way prepayment would work for them; nor is there any technology for a remote-controlled meter attached to a MW-scale connection," he says.

The standard bidding document (SBD) prepared for the smart metering programme was good. The standardised process, and use of common specifications across states, helped bring down the price of the smart metering system. But the errors that crept in along the way included multiple changes to the SBD — "it has undergone changes 12 or 13 times."

Then came the programme of empaneling vendors and contractors, many of whom had little or no exposure to the smart metering ecosystem. Such choices and the involvement of agencies with no prior experience have slowed the pace of installations, Pillai notes.

Consensus is now growing among utilities and other stakeholders that the prepaid-only option was a mistake. Observers hope that the future could be of postpaid meters.

Assam, Madhya Pradesh and Bihar are among the states with a better take-up of smart meters.

## OFFICE BUZZ.

Tough assignment for Lip-Bu Tan at Intel

After months of hunting, Intel finally appointed a new CEO — 65-year-old Lip-Bu Tan — and investors cheered the news. Intel's shares rose more than 15 per cent after the announcement. Tan, Intel said, is an accomplished technology leader with deep semiconductor industry experience. He

will be CEO effective March 18 and succeeds interim co-CEOs David Zinsner and Michelle Johnston Holthaus. The Malaysian-born, Singapore-raised naturalised American had been CEO of chip design software firm Cadence Design Systems, where his leadership qualities stood out as he lifted the fortunes of the company. The question is whether he will be able to replicate the success at troubled Intel — especially as he is up against stiff competition from Jensen Huang-led Nvidia and Lisa Su-led AMD. He has already told Intel employees that "It won't be easy". But his mantra of "Stay humble, work hard, delight our customers" is a sound one.

### Increments will be low

It's grim news for employees on the pay front. Deloitte India Talent Outlook 2025 says there is a clear focus among companies on optimising compensation cost budgets, with pay increases for 2025 being forecast at 8.8 per cent

(compared with 9 per cent in 2024). The survey shows 75 per cent of companies will either reduce or keep their pay

increases the same as last year. Furthermore, while most sectors will keep the increment growth stable or moderately less than the previous year, the consumer products sector expects a significantly lower increment budget.

Of course, companies will try to retain top performers, but even they will get a moderately lower increment compared to last year. Top performers can expect a 1.7x higher increment than average performers. Most companies expect to not increase their promotion-linked pay hikes compared with previous years.

Prakhar Tripathi, Partner, Deloitte India, said, "In an environment where companies are witnessing muted revenue growth, compensation budgets are naturally coming under pressure."



### ◎ UNALLOYED AMBITION

# Jindal's steely expansion on global stage

**SHOPPING SPREE.** Jindal Steel and Power Ltd chief is locked in a fierce bidding war with Baku Steel for Italian Acciaierie d'Italia

Abhishek Law

**B**illionaire businessman Naveen Jindal, chairman of Jindal Steel and Power Ltd, is expanding his steel and alloy empire overseas, even as he ramps up his power play in India. His latest move is a bidding war against Azerbaijan government-backed Baku Steel for control of the flagship Italian alloy-making company Acciaierie d'Italia. If he gets this, he adds one more asset to his fast-growing empire across India, West Asia, and Africa, even as he consolidates presence in Europe.

Jindal has had a remarkable year, marked by his acquisition of Vtikovice, a 750,000-tonne-per annum downstream steel processing mill based in the Czech Republic. He is in the process of acquiring the Bhadreshwar Vidhyut power plant in Gujarat at ₹500 crore. And he has announced his venture into nuclear power projects in India through a new subsidiary, Jindal Nuclear Power Pvt Ltd (part of Jindal Renewables), with plans to build 18 GWe of nuclear capacity over the next two decades, at an estimated investment of \$21 billion.

He has also ramped up his national and international operations across the steel, coal and iron ore businesses as well as beefed up the power portfolio.

#### NEGOTIATING HARD

The 54-year-old steel baron's pitch to take control of Acciaierie d'Italia is primarily through the privately owned promoter entity Jindal Steel (International).

Discussions with the Italian government are likely to begin "soon" and the company has made a revised offer of at least €2-3 billion (₹18,000-27,000 crore), reportedly outbidding Baku at the moment, sources in the know said.

"If required, offers could be upped by another €1 billion or so. But until discussions with the gov-



**MORE IN STORE.** Naveen Jindal, Chairman, Jindal Steel and Power Ltd *WF*

ernment begin, all things are fluid," a person in the know told *businessline*.

Jindal's first offer was at least €120 million for the warehouse and guaranteed €2 billion in investments for decarbonisation. By contrast, Baku Steel is offering around €500 million for the warehouse, with a likely addition of €450 million. The catch? Baku is guaranteeing cheaper gas supplies (Azerbaijan is a major gas supplier to Italy); Jindal, on the other hand, is proposing an electric arc furnace set-up — a technology his companies specialise in.

In terms of employment, the Italian steel group has around 9,000

workers. Both companies have proposed job cuts.

The Jindal Group did not respond to queries from *businessline*.

In its heyday, Acciaierie d'Italia used to produce 12 mtpa of steel, but is currently operating at 2.5-3 mtpa capacity in the face of financial difficulties. The plan is to hike capacities to 7 mtpa.

#### EUROPEAN FOOTPRINT

Earlier this fiscal, Jindal, through its private investment arm, bought controlling stakes in the Czech steel-maker Vtikovice Steel. The deal, valued at €150 million, is noteworthy because it will give the Jindal Group access to value-added

premium offerings, which are in demand in the region.

His next round of expansion in Europe comes amid the looming Carbon Border Adjustment Mechanism (CBAM) rules — the world's first carbon tariff on imported goods — which will come into force on January 1, 2026. Designed to support the European Union's ambitious decarbonisation goals, CBAM will impose a carbon fee on imports such as steel, aluminium, and fertilizers, while seeking to ensure the competitiveness of European industries. So, steel prices will be determined by the carbon emission of the product at the time of manufacture.

Additionally, there are the proposed Trump tariffs — according to which, alloy moving from Europe to the US will have an additional levy — causing concern for the listed steel-makers in India who export to these countries.

Incidentally, Jindal runs India's third largest private steel company, Jindal Steel and Power Ltd (JSPL), which also exports to Europe — a segment witnessing a decline due to economic slowdown in large buyer markets like Belgium and Spain. Thus, the European acquisitions give him a foothold in the region's markets and an entry into value-added or premium products.

Jindal is also eyeing operations in Venezuela's largest iron-ore complex, a project it has led since late 2023. This aligns with Jindal's other ambition of ramping up his power generation portfolio.

In India, Jindal Power currently has projects in Raigarh (3,400 MW), Nellore (600 MW) — acquired in 2022 at ₹300 crore, and at Dhule (300 MW). The acquisition of Bhadreshwar Vidhyut adds 300 MW to the company's 4,600 MW portfolio.

The company is also setting up a 300 MW thermal power project overseas, in Botswana, and expanding its footprint in renewables.

Jindal Renewables (JRPL) aims to pioneer renewable energy projects in India, currently developing close to 3 GW of diverse renewable assets with power offtake locked in. It aims to develop around 12 GW of renewable energy assets, storage facilities, as well as significant green hydrogen production facilities by 2030 and become amongst the largest de-carbonisation solution providers in the country.

## First impressions and fresh starts

### PEOPLE@ WORK



KAMAL KARANTH

"I should have been in your seat if only the management had shown a little more trust in the people who built this company," one of my direct reportees told me candidly when I assumed a C-suite role for the first time. We didn't start off well, thanks to that meeting, and parted ways a few months later. This begs the question whether it matters on what footing we set off in our new professional relationships?

Leadership changes are constant across the globe. The US is still coming to terms with the new president and his entourage, Germany has a new leadership, and Canada has a new prime minister. In the enterprise world, Unilever and Nissan promoted their internal candidates as global CEOs. Back home, Diageo, LTIMindtree, Honda Cars, DBS and Standard Chartered Bank have all announced new CEOs.

**THE FIRST 100 DAYS**  
I hired a new sales leader, and he hit the road running with customers and brought the sense of urgency required externally. But, internally, he drove colleagues crazy. He'd be late for most meetings; he wouldn't make notes, and hence become confused over internal product lines. Moreover, he wouldn't respond to his peers on time. In short, his say-do ratio in the first three months didn't impress most stakeholders.

In another instance, in my first overseas assignment, I replaced a CEO who was an incumbent for 10-odd years; two senior people resigned in the first week, stating they couldn't work with anyone else after working with their favourite CEO for so long. I was amused that I wasn't even given a chance.

**TRUST FACTOR**  
Management professor Daniel McAlister published a paper in 1995 in which he postulated that trust has two fundamental dimensions: affective and cognitive. Cognitive trust refers to the focus on the reliability, competence, and dependability of the individual or entity in question. The affective trust dimension emphasises the emotional bond, empathy, and feelings of connection and warmth between parties involved in an interaction.

In all leadership transitions, cognitive trust comes into play. Leaders taking charge must move quickly if it's a turn-around; and if the mandate is to change the culture, they may start with some not-so-pleasant conversations or shake up the tree with some strange behaviours.

Once, our then Europe head came to India and refused a dinner with the leadership team, which was a sort of tradition till then. "The company is cutting its cost globally, and I can't fathom how the leadership team can go on a five-star dinner," was his explanation. He sure was sending a message, but, at the same time, for the leadership team the cognitive trust was getting shaken.

In instances where we see immediate resignations of team members as soon as a new leader takes over, it is because they are unable to make a fresh beginning bey-

ond the 'affective trust' they have built with their old boss.

#### BEING SELF-CONSUMMATE

It's quite natural for new leaders and their teammates to be in a self-consummate mode in their first few interactions. For leaders, there is a need to prove their appointment or promotion, whereas their new reportees need to protect their past identity and recognition. Hence, the first few conversations should have components of building cognitive trust, like turning up on time, making notes, not getting distracted by phones, actively listening, and acknowledging the past. However, some leaders are in a rush to show the hammer, and some reportees are desperate to play victim. In these self-serving natural expressions, the opportunity to make new beginnings takes a back seat, and the stormy first impressions become challenging to erase. Is that why they say "You never get a second chance to make a first impression"?

#### THE SECOND CHANCE

In an organisational setting, often we do get opportunities to change first impressions. Despite the lingering scars, most leaders and reportees have a chance to revisit their first act. One of my employers had a unique exercise called 'assimilation workshop'. After three months of each new leader's term, the learning and development (L&D) head would take all reportees to an offsite and ask them to list all the good things and non-workable issues they observed during the initial months. Then the new leader would be called in to absorb those questions and respond, with help from the L&D head. The anonymity gave the reportees the power to raise their concerns, while it also served as a collective feedback to leaders on appropriate behaviours and how they could change things.

#### NEW BEGINNINGS

The first quarter of any calendar year begins with many leaders changing jobs. In January and February, we observed some 148 leaders starting with new employers in the GCCs, IT services and unicorns of India. Most have a mandate to start a new business, expand an existing product line, turn around a unit, expand overseas, or sustain success. In all these contexts, the leaders have the onus to build cognitive trust with their new team, and their team members must make fresh beginnings in their new realities.

However, if they constantly find themselves trying to prove their worth to their new team or boss, they have already forgotten their value.

Kamal Karanth is co-founder of Xpheno, a specialist staffing firm

### ◎ GOLDEN OPPORTUNITY

## How GRB churned itself into a ghee giant +



**AROMA OF SUCCESS.** GR Balasubramaniam (right), Managing Director of the ₹1,010-crore GRB Dairy Foods Private Ltd

Aishwarya Kumar

**A**fter milk, ghee is the second most consumed dairy product in India and a crowded category. But it's a category where regional players have held their own against national heavyweights like Amul, Aashirvaad (ITC), Britannia, and Gowardhan, and churned up growth. Take Bengaluru-based GRB Dairy Foods Private Ltd, which from humble beginnings has scaled up into a ₹1,010-crore company — riding on strong connections with retailers — and is now on an ambitious expansion journey.

The company is pumping in ₹100 crore to ramp up its Nilakkottai factory, in Dindigul district, where, beyond ghee, it produces snacks and sweets. The expansion is expected to be completed by FY26.

**A VITAL 'BREAK'THROUGH**  
When founder GR Balasubramaniam first approached retailers with his brand of ghee, he was met with scepticism. People buy from their local dairy, why would they pick yours, they asked him. The year was 1984. Balasubramaniam and his team would carry along 10-20 ghee bottles, hoping that shopkeepers would agree to stock them.

One fine day, his fortune changed in an unexpected way. Trying to convince a shopkeeper to give his product a try, he placed a few bottles on the counter. It was a busy day and, in the rush, one of the bottles slipped and shattered on the floor. The golden ghee splashed across the store entrance. Dejected and embarrassed, Balasubramaniam bent down to clear the glass shards and mop up the spilt ghee. As he turned to leave, the shopkeeper, in a fit of compassion, offered

to take a box containing 24 ghee bottles. Eventually, the shopkeeper continued to stock the product and recommended it to other stores too.

In the beginning, he was working with just 75 kg of butter a month, Balasubramaniam recalls. "Within a year or two, it was already selling in 10 shops and, soon, I was moving 1,000 kg per month," he says.

#### BUTTERY BEGINNINGS

Balasubramaniam had his exposure to the world of business at the tender age of 13, when he joined his sister's family venture in Bengaluru. Eventually he started his own business, selling butter door-to-door. Quickly realising that the product's limited shelf-life meant it had to be sold by the 15th of every month, he decided to convert the butter into ghee for extended shelf-life.

Post 1991, his ghee began gaining traction in the busy retail hubs of Jayanagar, Basavanagudi, Rajajinagar, Malleshwaram, and Vijayanagar in Bengaluru. Word of mouth helped, and demand soon outpaced supply. However, production remained a challenge.

Balasubramaniam was the face of the company. Though he had helpers and his family supporting him in running the business, retailers knew him personally and preferred to deal with him alone.

Until 1993, all manufacturing took place in a small setup in Bengaluru's City Market. As demand surged, he realised he needed a dedicated production space and team. This pushed him to transition from a personal, hands-on approach to a distributor-based model.

To ensure that the market associated more with the product than him, he realised he needed to establish a strong brand identity. Thus, in Chennai, he introduced his product under

the brand name 'Udhayam'.

The strategy worked. Branded ghee was placed in key retail locations, and sales picked up. Shops in areas like T Nagar, Mylapore, and Kothawal Chavadi — once Asia's largest fruit and vegetable market — became strongholds for the brand. Slowly but steadily, Udhayam gained traction in Tamil Nadu.

He replicated the strategy in Bengaluru with the GRB brand name. In 1999, he set up a ghee production factory in Hosur, and in 2004, the company began exporting to Singapore and Malaysia.

#### DIVERSIFICATION

GRB currently operates six plants for ghee production. In addition, it has dedicated factories for instant mixes, sweets, and masalas, while the Nilakkottai factory focuses on snacks. A new plant in Nilakkottai has begun producing sweets.

With its expanded portfolio of products, GRB targets revenues of ₹1,500 crore for FY26.

GRB sources butter from across India through a network of regular suppliers. In the ghee market, it holds a 27.8 per cent share in Karnataka, 24.7 per cent in Tamil Nadu, 21.3 per cent in Andhra Pradesh, and 28.5 per cent in Telangana.

Ghee contributes 75 per cent of GRB's total revenue, while the rest comes from its food segment. With a presence in 39 countries currently, GRB aims to increase this to 50 countries by the next financial year. Exports contribute ₹100 crore, and the company says it is profitable.

With ghee consumption in India steadily rising, GRB seems to be on a well-oiled wicket. But it's also in an increasingly competitive field, marked by the entry of several new D2C brands with strong digital play.

CM YK



**COPING WITH CHANGE.** Justin Trudeau, former prime minister of Canada *REUTERS*

**FUND FACTS.****\$140 million**

Darwinbox Digital Solutions Private Limited received funding from KKR India Private Equity, Gravity Holdings, and Partners Group on March 5, taking the total funding to \$268.48 million.

**\$70 million**

Girnar Insurance Brokers Private Limited received Series B funding from Beams Fintech Fund, BNP Paribas Cardif, and MUFG Ganesh Fund on March 4, taking the total funding to \$145.78 million.

**\$43.1 million**

Intellihealth Solutions Private Limited received Series C funding from Accel India, Westbridge Capital Partners, and Info Edge Ventures on March 6, taking the total funding to \$68.43 million.

**\$14.05 million**

Munchmart Technologies Private Limited received Series A funding from Hara Global Capital, Accel India, Sumer Juneja, Kunal Shah, and Gaurav Munjal on March 7, taking the total funding to \$16.05 million.

**\$11.51 million**

Ce Serviced Offices Private Limited received funding from Carpediem Capital on March 7, taking the total funding to \$12.81 million.

**Source:** PrivateCircle Research, a private market intelligence platform

**RE POSTS.**

**X** Most startup ideas that don't funded have usually 3 shortcomings  
1) small TAM  
2) non delta 4 or non differentiated solution  
3) founder quality (not pedigree)

**Kunal Shah**  
@kunals11

**X** founders outside india are now copying their "capital efficiency theater" in pitch decks. When VCs say do more with less, they really mean act like an indian startup

**Gregoire Colcombet**  
@GColcombet

**X** Bangalore is often called the "Silicon Valley of India" due to its booming tech startup ecosystem. Interestingly, many startups are now adopting AI not just for efficiency, but to unlock new business models. In fact, the initial investment in AI can lead to a potential return on investment exceeding 200%. Yet, surprisingly, many founders still hesitate to

**Rushabh Shah**  
@Rushabh\_Shah777

**SHOULDER TO SHOULDER**

# D2C handbag brands carry it off, in style

**ASPIRATIONAL ACCESSORY.** Startups stoke demand for mid-premium bags with a judicious mix of design, pricing, and functionality

**Jyoti Banthia**

**F**or Meher, a handbag is more than just an accessory or a fashion statement — it's a companion that moves with her through the day. From an oversized tote for work to a compact crossbody for casual evenings, every bag she carries tells its own story — from its origin, to its place in her life. And, increasingly, those stories are being crafted by Indian handbag startups that are redefining the segment with unique designs, sustainable materials, and a keen understanding of what modern Indian consumers want.

Home-grown handbag brands like Zouk, Miraggio, and DailyObjects have rapidly captured a significant market share with their unique positioning.

The sector has also attracted steady funding in the last five years, totalling about \$37.2 million, according to data from market intelligence platform Tracxn. Funding peaked in 2024 at \$20 million across two rounds, while it stood at \$10.5 million across four rounds in 2023.

**MARKET OPPORTUNITY**

The Indian handbag market has traditionally been dominated by international brands or local mass-market products, says Mohit Jain, founder of Miraggio.

Consumers often buy multiple handbags in a year, including work bags, casual bags, and occasion-specific clutches. But "there was no single brand that stood out as the go-to option", he says, adding that his company set out to solve this pain point. Moreover, post Covid, consumer preferences have shifted towards aesthetic looks, functionality, and affordability, he observes.

**BRAND POSITIONING**

Startups in the handbag segment



**PURSE STRINGS.** Zouk bags have India-centric designs; (right) DailyObjects sports a contemporary, minimalist look

are differentiating themselves from established players through a mix of design, pricing, and product functionality.

Rising disposable incomes and aspirational shopping habits are driving the demand for mid-premium handbags.

D2C brand Zouk's design language is India-centric, drawing inspiration from multiple cities, monuments, and cultural elements.

"Most legacy brands copy Western designs or source products from China. We saw a gap for a distinctly Indian design language," says Pradeep Krishnakumar, co-founder, Zouk. The company manufactures all its handbags in India and works with local artisans.

Gurugram-based Miraggio, which positions itself in the premium handbags segment, launches new collections every month, aimed at spurring repeat purchases. "We are the only brand in India that launches handbags

every month. This allows us to stay ahead of trends and create a repeat buying habit," says Jain.

Meanwhile, DailyObjects goes for a "contemporary, minimalist appeal". Pankaj Garg, co-founder and CEO, says, "Our goal was to create a product that seamlessly serves modern-day use cases while integrating form and function — accessories and bags that are versatile enough for work, travel, and daily use."

**SALES AND DISTRIBUTION**

Even as they increasingly extend into offline retail too, the new-age D2C handbag brands have mainly built themselves through e-commerce.

Zouk is even listing its products on quick commerce platforms.

"Quick commerce was a surprising yet promising category for us. We started it as an experiment and are now available across major platforms," says Krishnakumar.

For Miraggio, 30 per cent of revenue comes from its website and 70 per cent from marketplaces. The company wants to shift this balance in favour of direct sales. "Our goal is to have 60-70 per cent of our business from our channels within three to four years," says Jain.

Offline, Zouk has opened nine stores and plans to reach 25 in the first phase. "When we spoke to customers, many said they wanted to see the product before buying. Since 75-80 per cent of handbag purchases still happen offline, this was a logical step," says Krishnakumar.

Miraggio plans to open retail stores in FY26, with a focus on personalisation, "where you can customise the strap or add initials".

In the case of DailyObjects, 60 per cent of its consumers are from Tier 1 cities, alongside a growing demand from Tier 2 centres. Most of its sales are through its website, as also leading e-commerce market-

places. It has also hopped aboard quick commerce platforms.

"Our annual recurring revenue (ARR) stands at approximately ₹200 crore, with a strong year-on-year growth of 40 per cent. Our primary focus remains on scaling up the brand, and expanding our market presence... we are prioritising reinvestment over the bottom-line. We have consistently been EBITDA positive for the last five years," says Garg.

Miraggio projects ₹115 crore in gross merchandise value (GMV) for FY25 and ₹220 crore in FY26, with an expected EBITDA break-even in FY25.

International expansion is also on the horizon. Zouk aims to take "Indian style to the world".

**MANUFACTURING HEFT**

"India has outstanding manufacturing capabilities. We feel very happy that a large portion of our bags are still handmade, giving them sturdiness and authenticity," says Krishnakumar. The company also sources raw materials domestically, reinforcing its commitment to Indian craftsmanship.

DailyObjects, too, has in-house manufacturing capabilities, with a dedicated team of 1,000 skilled artisans.

Miraggio, on the other hand, manufactures its handbags in China and is exploring expansion into Myanmar and Vietnam. The company uses a contract manufacturing model, allowing it to scale up production rapidly while focusing on frequent new product launches.

**CHALLENGES**  
Inventory management, competition from international players, and design piracy by local players are among the key challenges facing home-grown handbag startups.

"Mass-market players can quickly copy your designs. The key is to create differentiation and stay ahead of trends," says Jain.

**STARTUPS: VAI-THEE-FUSS**

## The AI affair: Painstakingly straightforward



**VAITHEESWARAN K**

I have not written this fortnight's column. Let me explain.

At a recent startup event, some young founders asked me how essential it is to include AI (artificial intelligence) in their venture? It was a good question because, seemingly, everything around us has 'ai' in it. As an experiment, I prompted an ai tool to write this column for me on AI startups, with a rule that most words in this article must

have "ai" in it. Enjai.

The AI startup terrain is in a tailspin, as founders aim to attain gains in an affair that seems both praiseworthy and painstaking. The main trait of startups is their faith in AI, claiming it will sustain industries and restrain failure. Some complain that this campaign curtails human creativity, fearing AI will derail traditional jobs and taint industries.

Daily, brainy entrepreneurs train AI models, painting a portrait of a future where AI aids in all domains, from retail to railways. AI's availability has been hailed as a fountain of innovation, with claims that it will sustain businesses, raise efficiency, and hail a new era of automation. However, critics complain of an un-

fair over-reliance on AI, questioning its attainability in a balanced workforce.

Startups bait investors with AI-driven attainments, hoping to maintain traction in a marketplace that mainly rewards automation. They proclaim that AI-powered solutions will prevail, yet without careful maintenance, this affair may result in painful failures. A startup that fails to retain originality may wail in despair, like a sailor lost in a hailstorm.

AI's flair for automation reshapes industries rapidly. AI-powered chatbots replace waitresses, AI-driven mail services diminish postal jobs, and AI-tailored recommendations transform retail. Painters now see AI-generated por-

traiture overtaking traditional art, while hairdressers witness AI-driven hairstyling simulations gaining traction. The question remains: does AI sustain fair opportunities, or does it blackmail industries into over-reliance?

Despite disdainful resistance, AI remains the chieftain of the startup scene. Entrepreneurs, captains of AI-driven innovation, continue to brainstorm, sustaining AI's momentum. In finance, AI aids in fraud detection; and in healthcare, AI diagnoses ailments and tailors treatments for patients. AI's attainability is praiseworthy, yet its expansion raises concerns — should we restrain AI's rise or hail its potential without restraint?

The AI affair isn't a passing trend; it's a campaign shaping the future of daily life. Startups are in a race, a painful yet rewarding trail toward AI-powered attainments. Will AI remain a sustainable force, prevailing in all domains? Or will industries eventually complain, calling for restraints on its trajectory? One thing is certain — this AI campaign is far from over, and whether we praise or disdain its expansion, the AI-driven future is already laid before us.

PS (I wrote this): I hope you noticed the title of my column? You just cannot escape from AI — it's everywhere now.

The writer is a serial entrepreneur and best-selling author of the book 'Failing to Succeed'; posts on X @vaitheek

## Honing healing skills in a simulated hospital ward

MediSim deploys virtual reality technology to augment medical training courses

**Sanjana B**

**A** student at the Pondicherry Institute of Medical Sciences carefully inserts an IV line into a vein. Her movements are precise and confident — but there is no real patient beside her. The student is immersed in a virtual reality simulation, honing a life-saving medical skill.

"We use virtual reality and augmented reality to train undergraduate medical and nursing students," says Sabarish Chandrasekaran, CEO of Chennai-based MediSim VR, a company specialising in simulated medical training.

The idea for the company was sparked 10 years ago when Chandrasekaran, an MBA graduate, teamed up with Jeno Manickam Durairaj, a game engine development engineer, to create a VR-based training platform across industries.

In 2018, Dr Adith Chinnaswami came on board to devise a VR solution for grassroots-level training in the healthcare industry.

"The National Medical Commission has a mandate on skills essential for nursing and allied health science workers. We are trying to ensure all students have a certifiable level of



**VRx.** (From left) Adith Chinnaswami, COO; Jeno Manickam, CTO; Sabarish Chandrasekaran, CEO, MediSim VR

competency through VR training before they practise on patients," Chinnaswami says.

**BUSINESS MODEL**  
Incubated at IIT-Madras in 2018 and at Boston's Johnson & Johnson Innovation Labs in 2019, MediSim incorporates an SaaS (software-as-a-service) and licensing model. When setting up a training facility at a college, it offers two payment models — an annual fee-based licence for the institution, covering infrastructure, hardware, and software; and an annual subscription fee paid directly by students.

MediSim has seven labs across India, mainly at medical colleges, including Chennai's Sri Ramachandra Institute of Higher Education and Research; Karppa Vinayaga Institute of Medical Sciences And Research Center in Madurantakam, Tamil Nadu; the right path for them to transition to a newer technology, the uptake will be poor," the CEO explains. "We operate as a plug-and-play model," he adds, which means the company takes care of all aspects of running the programme — whether hardware, software, or troubleshooting.

MediSim's patented software and hardware is built in-house in India. Its in-house industry engagement team includes academicians, doctors, and other medical experts.

MediSim has seven labs across India, mainly at medical colleges, including Chennai's Sri Ramachandra Institute of Higher Education and Research; Karppa Vinayaga Institute of Medical Sciences And Research Center in Madurantakam, Tamil Nadu;

the idea is to ensure that the institution does not have to bear upfront the heavy cost of capital investment, Chandrasekaran says. "We realised that if we don't create

the right path for them to transition to a newer technology, the uptake will be poor," the CEO explains. "We operate as a plug-and-play model," he adds, which means the company takes care of all aspects of running the programme — whether hardware, software, or troubleshooting.

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## Early investing with a PE touch

**bl.interview**

**Aishwarya Kumar**

**P**udent Investment Managers, founded in 2021, identified a gap in startup funding and adopted a private equity-like approach to early-stage investments. "Typically, early-stage investors focus primarily on the idea and the founding team, assuming financials will fall into place over time. However, we emphasise unit economics, business sustainability, and ensure promoters secure timely funding to avert any financial constraints that could force a shutdown," says Prashasta Seth, CEO, Prudent Investment Managers. The fund house's portfolio includes Flipspaces, Snapmint, HROne, and The Money Club.

*Edited excerpts.*

**What is your investment thesis?**

Our investments always have a strong tech angle; we don't want to invest in companies that are mere replicas of existing businesses. While we are largely sector-agnostic, we focus on opportunities where we see strong potential, backed by a capable team and a sustainable business model.

We invest across various stages, from early-stage startups to pre-IPO and listed companies. Currently, we manage a ₹750-crore portfolio management service (PMS) focused on the listed mar-



We ensure promoters secure timely funding to avert any financial constraints that could force a shutdown

**PRASHASTA SETH**

CEO, Prudent Investment Managers

ket. This quarter, we plan to launch a category II as well as category III alternative investment fund (AIF). On the unlisted side, our investments span different stages, albeit in a relatively unstructured manner, through a group of investors using power of attorney (POA) structures.

**What is your risk appetite like?**

We take a long-term investing approach, typically with a five- to seven-year horizon. Our risk appetite is high — we prefer to be invested in 10-12 companies at a time. However, we do not follow a "pray-and-spray" model.

We back a company with full conviction, and we participate in multiple funding rounds for our portfolio companies.

**How many investments have you planned for this year?**  
We recently closed an investment. We plan 3-4 investments this year.

## Honing healing skills in a simulated hospital ward

MediSim deploys virtual reality technology to augment medical training courses

**Sanjana B**

**A** student at the Pondicherry Institute of Medical Sciences carefully inserts an IV line into a vein. Her movements are precise and confident — but there is no real patient beside her. The student is immersed in a virtual reality simulation, honing a life-saving medical skill.

"We

## DATA BANK

### Public sector banks lend the most for housing

Of the ₹33,53,668 crore outstanding individual housing loan (IHL) portfolio of primary lending institutions, as of September-end 2024, the share of public sector banks (PSBs) was the highest at 43.8 per cent, followed by private sector banks (PVBs) and housing finance companies (HFCs) at 37.5 per cent and 18.7 per cent, respectively, according to the National Housing Bank's 'Report on Trend and Progress of Housing in India'.

Rural housing loans outstanding stood at ₹2,55,724 crore (7.63 per cent of IHL outstanding), as on September 30, 2024.

The IHL portfolio of primary lending institutions grew by 14.08 per cent during September 2024, as against the same period a year ago, with housing finance companies registering growth at 13.93 per cent, PSBs at 17.42 per cent, and PVBs at 10.47 per cent.

Housing loans as a percentage of GDP increased from 3.2 per cent in financial year (FY) 2001-02 to 6.6 per cent in FY 2011-12 and further to 11.29 per cent in FY 2023-24.

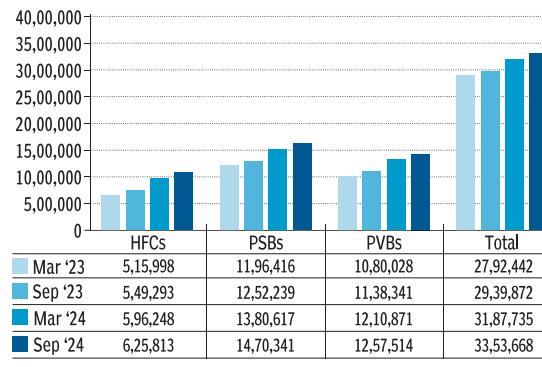
#### Regional trends

Regional variations in credit flow for housing have been observed across the country. The southern, western and northern states account for 35.02 per cent, 30.14 per cent and 28.73 per cent, respectively, of the cumulative disbursements during the first half (H1) of FY 2024-25, whereas the share of eastern states (inclusive of north-eastern states) is 6.1 per cent. The north-eastern states account for 0.68 per cent of total IHL disbursements during H1FY 2024-25.

Fourteen states — Maharashtra, Karnataka, Tamil Nadu, Telangana, Gujarat, Uttar Pradesh, Andhra Pradesh, Rajasthan, Kerala, Haryana, Delhi, West Bengal, Madhya Pradesh and Punjab — accounted for nearly 91 per cent of the individual housing finance market in terms of IHL outstanding.

Sectoral analysis of the data reveals that the eastern and north-eastern states account for only 6.9 per cent of the total individual housing loan book.

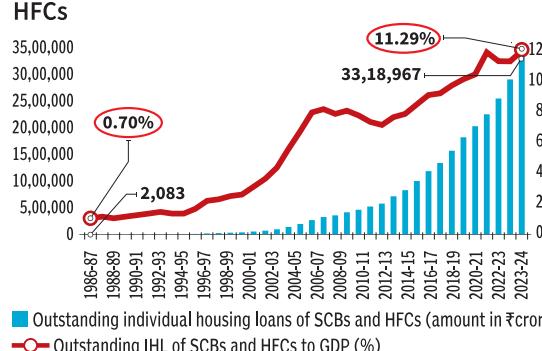
#### Outstanding individual housing loan portfolio of primary lending institutions (in ₹ crore)



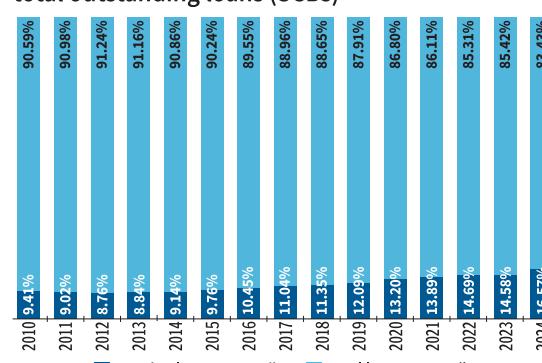
#### Region-wise individual housing loan outstanding & disbursement by PLIs (in ₹ crore)

Regions	Outstanding as on September 30, 2024	Cumulative disbursement H1FY25
North	8,57,088	1,17,927
West	10,30,543	1,23,697
South	11,84,110	1,43,738
East	2,31,541	25,054
share of North-East	31,341	2,786
<b>Total</b>	<b>33,53,668</b>	<b>4,10,416</b>

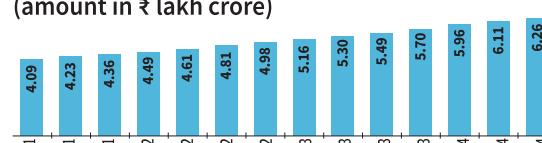
#### Outstanding individual home loans of SCBs and HFCs



#### Percentage share of outstanding housing loans in total outstanding loans (SCBs)



#### Outstanding individual housing loan of HFCs (amount in ₹ lakh crore)



#### Rural share in individual housing loan by PLIs (amount in ₹ crore)

Primary lending	Outstanding* as on institutions	Cumulative* IHL disbursement (₹M)		
	Sep '23	Sep '24	Sep '23	Sep '24
Housing finance companies (HFCs)	39,390	47,032	5,800	6,949
Public sector banks (PSBs)	99,836	11,2,402	11,679	12,074
Private sector banks (PVBs)	83,095	96,290	13,593	12,535
<b>Total</b>	<b>2,22,322</b>	<b>2,55,724</b>	<b>31,073</b>	<b>31,557</b>

\*For uniformity in comparison, HDFC Ltd has been retrospectively considered as a PVB.

Source: Sectoral Deployment of Gross Bank Credit, NHB, RBI

## TOP WORRY

# Bankers on edge over reappointment

**RENEWAL CLAUSE.** What informs the RBI's move to cut short board-approved extended tenures of private bank heads?

Piyush Shukla

**W**hat does it mean when the Reserve Bank of India cuts short the tenure of a bank CEO after the board has recommended a longer extension? Is this the regulator's way of telling the board that it does not find the CEO's performance up to mark and that he/she needs to shape up or ship out?

The issue of tenure extension for chiefs of private sector banks has come into sharp focus after the RBI granted only a year's extension to Suman Kathpalia, MD and CEO of IndusInd Bank (IIB), against the three recommended by the bank's board.

The RBI's overruling of board-recommended tenure extensions appears to be bothering several top private sector bankers whose terms are up for renewal.

"The scenario is saddening. He (Kathpalia) was given a one-year extension this time weeks before his tenure ends. Earlier, he was given a two-year extension. The regulator assesses all data points and processes before approving a new tenure for bank heads, but mentally we are on edge during the reappointment period," said a top official at a private bank.

The RBI has asked IIB to submit names of external candidates who can potentially succeed the incumbent CEO. According to six senior bankers businessline spoke with — including two bank chiefs — corporate governance and financial performance top the RBI's checklist when deciding the fate of bank CEOs.

**LOOMING UNCERTAINTY**  
Kathpalia's case is only the most recent instance of the RBI curtailing a longer extension proffered by a bank board.

IIB's recent disclosure of discrepancies in its derivative port-



They have a good understanding of the bank and they have the advantage of comparing the performance of the bank with similar-sized peers..." the banker said.

"The regulator also does inspections of banks every year. RBI inspectors meet with the heads of different departments, which gives them a fair idea of the bank's core team performance and processes," the banker added.

If a candidate has worked overseas, the RBI attempts to contact the regulator in that foreign jurisdiction for background checks.

Another source said the regulator gauges the individual's ability to ensure compliance, take the team along on decisions, and the manner in which they lead the business. Recently, the source added, the regulator made it clear to the CEO of a private bank that their overall behaviour had to improve, and this was acted on immediately.

"You cannot run the ship in a 'my way or the high way' style. There are often times when the RBI has told the CEO that they must take the board along. The board is not there just to sign off things for you. Core team is meant to ask questions. Basically, it all trickles down to compliance," the source said.

While bankers may face uncertainty in the run-up to their reappointment, any change of guard has always better served the institution.

"The RBI has more information about institutions. Bankers at the top level are sometimes unable to see the mistakes they are making," the source said. "In Rana Kapoor's case, while the bank was doing well financially, the core business model was not right as it chased quick profits rather than building a sustainable business model. Fee income alone cannot make the bank's business sustainable, which the RBI expects from the bank in depositors' interest."

## RBI keeps it short

Bank CEOs whose reappointments have been affected by the regulator

CEO	Bank	Tenure
Suman Kathpalia	IndusInd Bank	2020-present
C S Ghosh	Bandhan Bank	2015-2024
Shyam Srinivasan	Federal Bank	2010-2024
Vishwavir Ahuja	RBL Bank	2010-2021
Rana Kapoor	YES Bank	2004-2019
Shikha Sharma	Axis Bank	2009-2018
Chanda Kochhar	ICICI Bank	2009-2018

During Ghosh's tenure, a government agency was appointed to audit loan claims filed by the bank under a credit guarantee scheme.

Former RBL Bank CEO Vishwavir Ahuja, YES Bank's Rana Kapoor, Shikha Sharma of Axis Bank, and Chanda Kochhar of ICICI Bank also faced adverse actions by the regulator, which cut short their tenures.

## RBI'S YARDSTICK

According to a former bank chief, lenders are asked to submit to the RBI the names of candidates for the MD and CEO post at least six months before the incumbent's tenure ends. This gives the regulator enough time to conduct background

checks in the case of external candidates. For an incumbent CEO whose name has been recommended for a new term, the RBI checks the bank's financial performance during the CEO's term, the corporate governance framework, its risk mitigation strategy, and whether the individual recuses himself/herself whenever there is a potential conflict of interest, among other factors.

"Each year the RBI approves ESOPs and salaries of MDs, CEOs, EDs and even key managerial personnel at large banks, depending on individual performance. Based on the bank's business plan, the RBI generally gives an indicative goal sheet before the new CEO takes charge....

## WAR CHEST

# As Europe rearsms, bond funds are ripping up the rule book

Bloomberg

**E**urope's plan to rearms in the face of Russian aggression and US detachment has already delivered a bonanza to equity investors. Credit funds are scrambling to get a share of the windfall, too.

Like other key parts of the capital markets, corporate-debt investors are having to navigate ESG restrictions that, in more peaceful times, put weapons makers beyond the pale. Now they're looking to rip up many of those rules.

European bond and loan buyers are either pitching to loosen their own limits on financing defence companies, or expanding the meaning of ESG to take in manufacturers of fighter jets, tanks and missiles, according to conversations with multiple investors, most of whom didn't want to speak publicly about a sensitive topic. In several cases, they're considering stripping the words "sustainability" or "ESG" from the name of their funds or marketing materials.

As Europe's military cranks into gear, it's starting to look like almost anything goes for some debt investors — barring cluster bombs, landmines, biological and chemical weapons, nuclear bombs and firearms. His firm may relax that further if future deals come up.

Another executive at a leading investor in high-yield debt — an important source of finance for younger, riskier companies — says there's space for plenty of nuance under the ESG category. His clients are usually more worried about carbon than weapons, he adds.



## ON TARGET

Italian defence firm Leonardo SpA issues investment-grade debt

BLOOMBERG

Investors of many stripes shunned arms manufacturers as they tried to portray themselves as socially responsible. But with European military spending set to soar to fill the void left by President Donald Trump's faltering support for Ukraine, there's a rush to follow the money. The number of ESG equity funds invested in defence companies has risen 50 per cent to near 1,800 since Russia's invasion of Ukraine in 2022, according to analysis by Bloomberg Intelligence.

New sources of funding would be welcome news for a defence industry that's struggling at times to get buy in from bank lenders, who still worry about falling foul of European ESG regulations. That's doubly true for smaller

## Reform-FDI tango in insurance

The tempered buzz around 100% foreign holding in insurance firms



SIDDHARTH SANKAR



CONDITIONS APPLY. Insurance covered by foreign funding

STOCK

with the requirement.

The "Indian ownership and control" criterion was withdrawn in 2021 with the FDI limit hiked from 49 per cent to 74 per cent. According to the existing regime, though majority ownership may vest with a foreign investor, most of the insurance company's directors and key management persons (KMPs) must be resident Indian citizens. Moreover, at insurance companies with more than 49 per cent foreign investment, 50 per cent of the board must consist of independent directors. If, however, the chairman of the board is an independent director, then one-third of the board must consist of independent directors. Such conditions create practical challenges

## QUICKLY.

**Sun Pharma, Zydus recall products in US: USFDA**



**New Delhi:** Sun Pharma and Zydus Pharmaceuticals are recalling products in the US market due to manufacturing issues, according to the USFDA. Sun Pharma is recalling 9,840 bottles of Morphine Sulfate extended-release tablets for "Failed Dissolution Specifications", the US health regulator stated in its latest Enforcement Report. PTI

**ISRO, SCL develop 32-bit microprocessors**

**Bengaluru:** ISRO's Vikram Sarabhai Space Centre and Semiconductor Laboratory, Chandigarh, have jointly developed 32-bit Microprocessors—Vikram 3201 and Kalpana 3201—for space applications. Vikram 3201 is the first fully Indian-made 32-bit microprocessor qualified for use in the harsh environmental conditions of launch vehicles. PTI

# India-New Zealand to resume FTA negotiations after a decade's lull

**FRESH START.** Plan coincides with New Zealand PM's visit; earlier talks had stalled on inclusion of dairy sector

**Amiti Sen**  
New Delhi



**TAKING IT FORWARD.** Union Minister of Commerce and Industry Piyush Goyal meets New Zealand Trade Minister Todd McClay, in New Delhi on Sunday ANI

India and New Zealand have decided to resume negotiations for a comprehensive free trade agreement (FTA) almost a decade after talks were suspended due to disagreement over keeping dairy out of the pact, something New Delhi insisted upon.

The re-launch of India-New Zealand FTA talks on Sunday, marking New Zealand PM Christopher Luxon's visit to India from March 16-20, is significant also because it comes at a time when the world is trying to brace against US President Donald Trump's tariff tirade.

**SIGNIFICANT STEP**

"This significant step was marked by a meeting between India's Commerce & Industry Minister Piyush Goyal and New Zealand's Minister for Trade and Investment Todd McClay, on March 16<sup>th</sup>, laying the found-



**TAKING IT FORWARD.** Union Minister of Commerce and Industry Piyush Goyal meets New Zealand Trade Minister Todd McClay, in New Delhi on Sunday ANI

ation of a momentous partnership towards strengthening the economic and trade ties between the two countries," said a statement from the Commerce Department.

India's talks with New Zealand for an FTA were suspended in 2015, mostly over the dairy sector, after five years of talks.

India had refused to give additional access to protect livelihood of millions of farmers while New Zealand

did not want to give up the demand as the dairy sector contributes significantly to its GDP and is its largest export item.

"Things seemed to have changed after India signed its Economic Cooperation and Trade Agreement with Australia in December 2022. It seemed possible to gain from an FTA with India even without dairy as there were gains to be made in other areas such as kiwi fruits,

nuts, wines, meat and wool," a source tracking the matter told *businessline*.

In fact, Prime Minister Luxon, during his 2023 election campaign, promised to sign a FTA with India before the end of his electoral term.

"As negotiations resume, both countries will need to address the issues that led to the breakdown in talks. Currently, India's dairy imports from New Zealand are minimal (around \$0.57 million), and while India may consider limited imports of value-added dairy products, it remains firm against allowing raw dairy imports," according to report by research body Global Trade and Research Initiative.

New Zealand, with a population of around 5.25 million,

nomy in the world, very, very shortly. It's just insane to me that you just wouldn't try," Luxon was quoted as saying by the New Zealand media recently.

**MAJOR CHALLENGE**

A major challenge in the renewed talks will be the disparity in tariff structures, the GTI report said. "New Zealand's average import tariff is only 2.3 per cent, with over half of its tariff lines already duty-free... India's average tariff stands at 17.8 per cent, meaning it would have to make significant reductions, making a traditional FTA less attractive for India," it said.

New Zealand, with a population of around 5.25 million, was India's 87th largest trading partner in FY 24 with exports to the country at \$38 million and imports at \$335 million. While India's exports mostly comprise pharmaceutical products, mineral fuels, textiles articles and machinery, its imports include mineral fuels, wood, iron and steel and kiwi fruit.

Proposed India-US trade pact must not go beyond tariffs, say experts

**Amiti Sen**  
New Delhi



Negotiations for the proposed India-US bilateral trade agreement (BTA) need to be mostly restricted to tariffs as any widening of coverage could open a "Pandora's box" of issues that New Delhi has mostly avoided in its trade pacts to preserve its policy space, trade experts have said.

"The issue now seems to be how much more will we bend. That is the key question. If we go beyond tariffs, a whole Pandora's box of all 'behind-the-border barriers' get opened," said Biswajit Dhar, Distinguished Professor, Council for Social Development.

As New Delhi does not want to lose its sovereign policy space in sensitive areas such as IPR, data protection, government procurement and labour, it has mostly excluded meaningful commitments in these areas in the free trade pacts it has forged with other countries.

**SENSITIVE AREAS**

Instead of an FTA, India may offer a zero-for-zero tariff deal to the US by proposing to eliminate tariffs on most industrial products from the US, provided the US does the same for Indian goods, Srivastava said. The government can take a cue from the FTAs it has with other countries.

India does not want to negotiate on IPRs with the US as the country has been against Section 3(d) of the Indian Patents Act, 1970, which disallows 'evergreening of patents'. In data protection and e-commerce, India wants freedom to formulate its own policy weighing sensitivities. India has also kept commitment on government procurement out of trade negotiations as it wants to protect interests of the MSME sector.

# Regional hubs being mulled to boost air traffic growth

**Rohit Vaid**  
New Delhi

India is contemplating a plan under the ambitious 'Hub Strategy' to ensure seamless movement of domestic air travellers onto long-haul international flights.

"The idea behind regional hubs is to reduce layover times, improve connectivity, and allow for a smoother transit experience between domestic and international flights and vice versa," sources told *businessline*.

"Not all airports can be-

come major hubs. However, apart from providing primary connectivity, they can also be used for immigration procedures and security clearance before passengers reach major hubs," said sources.

Besides, sources said, some regional hubs will also have the added advantage of providing direct connectivity with a particular international region.

"A regional hub in Uttar Pradesh or Kerala will be able to provide seamless connectivity between a tier II airport and the Middle

**The idea behind regional hubs** is to reduce layover times, improve connectivity, and allow for a smoother transit experience

East region," sources said.

**HUB AIRPORTS**

The hub requires well-synchronised flight connectivity to regional airports besides metro, road, and highway

connections. The principles of hub-and-spoke model applies to both major and regional airports, however, the latter mostly facilitates flights to and from smaller cities with limited passenger traffic.

Accordingly, these passengers coming in from various smaller cities are batched together and then transferred in a synchronised manner to major hubs like Delhi to take international flights.

Notably, the Centre has established a platform under which industry participants

and various ministries are engaged to make a strategy to develop hub airports in the country.

"Proposed measures include faster security checks, improved baggage handling, and better inter-terminal connectivity."

"Airlines and airport authorities are also coordinating to introduce a seamless passenger movement framework that aligns with global standards."

The aim, sources said, is to make India-based airports as competitive as Dubai and Singapore.

"We are working on sim-

Navi Mumbai airport to open in June: Adani

**Our Bureau**  
Mumbai

Navi Mumbai airport is set for inauguration in June, nearly two months behind schedule. The airport announced the June opening after an inspection by Gautam Adani, Chairman of Adani group, on Sunday.

Earlier, the opening was set for April 18, but it has been pushed back as work on terminal building is pending. Passenger operations could begin from July after a security sweep of facilities.

**CHECK-IN TESTED**  
The Navi Mumbai airport is being developed by the Adani group with a capacity to handle 20 million passengers and 0.8 million tonnes of cargo in the first phase.

## 'AI is powerful but may never be able to match depth of human imagination'

**Press Trust of India**  
New Delhi



Prime Minister Narendra Modi on Sunday asserted that while artificial intelligence is powerful, it may never be able to match the depth of human imagination, and no matter what the world does with AI, it will remain incomplete without India.

In a podcast with Lex Fridman released on Sunday, Modi said that without genuine human intelligence, AI cannot thrive or progress sustainably.

"It is true that in every era, a competitive atmosphere between technology and humanity was created. At times, it was even portrayed as conflict. It was often portrayed as if technology would

age," the prime minister said. Modi also said he believes that with AI, "humans are now being forced to reflect on what it truly means to be human".

**REAL POWER**  
"This is the real power of AI. Because of the way AI functions, it has challenged how we perceive work itself. But human imagination is the fuel. AI can create many things based on that and in the future, it may achieve even more. Still, I firmly believe that no technology can ever replace the boundless creativity and imagination of the human mind," he said.

Asserting that AI development is fundamentally a collaboration, the Prime Minister exuded confidence that it will remain incomplete without India.

"But every time, as technology advanced, humans adapted and stayed a step ahead. It has always been the case. After all, it is humans who find the best ways to use technology to their advantage."

# OneWeb working on new capabilities to compete with Starlink satellite services

**Vallari Sanzgiri**  
Mumbai

Eutelsat OneWeb is working on rolling out new systems and technologies that will have comparable capabilities as Elon Musk's Starlink satellite services following the joint ventures announced between SpaceX and the two Indian telcos Bharti Airtel and Jio Platforms.

Pranav Roach, OneWeb stakeholder and President of Hughes Network Systems India that provides broadband satellite services and solutions, said that while OneWeb cannot do everything Starlink can do, the company is confident in performing better in certain fixed applications.

Roach said, "Starlink capabilities use a newer generation system, allowing for better speeds. However, for

**Stakeholders believe** that the satcom provider will have a difficult time navigating Indian conditions, market, users and pricing.

fixed applications, especially for enterprises, OneWeb may be better. So, we're also working on a new system that will have the same capability as Starlink and it will roll out in some months."

**INDIAN MARKET**  
Also, Roach and other stakeholders believe that the satcom provider will have a difficult time navigating Indian conditions, market, users and pricing.

Many communication service providers entered

and left this market over the last 30 years. It's not an easy place to work in and certainly, you just can't come in and dictate terms and especially now with users getting used to extremely low data areas," said Roach.

Even sources knowledgeable about the SpaceX-telcos collaborations said the Indian giants were still deliberating on whether Starlink services should be distributed on a segmented manner or left up to the customers' discretion. The alliance will largely enable both telcos to expand B2B connectivity and related offerings to enterprises and businesses in remote areas that are otherwise lacking in fibre/FWA connectivity, Citi Research said in a recent report.

**CONSUMER ORIENTED**  
It may be noted that IP Access International, a US connectivity provider, observed

**THE HURDLE**  
Starlink's biggest hurdle in cracking the Indian market is in terms of costs. Starlink's price is almost 10-14 times higher than India's major broadband providers, as per a Bernstein brokerage firm's report.

According to Roach, the market dynamics for satellite companies in India will only be clear once the Telecom Regulatory Authority of India (TRAI) releases its pricing and regulatory recommendations for the sector.

**A SPECIAL PUBLICATION FROM THE HINDU GROUP**

# GROUND ZERO

In-depth stories from across India

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