

Bihar Polls: Tensions in the Alliances**VANDE BHARAT: ON A SLOW TRACK / CINEMA: AI TAKES BOLLYWOOD**

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NOVEMBER 3, 2025 ₹100

**INDIA
TODAY****BACKACHE****HURTING THE YOUNG****ONCE CONSIDERED AN OLD-AGE AFFLICION, BACK PAIN IS NOW STRIKING EARLY. BUT NEW, LESS INVASIVE THERAPIES OFFER HOPE**

India's Most Favorite



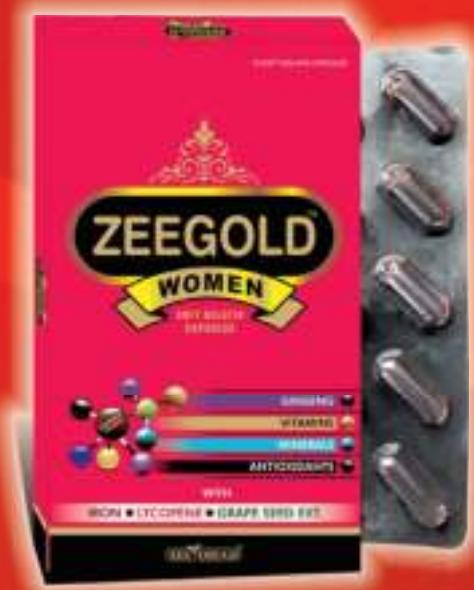
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FROM THE EDITOR-IN-CHIEF

Back pain was once a problem associated with middle age and the later stages of life. Not anymore. Across today's India, it's becoming a creeping epidemic that is getting younger by the day. People in their twenties and thirties are showing up at spine clinics with conditions that doctors used to see only in patients decades older. The numbers are alarming. An estimated 15 per cent of the world's spine patients are in India, with 1.5 million cases, second only to China's. But what should truly make us sit up is the pace at which the pain graph is shifting downward into younger age brackets. A study across 18 Indian states found not only a sharp rise in back pain cases between 2020 and 2023, the highest prevalence was in the 18-38 age group. A 2024 analysis offered a more chilling data point: low back pain is now a leading cause of disability among Indians aged 10 and above. Worse, it peaks in the 25-49 age group, the very years meant to be the most productive. Thankfully, there's one mitigating factor. Medical innovation is reshaping spine care, with exciting new developments in minimally invasive surgery, robotics and regenerative therapies.

The source of the danger is not hard to identify. We are turning into a sedentary species. The usual suspects are obvious: desk jobs, long hours at the screens and a culture of poor posture. But the real villain is the mobile phone in our hand. Held below eye level, with the head permanently tilted at a dangerous 30 to 45-degree angle, this bad posture is the standard for everyone, including young kids. It makes the head four times heavier for the neck muscles to bear, from about 6 kg to 25 kg. The distortion radiates downwards. The lack of natural movement weakens the muscles and the very structure that holds us upright. Result: the spine is ageing faster than the body. The 2023 Global Burden of Disease study ranks low back pain among the top 10 causes of early death and poor health worldwide. What the medical data presents is nothing short of an unvarnished X-ray of a national crisis.

The evidence is everywhere. A 2024 cross-sector analysis estimated that 76 per cent of working-age Indians suffer from work-related musculoskeletal disorders; 60 per cent have low back pain. The problem hits hardest among those glued to screens. A 2024 study of computer engineering students found nearly 60 per cent suffered from 'tech-neck syndrome'. Among corporate employees too, a 2025 study found half of those aged 22-40 reported neck pain. A 2023 survey of tech workers under 35 revealed 53.4 per cent had musculoskeletal disorders. Shockingly but not surprisingly, even schoolchildren are affected. A 2024 survey of grades 8-12 found 61 per cent of students using e-learning devices reporting neck pain. Added to that is the old bane of heavy school bags.

The picture becomes grimmer once you add mod-

ern lifestyle ingredients to the mix. Hours in front of screens trap the body in one position. Poor diet adds another layer. Vitamin D and magnesium deficiencies impair calcium absorption, which weakens bones and softens the vertebrae. Processed food going hand in hand with lack of exercise leads to obesity, resulting in the overloading of discs and joints, promoting muscle loss and inflammation. Stress compounds the problem, with chronic muscle tension distorting posture over time and cortisol eroding bone strength. This is the perfect recipe for a painful back.

Yet the story is not without hope. What was once a life sentence of pain is now, in most cases, manageable. Take the case of Rohan Mehta, a 29-year-old DJ in Delhi. He was one of those new-age victims of a slipped disc, brought on by long hours hunched over his console. But Rohan had options his parents' generation never had. Instead of being condemned to bed rest or bulky braces, he had surgeons accessing his spine through keyhole-sized incisions, stabilising his vertebrae with nano-sized tools, neuro-navigation systems and cameras beaming a live feed to CT and MRI scanners. Within weeks, after rehab, Rohan was back at his turntable. A step up from these minimally invasive bone graft techniques is robotic surgery, with Augmented Reality doing duty as a real-time X-ray visor. There are also new kinds of custom-fitted implants, like 3D-printed titanium cages and spacers. An even more futuristic scenario lies in the regenerative potential of stem cells and Platelet-Rich Plasma injections. Doctors advise caution on those for now,

but it's like a window opening up to a future for those seeking alternatives to surgery. India also has to perfect the restorative potential of yoga and ayurveda, applied mindfully, in conjunction with proper diagnostics.

In this week's cover story, Senior Editor Sonali Acharjee takes you through the scale of India's spinal crisis and the frontiers of treatment. But the best cure is, as always, prevention. Ergonomic chairs and ortho-friendly mattresses and pillows help. But the most crucial accessory is awareness, among parents, schools and workplaces. The real key lies in movement. Stand up, stretch, walk, bend, run. The key is to create a lifestyle where you stay on your feet. Do not let your back give way before your spirit.



▲ Sept. 26, 2016



(Aroon Purie)

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Volume 50-Number 44; For the week

October 28-November 3, 2025, published on every Friday

• Editorial/Corporate Office Living Media India Ltd., India Today Group

Mediaplex, FC-8, Sector-16A, Film City, Noida - 201301; Phone: 0120-4807100

• Subscriptions: For assistance, contact, email: wecare@intoday.com; Phone / WhatsApp: +91 8597 778 778 (Monday to Saturday, 9.30am - 5.30pm).

• Sales: Direct all trade enquiries to General Manager (Sales), Living Media India Limited, C-9, Sector-10, Noida-201301 (UP).

• Regd. Office: F-26, First Floor, Connaught Place, New Delhi-110001.

• Impact Offices: 1201, 12th Floor, Tower 2A, One Indiabulls Centre,

(Jupiter Mills), S.B. Marg, Lower Parel (West), Mumbai-400013;

Phone: 022 69193355; Fax: 66063226

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House, Pancharati, Office C.G. Road, Ahmedabad-380006; Phone: 26560393,

26560929; Fax: 26565293 • Copyright Living Media India Ltd. All rights

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Printed and published by Manoj Sharma on behalf of Living Media

India Limited. Printed at Thomson Press India Limited,

18-35 Milestone, Delhi Mathura Road, Faridabad-121007, (Haryana)

and at Rajhans Enterprises, 134, Industrial Town, 4th Main Road, Rajajinagar,

Bengaluru-560044, (Karnataka).

Published at F-26, First Floor, Connaught Place, New Delhi-110001.

Editor: Raj Chengappa.

• INDIA TODAY does not take the responsibility for returning unsolicited publication material.

All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only

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Illustration by NILANJAN DAS / AI

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ONCE CONSIDERED AN OLD-AGE AFFLICITION,
BACK PAIN IS NOW STRIKING EARLY. BUT NEW, LESS
INVASIVE THERAPIES OFFER HOPE

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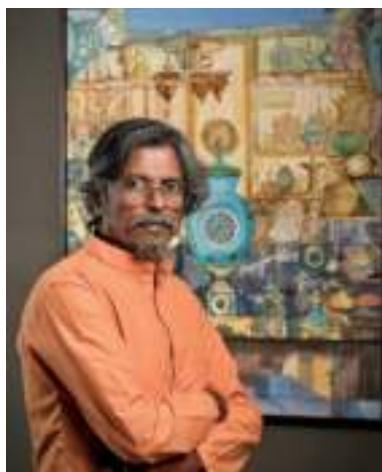
As AI enters Indian films, the fraternity views it with both excitement and fear



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Presenting India Today Insight

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GROUND REPORT: VIJAY'S POLITICAL FUTURE

As CBI probes Karur stampede, is Vijay at an electoral crossroads?

By Kavitha Muralidharan

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STORY OF THE DAY

How Trump tariffs are piling losses, uncertainty on India's textile sector

By Sonal Khetarpal and Jumana Shah

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FROM THE STATES: JAMMU AND KASHMIR

After a year as J&K CM, why Omar Abullah feels the burden of his crown

By Kaleem Geelani

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IN FOCUS: NO SILVER LINING

Why a silver shortage has shocked markets this festive season

By Sonal Khetarpal

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Yotta Data Services' server room in Navi Mumbai



GETTY IMAGES

► TECHNOLOGY

THE NEXT DATA GIANT

With Google's proposed \$15-billion gigawatt-scale hub in Visakhapatnam, India races to expand data capacity and host the world's digital traffic

By AJAY SUKUMARAN

INDIA'S NASCENT DATA CENTRE INDUSTRY RECEIVED A FILLIP THIS MONTH

when internet giant Google announced a \$15 billion (Rs 1.32 lakh crore) plan to build a 1-gigawatt (GW) facility in Visakhapatnam, the first of its scale in the country. The investment, spread over five years until 2030, includes building a new international subsea gateway in the east-coast city to enable fibreoptic cables carrying global internet and data traffic to land.

India generates nearly 20 per cent of the world's data, but holds barely 3 per cent of its global storage capacity. Hence, the country is expected to witness a data centre boom in the coming years. Fuelling this expansion is India's ongoing digital

transformation—rapid growth in smartphone usage, data consumption and digital services such as cashless and real-time transactions through UPI. According to the Ericsson Mobility Report 2025, the country's data traffic per smartphone is among the highest in the world at 32 GB per month, owing to the rapid adoption of 5G. It could nearly double to 62 GB by 2030.

The 2018 Reserve Bank of India regulations mandating that all financial data be stored locally acted as one of the triggers for the growth in data centre demand. Another stimulant came in 2022 with the government designating these centres as key infrastructure. Therefore, from 590 MW in 2019, India's data centre capacity has more than doubled to 1.4 GW in 2024.

INDIA'S DATA POWER

Data centre capacity is measured in megawatts and gigawatts, as power consumption is one of the key indicators of operational costs. By some estimates, India's capacity is projected to grow five-fold to reach nearly 8GW by 2030. Such an increase would require a capex of \$30 billion (Rs 2.64 lakh crore) and could generate revenue potential of \$8 billion (Rs 70,000 crore) from data centre leasing by the end of the decade, according to a recent report by investment firm Jefferies.

SHIFTING GEOGRAPHY

Currently, nearly two-thirds of India's data centre capacity is located in Mumbai and Chennai. India hosts 17 international subsea cables across 14 landing stations located in Mumbai, Chennai, Kochi, Thoothukudi and Thiruvananthapuram, while the list of telecom operators owning submarine cable infrastructure includes Tata Communications, Global Cloud eXchange, Reliance Jio, Bharti Airtel, Sify Technologies and BSNL.

Google says its proposed AI hub in Visakhapatnam will be developed with partners, including Airtel and AdaniConneX, which is a 50:50 JV between Adani Enterprises and data centre operator EdgeConneX. "India is experiencing a digital transformation that is unparalleled in pace and scale," Google Cloud CEO Thomas Kurian said on October 14 when the company unveiled its plans. "This AI hub is a multi-faceted investment combining powerful gigawatt-scale data centre operations, new large-scale energy sources and an expanded fiberoptic network, and has the potential to accelerate AI-driven transformation across every sector." Bringing multiple international subsea cables to land in Visakhapatnam will create an essential connectivity hub to complement existing landings in Mumbai and Chennai, he added.

GLOBAL BETS

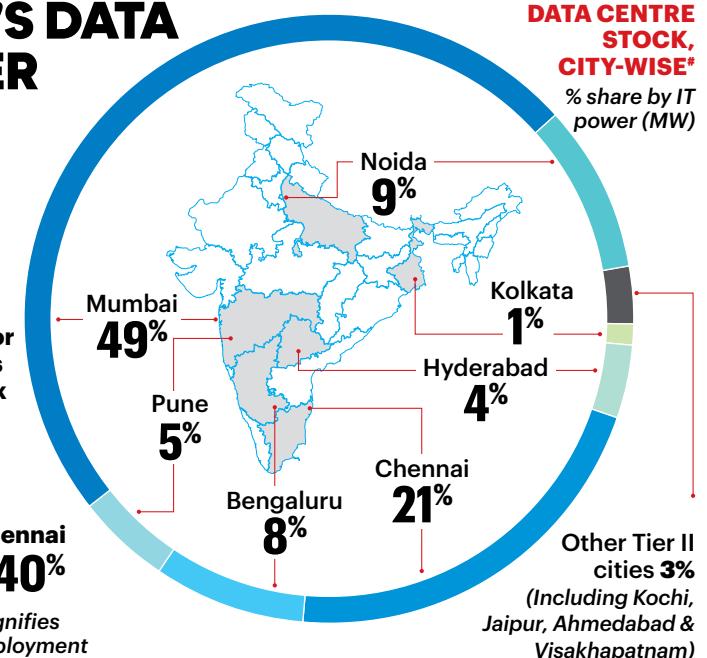
"Despite India having over 970 million internet users as of 2024, nearly three times that of the USA, its data centre capacity remains significantly lower compared to mature and established markets like the USA, UK, Canada and Germany," noted a May 2025 report by real estate brokerage Colliers, adding

Mumbai* and Chennai continue to be hotspots for data centre (DC) operators, together accounting for 70% of India's total DC stock

GROWTH IN SUPPLY (2022-24)

Mumbai 92% **Chennai** 340%

This growth signifies major cash deployment from operators to build capacities at these locations in the past three years



*Excludes capacities from hyperscalers' own and operated facilities; *Mumbai Metropolitan Region
Courtesy: ANAROCK Capital Research & Industry Sources

WHY INDIA NEEDS DATA CENTRES

- » Rising digital use and online services demand local data storage
- » Data localisation laws require sensitive data to stay in India
- » Cloud, AI and fintech growth need secure computing power
- » Local storage means faster, safer access
- » Boosts employment, investment and digital sovereignty

booming demand for data storage, other factors that make the industry attractive to investors include cost arbitrage in land, labour and construction costs. Over the past decade, commitments of over \$6.5 billion (Rs 57,000 crore) have been made in the sector, according to Mumbai-based property consultancy ANAROCK.

GREEN POWER PUSH

Data centres are also power-hungry. According to S&P Global Commodity Insights, they constituted 0.8 per cent of India's total electricity demand at the end of 2024, and this is expected to triple to about 2.6 per cent in 2030. India, it says, is expected to become the second-largest market for data centre electricity demand in the Asia-Pacific region over the next two years.

Power availability in India is comparatively better than in many European countries or hubs like Singapore, says an industry expert. But a key priority would be the shift towards renewable energy and balancing the huge water demand from data centres for cooling. As India's budding data centre sector looks set for steady growth, clean energy technologies and accompanying regulatory policies will play a key role. ■

that the demand-supply mismatch has drawn major global players and investors across the value chain.

The sectors driving demand include hyperscalers or cloud services providers that handle large volumes of data, financial services, technology, retail and healthcare. Apart from



STRIKING A CHORD

When Congress leader **Rahul Gandhi** landed in Assam on October 17 to pay tribute to the late **Zubeen Garg**, nearly a month after the singer's death in Singapore, the visit hit a few political side notes of its own. Chief Minister **Himanta Biswa Sarma** wasted no time taking a jab, saying Rahul had arrived "28 days too late" and accused the Congress of indifference toward Assam, alleging that "no big leader" had come when Bharat Ratna Bhupen Hazarika had died in 2011 as well. Within hours, however, the internet dug out Himanta's own post from his Congress days, featuring a photograph of Rahul paying his respects to Hazarika. Rahul, for his part, stayed clear of politics. At Zubeen's home, he said he understood why the musician called himself Kanchenjunga. "Like the Kanchenjunga, Zubeen was honest, transparent, unshakeable and beautiful," he said. Try finding fault with that!

Illustrations by **SIDDHANT JUMDE**

▼ MAMATA'S DIVINE PUSH

HOLY HEIGHTS

Like many of her counterparts in the north, West Bengal CM **Mamata Banerjee** seems to have caught the 'temple bug'. After unveiling the Jagannath shrine in Digha, she's now promising a Mahakal temple in Siliguri, complete with the "tallest Shiva idol". Predictably, with elections just a year away, the Opposition is furious, but for different reasons. The Congress and Left



are accusing her of using public money to woo the electorate while main rivals BJP are upset that the Trinamool leader has stolen a march on them, for surely they have the proprietary right to erect the tallest and biggest temples. But the BJP can't complain openly. Meanwhile, Siliguri residents have little say on where the ginormous Shiva statue will come up. The political higher-ups will decide that.

THE 'FAITH' FILES

If it's Diwali season, political fireworks surely cannot be far behind. Lighting them is ex-BJP MP **Paresh Rawal**, who plays a travel guide in *The Taj Story*. In that role, he goes to court to question the origins of one of the seven wonders of the world, equating the Mughal-era monument to a "Hindu mahal". The actual courts, meanwhile, asked the filmmakers to tamp down that bit of rhetoric, so the film now comes with a disclaimer. The last political drama that claimed to be "rooted in history"—serial muckraker Vivek Agnihotri's *The Bengal Files*—created barely a ripple at the box office. We'll have to wait and see how this one does.



Lyrical Face-off

After months of the BJP's high-decibel campaign celebrating CM **Pushkar Singh Dhami** as 'Dhakad Dhami', the Opposition Congress has dropped a song of its own. '*Chup re chhoron halla ni kara, dhakad Dhami seenu cha, Uttarakhand ku vikas pracharon ma hunu cha*' (Stay quiet boys...Uttarakhand's development is now only in publicity), takes aim at the 'hollow image' of the state government. The Congress alleges the

BJP regime has spent Rs 1,001 crore on self-promotion even as the youth face joblessness and corruption scandals pile up.



PATEL PARADOX

The recent cabinet reshuffle in Gujarat was expected to toss up a Patidar youth icon to counter the rising popularity of AAP MLA Gopal Italia. The names of Hardik Patel and **Jayesh Radadiya** were doing the rounds, but neither made the cut. Hardik is a Congress turncoat, but Radadiya, an outspoken Patel strongman from Saurashtra, has been a BJP loyalist all through. But last year, the 44-year-old had rubbed the party the wrong way by supporting a Patel candidate in a national cooperative body election against the BJP high command's nominee. Worse, his candidate had won. Still, with a Patidar CM at the helm, the community's youth had got their hopes up. It was not to be.



Kaushik Deka with Arkamoy Datta Majumdar, Suhani Singh, Avaneesh Mishra and Jumana Shah

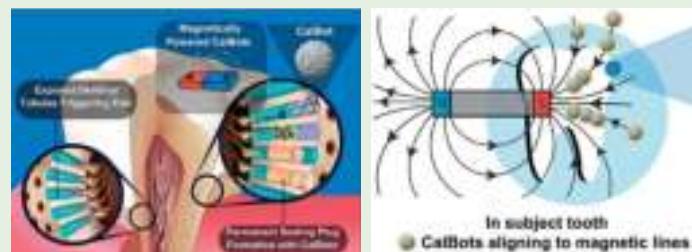
TECH WATCH

By Ajay Sukumaran

TOOTH SENSITIVITY NANOBOTS TO THE RESCUE

Switch on the TV and it won't be long before you run into a toothpaste ad for sensitive teeth. Dental hypersensitivity affects nearly one in four people worldwide. It occurs when tooth enamel erodes or the gum recedes, exposing the inner layer of hard tissue, the dentine. Inside the dentine are tiny fluid-filled tunnels, or tubules, which lead to nerve-end-

The holy grail of fixing sensitive teeth, explains Debayan Dasgupta, director of Theranautilus, which he co-founded with Prof. Ambarish Ghosh of the Centre for Nano Science and Engineering (CeNSE) and postdoc Shanmukh Peddi, has been to drive the cementing material deep enough, given the tubules are about 2,000 microns long. In a paper pub-



ings where a twinge is felt when teeth come in contact with cold substances.

Treatments such as desensitising toothpastes provide short-term relief through a protective coating over the exposed part. But a permanent fix remains elusive. Now, a deep-tech startup from the Indian Institute of Science (IISc) in Bengaluru has patented a radically different approach. Using magnets, they guide nano-sized robots deep into the dentinal tubules and plug these tunnels with a bioceramic cement.

lished in *Advanced Science* in July, the researchers showed that their nanobots—spherical structures with an inner core of iron oxide enclosed by an outer layer of calcium silicate—can reach up to 300-500 microns inside the tubules and, once there, self-assemble into cement-like plugs that block the tubules.

"Forget nanostructures, there are no magnetically-delivered therapeutics anywhere in the world," says Dasgupta. The next step for Theranautilus, proving efficacy in human clinical trials, will start soon.

UPFRONT

► WILDLIFE

JUMBO CRISIS IN INDIA

Graphic by **NILANJAN DAS & TANMOY CHAKRABORTY**
Text by **JUMANA SHAH**

India's most comprehensive estimate of its elephant population comes with some sobering news: pachyderm numbers have fallen by 18–25 per cent, from 29,964 in 2017 to 22,446 now (2021–25). The Synchronous All-India Elephant Estimation (SAIEE) 2021–25 report, prepared by the Wildlife Institute of India, the ministry of environment, forest and climate change, and Project Elephant, represents a scientific milestone. For the first time, the non-invasive genetic SECR (spatially explicit capture-recapture) method has been used to estimate jumbo numbers. Field teams trekked across some 666,977 km of forest trails, collecting dung swabs to extract DNA for analysis. The shift in methodology means current numbers cannot be compared with earlier data, but it does establish a 'fresh baseline' for future monitoring.

WHY NUMBERS ARE FALLING

- With poaching on the wane, fragmented habitats are the main culprits now. This has led to more human-elephant conflict, retaliatory attacks after raids by the pachyderms
- Electrocution deaths from high-tension wires, electric fencing. Rail track accidents also rising

HOW TO TACKLE THE CRISIS

- Prevent further habitat destruction, secure traditional elephant corridors
- Integrate land-use planning with conservation efforts. Incorporate elephant-friendly thresholds
- Focus conservation efforts/resources on states with high jumbo numbers, those with high threats

(All figures
are estimated;
2025 range:
18,255–26,645)

22,446
2025

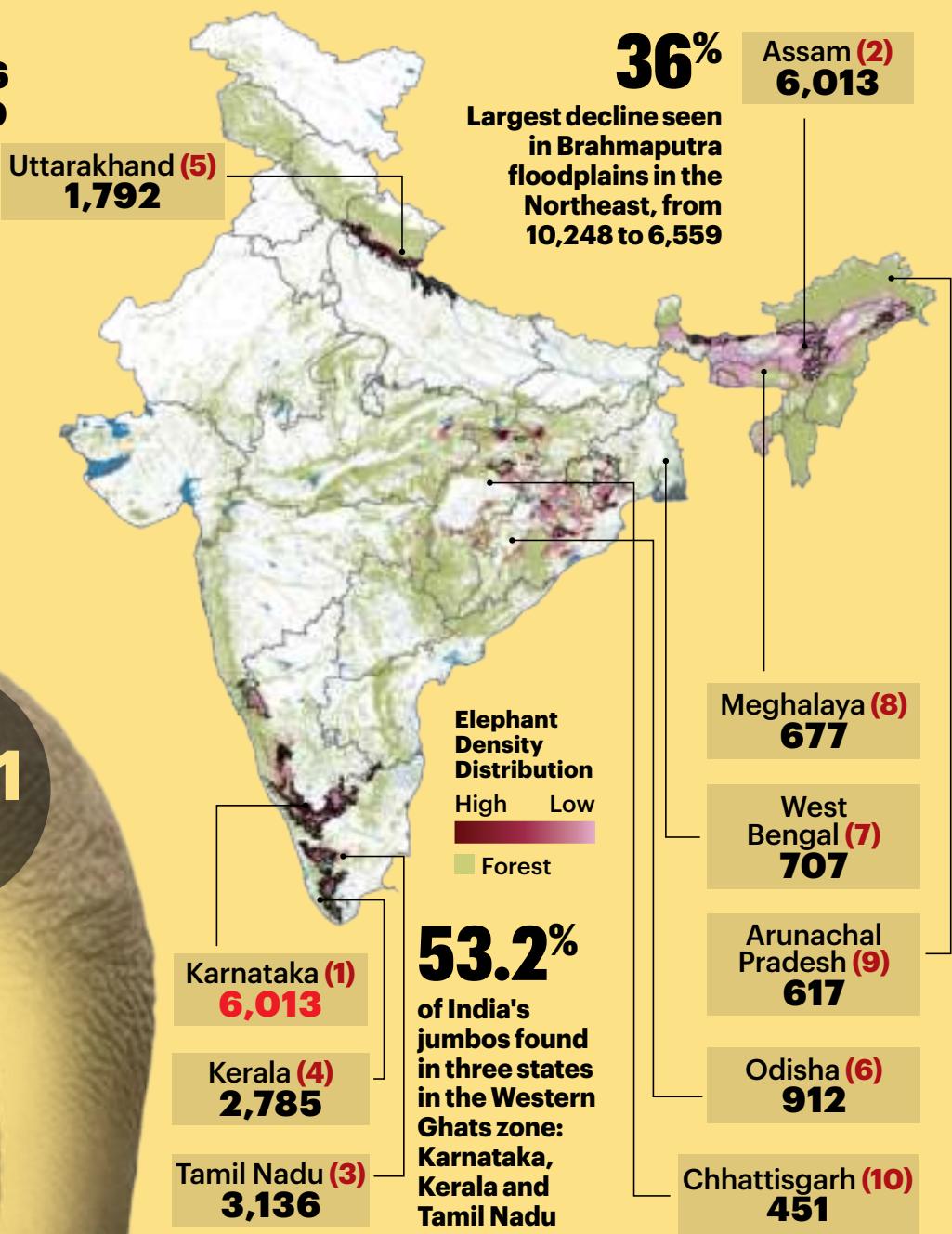


TOP 10 STATES BY ESTIMATED ELEPHANT NUMBERS

The survey had divided elephant populations into four regions: Western Ghats, Central India and Eastern Ghats, Shivalik Hills and Gangetic Plains, and Northeastern Hills and Brahmaputra Floodplains

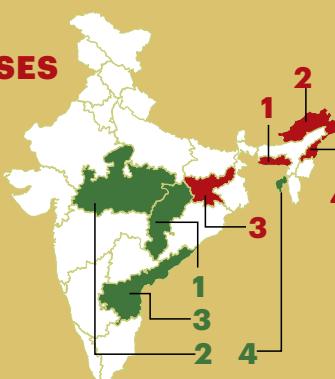
30,051
2012

29,964
2017



STATES SHOWING MOST LOSSES

1. Meghalaya **677 (1,754)***
2. Arunachal Pradesh **617 (1,614)**
3. Jharkhand **217 (679)**
4. Nagaland **252 (446)**



STATES WITH RISING POPULATIONS

1. Chhattisgarh **451 (247)***
 2. Madhya Pradesh **97 (7)**
 3. Andhra Pradesh **120 (65)**
 4. Tripura **153 (102)**
- *2017 figures in ()



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Growing Legacies



Nature's Basket



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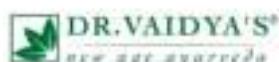
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STATE SCAN

TAMIL NADU: STREETS TO HAVE NO CASTE PG 16

MP: A DIP IN TROUBLED WATERS PG 18



► GOING UP New deputy CM Harsh Sanghavi with CM Bhupendra Patel

► GUJARAT

HEIR APPARENT

Harsh Sanghavi, coronated as deputy CM, is the new No. 2 in Gujarat

By Jumana Shah

AGASP OF SURPRISE ROSE UP IN THE convention hall of Mahatma Mandir as Harsh Sanghavi took oath as Gujarat's deputy chief minister. To be sure, this scion of an affluent Jain family in the diamond business, a beaver-like MoS with a raft of portfolios, was set for an elevation to cabinet level. The previous day had seen 16 ministerial resignations—the second time the

Gujarat cabinet was made to exit en masse. In 2021, when the Vijay Rupani cabinet was decommissioned, it included the CM. This time, Bhupendra Patel was safe. But everyone was taken aback by the new 40-year-old installed by his side in the October 17 reboot.

But Sanghavi didn't take long to adjust from junior minister to state No. 2. As the 25 other inductees came up to the CM after their swearing-in,

Patel stood up and greeted each one. Sanghavi remained seated, offering only a cursory handshake to colleagues decades senior to him. Thus were new power equations established. The man of the moment, judging by all cues, is the man to watch out for in the next few decades. The reshuffle, precipitated by former MoS Jagdish Vishwakarma's appointment as BJP's state president, was on the cards for at

least six months. It answers to a certain restlessness within party ranks on account of non-performance. At least three cabinet ministers are also facing police inquiry in financial scams. The party also wanted wider regional and caste representation, as well as ensuring the rewarding of turncoats—former Congress state chief Arjun Modhwadi was one of the top inductees.

THE YOUNG FACE

“Anti-incumbency is being felt rather acutely after 27 years of BJP rule,” admits a party insider. “The youth are troubled by economic headwinds. But they’ve never seen Congress rule and don’t know the difference the BJP has made. They blame us for all problems. Patel is non-controversial but isn’t seen

Takeaways

► **The suave Sanghavi, 40, is from a Jain diamond trading family, and an arch party man**

► **His surprise elevation as deputy CM is meant to take the edge off youth unrest**

as particularly dynamic.” But it was prudent to signal continuity so as not to spook industry.

That’s where Sanghavi comes in—suave, charming, ambitious, and not the least, a counter to AAP’s Gopal Italia, whose exhortations are fuelling Gujarat’s restless youth. With the backing of leading Jain businessmen, and a savoir faire that belies his Grade 9 education, Sanghavi has what the BJP needs the most—organic popularity, while being a faithful knight close to Narendra Modi, Amit Shah and C.R. Paatil, and time spent in the party crusades.

Among portfolios, home, usually retained by the CM, has gone to Sanghavi. He also retains sports, a key onus as Gujarat gets set to host the Commonwealth Games in 2030, with its eyes on Olympics 2036. ■

► CHHATTISGARH / MAHARASHTRA

HUGE CRACKS IN THE RED EDIFICE

Two big Maoist rebels lay down arms—a crafty surrender policy helps silence guns peacefully

By **Rahul Noronha**

IT WAS LIKE A DIWALI BONUS: TWO TOP MAOISTS laying down arms, each with a huge trail of cadre and arms. It happened separately, in Maharashtra and Chhattisgarh, but as part of a single wave—like parts of a weakened mountain crumbling. Those who have come in from the bush call it not a surrender but a continuation of their work for the oppressed, minus arms. An indulgent State is welcoming it and playing along—in Chhattisgarh, it even christened it ‘Puna Margem’ (A New Life) to mark it out as a rehabilitation.

Call it what you will, it’s the one of the biggest subsidence of insurgency in these parts. On October 14, in Maharashtra’s Gadchiroli, it was politburo and central committee

(CC) member M. Venugopal Rao alias Bhupathi or Sonu who turned himself in; 60 cadres followed, with a 54-weapon cache. A day later, a formal ceremony happened before CM Devendra Fadnavis. Then, on October 17, 210 cadres led by CC member Satish alias Rupesh surrendered before Chhattisgarh CM Vishnu Deo Sai at Jagdalpur.

The cause of this turn to pacifism? Not hard to divine. The insurgency has been taking heavy hits in the security blitzkrieg ongoing since December 2023, with Maoist casualties pegged at 470-plus. Even a top gun like general secretary Nambalai Keshava Rao alias Basavaraju lay slain in Abujhmad this May.

A few months ago, Sonu, who headed the Maoist education wing



► **NEW DAWN** Senior Maoist leader Bhupathi (second from right) surrenders before Maharashtra CM Devendra Fadnavis in Gadchiroli, Oct. 15

and did spokesman duties, had released a note seeking a ceasefire to consult his peers on brokering a surrender. Devji, effectively the lone surviving politburo member actively taking decisions, vetoed it. Termed a 'traitor', Sonu insisted even Basavaraju had issued a similar appeal before his encounter. Yet, the government had refused, saying there was no war on, though it was open to surrenders.

When he heeded the call, why did Sonu choose Maharashtra, not Chhattisgarh—his area of operation? Sources point to his wife Tarakka, who had laid down

Takeaways

► **Politburo member Bhupathi alias Sonu lays down arms in Maharashtra; top insurgent Satish follows suit in Chhattisgarh. In all, 270 rebels surrender**

► **The two states have rolled out attractive terms for surrender**

arms in Maharashtra in January. The state offers a better severance package for retiring guerrillas. Sonu carried a total reward of Rs 6 crore, adding all the states where he was wanted. For CC members, Maharashtra offers Rs 50 lakh; Chhattisgarh only Rs 40 lakh.

The mass surrender in Chhattisgarh is also being linked to Sonu, since he had close ties with Satish and many others who lined before Sai. Bastar IG Sundarraj P. says there were no "peace talks with Maoists in Chhattisgarh, unlike in Andhra Pradesh in 2004". Yet, there was communication. The Maoists would test the waters for peace via a press note every few weeks. Typically, deputy CM Vijay Sharma responded with surrender

calls, no strings attached. Anyway, 50 cadres came out of the forests in Koyalibeda in Kanker on October 15; a day later, a 160-strong unit led by Satish emerged on the Dantewada-Bijapur border. On October 17, they came before the CM in Jagdalpur, in a ceremony similar to the one at Gadchiroli.

SINECURE FOR REBELS

Housed in a transit camp for debriefing, the ex-insurgents would be offered jobs commensurate with their education and aptitude—for instance, in the police. Satish, meanwhile, told the media he had been assured there would be no pressure on them to join the District Reserve Guard, the police's sword-arm built around Adivasis, with a fair sprinkling of surrendered Maoists among them. As for the surrender reward, only Rs 50,000 will be released immediately, plus Rs 10,000 for sustenance; the bulk will be stowed away in a bank for three years, a quasi-probation period.

With this, Dandakaranya's 'North Sub Zonal Committee' has mostly folded up and "the movement has considerably weakened in North Bastar's Kanker and part of Abujhmad", says IG Sundarraj. Indeed, the entire Maoist edifice is in dire straits. The politburo had five members at the beginning of 2025. That has dwindled to just three: Ganapathi, Devji, Mishir Besra. Ganapathi is old and ailing, Besra is in charge of Jharkhand. The CC, which had 18 members as 2025 dawned, now has just five.

Still untamed by Chhattisgarh are Bijapur, Sukma and Narayanpur districts, where committed cadres are down to around 250. This includes around 120 of 'Battalion Number 1', once headed by Madvi Hidma, said to be the best trained. The Centre's deadline of March 31, 2026, is not very far. ■



► **TAMIL NADU**

STREETS T

The Stalin regime orders caste-based renaming

By **Kavitha Muralidharan**

RENAMING HAS TYPICALLY STRUTTED down a different street in India, but Tamil Nadu is all set to change the name of the game. As it marks a century of Periyar's Self-Respect Movement, the state is axing the markers of an older form of pride. Caste-based names will be erased from streets, localities, water bodies and public landmarks across all districts.

An October order stipulates that every municipal body and panchayat will comb through its jurisdictions, identify public spaces carrying caste-linked titles and rename them. The replacements are to be caste-neutral and



▲ **TIE-BREAK** T.M. Nair Bridge Road in T. Nagar, one of the pathways to be renamed in Chennai

O HAVE NO CASTE

ed names to be wiped off all public places, critics cry bias

drawn from Tamil poets, flowers, local icons, or historically prominent figures.

A PERIYARIST STRIKE

The deadlines shows the state is dead serious: local bodies must first submit lists, then conduct public consultations and accept petitions, issue formal notifications, and send the finalised names to the state government by mid-November. The full transition is to be accomplished by November 19. In the capital city alone, the Greater Chennai Corporation plans to rename around 3,400 streets bearing caste-linked names before the deadline, using neutral substitutions or at

least initials if no suitable replacements are decided upon.

In 1929, the Self-Respect Conference at Chengalpattu, held under Periyar's leadership, passed a resolution urging

Takeaways

► All streets, localities, water bodies to get caste-neutral names by November 19

► Opposition calls it 'Street Karunanidhi', with AIADMK icons MGR, Jaya ignored

people to drop caste and community titles from their names. As a symbolic reform that harks back to that gesture, the idea is sweeping in its ambition and yet not immune from controversy. AIADMK leader Edappadi K. Palaniswami has accused the DMK government of using the exercise as a vehicle for partisan memory-making, particularly by favouring Stalin's father M. Karunanidhi, the former DMK CM.

'FAMILY FAVOURITISM'

Moreover, EPS alleges the government is sidelining icons like the AIADMK lodestars M.G. Ramachandran and Jayalalithaa, besides many others, while elevating Karunanidhi. He promises that, if his party returns to power, the renaming order will be revoked. BJP's K. Annamalai also critiques the exclusion of the two ex-CMs from the state's "icon" list. The list of suggested replacements presently comprises the names of 16 reformers and literary icons. The last on the list is indeed Kalaignar, the popular appellation of Karunanidhi, seen as a literary icon in his own right with a vital role in the Dravidian movement.

In response, finance minister Thangam Thennarasu has accused Palaniswami of politicising a socially progressive move. He clarifies that the names listed in the government order are merely suggestive, not prescriptive, leaving ample room for local choice.

Another flashpoint is the G.D. Naidu Elevated Expressway in Coimbatore—a 10-km corridor inaugurated this year. Critics point out it bears a surname that is in breach of the renaming logic. The government defends its decision on grounds of regional legacy and public identity. Thennarasu says Naidu was a celebrated scientist and Coimbatore native, and retaining his full name is essential for public recognition.

Observers note the real test lies in how far communities themselves can shape the renaming process instead of merely accepting it. Will new names truly unsettle local hierarchies, soften address-based stigma, and redefine belonging? Or will it all be symbolic? ■

► MADHYA PRADESH

Taking a Dip in Troubled Waters

As CM Yadav prepares to build grand mela infra in hometown Ujjain, farmers are up in arms against the proposal to pool land

By **Rahul Noronha**

UJJAIN, THE HOME BASE OF MADHYA PRADESH CM Mohan Yadav, is in ferment. Reason: a move to pool agricultural land to build permanent infrastructure for the Simhastha Mela in 2028, expected to be one of the state's biggest religious congregations ever. The farmers from whom land is to be acquired are up in arms. And not only the Congress, even the RSS-affiliated Bharatiya Kisan Sangh (BKS) is pitted against the BJP government on the issue. How does a religious issue polarise the field in such odd ways? Due to the terms under which land is to be acquired.

MP has a 'land pooling' policy under which farmers can cede half their agri holdings to the state for residential projects. Under its terms, 35 per cent would go for civil infrastructure, and 15 per cent for housing—the hook was that the 50 per cent the farmer retained would now fetch higher returns because of the surrounding development. This framework is now extended to private developers. But that's not at issue here. The present plan involves only the Ujjain Development Authority (UDA).



The Simhastha is a 12-yearly mela akin to the Kumbh, centred around the revered Mahakaleshwar jyotirlinga. Lakhs of pilgrims descend on Ujjain and take a holy dip in the Shipra river. The idea for developing permanent mela infrastructure arose because of past experience. Reports had detailed how, during the last edition of Simhastha in 2016, sewage, water supply and roads had become a huge mess.

To obviate that, the plan is to have road, electricity and sewage infrastructure over 2,300 hectares of the 3,100-ha designated mela area. Of this, 1,900 has to be acquired—only 300

▲ **NO CAN DO**
Farmers protest against the Simhastha land acquisition bid in Ujjain; (inset) CM Mohan Yadav



has materialised. Trouble is, the rest of the farmers are spooked by the fact that, unlike for residential projects where land value appreciation is immense, the mela proposal allows only schools, colleges and hospitals to be built over the remaining land. The 1,700 affected farmers fear this would strip the land of its value, leaving them with nothing.

The Congress was quick to echo their angst. But worryingly for the government, in mid-September, BKS general secretary Mohini Mohan Mishra, too, led a protest. With the Simhastha expected to see around 300 million pilgrims, it's a prestige issue for the CM, given his Ujjain connection and the high cachet in the party for pilgrim tourism. After the creation of Ujjain's Mahakal Lok Corridor in 2022, the jyotirlinga's footfalls have soared from 5,000 to around a lakh daily. Yadav wishes to leave his own stamp on his city. Last heard, hectic talks were on. ■

Takeaways

► **Farmers in Ujjain up in arms against move to 'pool' their land for 2028 Simhastha mela**

► **CM Yadav wants permanent infra around 3,100-hectare area to ensure smooth mela**

► **Unlike for urban projects, farmers fear giving up land portions for the project will slash value of farmland**

THE HIGH-STAKES BIHAR BATTLE



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HURTING THE YOUNG

ONCE CONSIDERED AN OLD-AGE AFFLICION, BACK PAIN IS NOW STRIKING EARLY. BUT NEW, LESS INVASIVE THERAPIES OFFER HOPE

BY SONALI ACHARJEE | Illustration by NILANJAN DAS

At

29, Rohan Mehta never imagined he would be dealing with a slipped disc, a condition associated with middle age. A budding DJ in Delhi, he had dismissed his nagging backache as just usual postural strain, until an MRI revealed the reason behind weeks of sleepless nights and shooting pain that made even bending to tie his shoelaces impossible. A slipped disc, doctors told him, occurs when the soft cushion between two spinal bones bulges or ruptures, pressing painfully on nearby nerves. What unsettled Rohan most wasn't the diagnosis, but the realisation that his spine seemed to be ageing faster than he was.

Rohan's ordeal, experts say, reflects a wider trend. Chronic back and neck issues are now increasingly affecting younger adults. A 2025 study in *Cureus: Journal of Medical Science*, based on 16,866 patients across 18 states, found a sharp rise in back pain cases between 2020 and 2023, with the highest prevalence in the 18–38 age group—the very years of peak productivity. Another 2024 systematic review by the ICMR-National Institute of Occupational Health, published in the *Journal of Occupational Health*, pooled studies from diverse sectors—agriculture, healthcare, mining, banking etc.—and found that 60 per cent of working-age Indians reported low back pain (also referred to as lower back pain) in the past year. Sedentary jobs, poor ergonomics and hours spent hunched over screens are fuelling the surge.

This, even as India is rapidly joining the ranks of countries with the highest number of back pain cases. Accord-

**61
PER CENT**

School students using e-learning devices who complained of neck pain*

**60
PER CENT**

Prevalence of low back pain among working-age Indians**

**18-38
YEARS**

Age group with highest prevalence of back pain cases in a study conducted across 18 states*

* A 2024 study of 1,007 Grade 8-12 students in India

** A 2024 meta-analysis of Indian studies across sectors

#16,866 patients covered from 2020 to 2023



ing to the 2023 'Global Burden of Disease' (GBD) study by the Seattle-based Institute for Health Metrics and Evaluation, low back pain ranks among the top 10 leading causes of early death and disability worldwide. In the 2021 edition of the same study, which provides the most up-to-date national estimates, India accounted for 15 per cent of all spinal injuries globally—the second-highest after China. More recently, a 2025 epidemiological study published on ResearchGate estimated that 1.5 million Indians are living with disabilities caused by spinal injuries.

Yet, for all the bleak statistics, spine care is at a crossroads. A wave of innovation—from minimally invasive surgery and robotics to regenerative therapies—is offering patients faster recovery, less pain and, in some cases, the chance to avoid surgery altogether. Complementing these cutting-edge advances are yoga-based interventions and other holistic practices rooted in traditional knowledge, which are helping patients build strength, improve flexibility and support long-term spine health. What was once a life sentence of chronic discomfort is increasingly becoming a condition that can be managed, and sometimes reversed.

CATCHING THEM YOUNG

Our ability to walk upright—a defining trait of being human—came at a cost. As humans evolved from moving on four limbs to two, the spine curved into an S-shape, freeing our hands but exposing the body to new mechanical stresses. This evolutionary trade-off made the spine biologically vulnerable to wear and tear with age. Modern lifestyles are accelerating that natural decline. While spinal trauma can occur anywhere from the neck down to the tailbone, it is the lower back that remains the most common trouble spot.

The World Health Organization notes that back pain is already the leading cause of disability worldwide, and is projected to afflict 843 million people globally by 2050, up from 619 million in 2020, with Asia carrying the sharpest burden. The stakes are high. For, young adults with persistent back pain have a 60 per cent chance of developing chronic spinal problems by 40, warns Dr Vidyadhara S., chairman and head of

spine surgery at Manipal Hospitals, Old Airport Road, Bengaluru. "Spinal deformities in youth can accelerate disc degeneration, trigger premature arthritis, chronic pain, even respiratory or neurological issues," he adds.

DR ISSAC MATHAI
Founder, Soukya, a holistic health centre in Bengaluru

ANATOMY OF STRAIN

WHAT PART OF YOUR SPINE IS UNDER PRESSURE AND WHY

CERVICAL SPINE (NECK)

 **Posture:** Forward head tilt from prolonged screen use (tech neck) compresses spinal discs, strains muscles

 **Stress:** Keeps neck and shoulder muscles in constant tension, reducing mobility

THORACIC SPINE (UPPER & MID-BACK)

 **Less movement:** Sedentary habits stiffen the rib-to-spine joints, affecting breathing and posture

 **Muscle weakness:** Weak upper back muscles lead to rounded shoulders and hunched posture

LUMBAR SPINE (LOWER BACK)

 **Obesity:** Extra weight overloads lumbar discs and joints, accelerating wear and tear

 **Wrong exercise:** Sudden high-impact or unsupervised lifting can cause strains, disc bulges or herniation

SACRAL REGION & PELVIS

 **Posture & weak core:** Poor pelvic alignment and weak abdominal muscles shift extra pressure to lower spine and hips, affecting balance

The everyday habits silently wearing down your spine—from screen slouching to weak cores—and why back pain now strikes decades earlier



WHAT CONDITIONS ARE EMERGING EARLY

• CERVICAL SPONDYLOYSIS (NECK ARTHRITIS)

BEFORE: Usually after 50 due to age-related wear

NOW: Early 20s–30s from prolonged tech neck, poor ergonomics and weak neck muscles

EARLY-AGE TRIGGER:
Continuous forward head posture from devices, no neck-strengthening exercises

• OSTEOPOROTIC VERTEBRAL FRACTURES

BEFORE: Common in post-menopausal women or elderly men

NOW: Showing up in under-30 adults

EARLY-AGE TRIGGER:
Severe Vitamin D deficiency, eating disorders and extreme diets

• SPINAL STENOSIS (NARROWED SPINAL CANAL)

BEFORE: Age-related bone overgrowth and ligament thickening

NOW: Early degeneration in 20s–30s

EARLY-AGE TRIGGER: Weight training without form supervision, repetitive strain and sports injuries

• FACET JOINT ARTHRITIS

BEFORE: Age-linked cartilage wear in the joints between vertebrae

NOW: Appearing in overweight young adults

EARLY-AGE TRIGGER:
Obesity, repeated heavy lifting and high-impact workouts without spine conditioning

• LUMBAR DISC DEGENERATION

BEFORE: Gradual disc dehydration and thinning in 40s–50s

NOW: Seen in young desk workers and gamers

EARLY-AGE TRIGGER: Sedentary lifestyle, obesity and prolonged sitting without breaks

Dr S. Rajasekaran, editor-in-chief of the *Indian Spine Journal* and chairman of the Department of Orthopaedics, Trauma & Spine Surgery at Ganga Hospital, Coimbatore, agrees: "There is definitely an increasing trend of spine pain disorders—both lower back and neck—in people below the age of 40." The pattern of complaints is also becoming more complex. "Early onset of disc-related leg or arm pain (sciatica or cervical radiculopathy) is now being seen in the 20–35 year age group," he adds.

It's not just allopathic doctors raising concern. "Spinal issues in the youth should be a public health priority," says Dr Issac Mathai, founder of Soukya, a holistic health centre in Bengaluru. "Physical neglect and mental stress are creating a generation prone to spinal dysfunction far earlier than ever. The tragedy is that many delay seeking help, letting small, fixable problems turn chronic."

“Spinal deformities in youth can accelerate disc degeneration, trigger premature arthritis, chronic pain, even respiratory or neurological issues”

DR VIDYADHARAS.

Chairman and Head of Spine Surgery, Manipal Hospitals, Old Airport Road, Bengaluru

THE PAIN POINTS

Anatomically, the spine is one of the body's most intricate structures—both a pillar of the skeleton and a highway of nerves. Its stacked bones shield the spinal cord, the central channel for messages between the brain and the rest of the body. When trouble strikes here, the fallout can affect movement, sensation and everyday function for years.

At the very top sits the cervical spine—the neck. Remarkably mobile, it balances and moves the head, allowing us to swivel, tilt and nod. But hours bent over screens, sudden whiplash of the sort caused by fast braking or accidents, or simply the wear of age takes a toll on its flexibility, leaving it stiff, sending pain into the shoulders and arms, or triggering headaches that creep up from the base of the skull.

The cervical spine flows into the thoracic region, the upper and mid-back that anchors the ribcage. Built more for stability than motion, it often bears the strain of a slouched posture, weak supporting muscles or the brittle bones of osteoporosis. Pain here can radiate between the shoulder blades or wrap around the ribs, sometimes mimicking heart or lung issues.

Below lies the lumbar spine—the lower back and the

EMERGING NEW TREATMENTS

From robotic and augmented reality-guided surgeries to minimally invasive procedures and regenerative therapies, new spine treatments combine precision, safety and faster recovery for lasting relief

ROBOTIC SPINE SURGERY

Uses robotic arms and navigation systems to place screws or implants with millimetre-level accuracy, reducing risk to nerves and improving surgical precision

Cost: ₹4-9 lakh



TOTAL DISC REPLACEMENT

Replaces a damaged spinal disc with an artificial one, preserving natural motion instead of fusing vertebrae, which can help prevent stress on adjacent segments

Cost: ₹3-6 lakh



body's workhorse. Bearing much of our weight and absorbing the shocks of daily movement, it is the epicentre of back pain globally. Strained muscles, bulging discs or arthritis can cause anything from morning stiffness to searing sciatica that shoots down the legs.

At the base, the sacrum and coccyx—triangular bones that lock into the pelvis, ending in the small tailbone—often go unnoticed until localised pain flares up, triggered by a fall or hours of sitting on a hard chair.

AUGMENTED REALITY NAVIGATION

Allows surgeons to see internal structures overlaid in real-time during surgery, improving safety and accuracy in complex spinal procedures



Cost: Depends on the surgery it is used for

MINIMALLY INVASIVE SPINE SURGERY

Uses incisions under 2 cm to treat disc problems or nerve compression, leading to less tissue damage, minimal blood loss and faster recovery

Cost: ₹1.5–5 lakh



STEM CELL & REGENERATIVE THERAPY

Uses special repair cells in the body that can transform into different tissue types to heal degenerated spinal discs and injured nerves. Platelet-rich plasma (PRP) is also used to boost healing and ease chronic back pain

Cost: ₹3–8 lakh per treatment cycle



THE RISK FACTORS

For many, the warning signs begin subtly—stiff shoulders after long study sessions, a nagging ache at the base of the neck or fatigue that no amount of rest seems to fix. According to Dr Ashish Tomar, senior consultant of orthopaedics & spine surgery at Faridabad's Sarvodaya Hospital, the modern lifestyle is leading to “a slow reshaping of young spines”—even in adolescence. The numbers back this. A 2024 study in the *Journal of Bodywork*

and Movement Therapies, which surveyed 1,007 students in Grades 8–12 across India, found that 61 per cent of those using e-learning devices reported neck pain. For Mumbai home-maker Neha Sharma, the problem hit close to home when her 11-year-old son began struggling to tilt his head back. A visit to the paediatrician revealed an altered neck posture from months of e-learning and gaming. “He’s always bent forward, whether it’s for school or screens,” she says. “I never imagined something like this could happen to a child.” Another 2024 study in the *Journal of Pharmacy and Bioallied Sciences* found that among the 500 Indian schoolchildren surveyed, the average backpack weighed about 13.5 per cent of their body weight. Half the boys and nearly two-thirds of the girls reported back pain as a result.

Office work is equally unforgiving. In Pune, 24-year-old design intern Suresh Raghavan developed upper back pain within six months of starting a work-from-home job. The culprits: a dining chair substituting as office furniture, a laptop placed too low, and marathon work sessions without breaks. “By the end of the day, my shoulders would feel like they were made of rock,” he recalls. An X-ray revealed early postural kyphosis—an abnormal forward rounding of the upper spine—linked to what is now commonly known as ‘tech neck’, the strain caused by constantly bending over screens. Left unchecked, his doctor warned, it could become permanent. His experience echoes the findings of a 2025 study in the *International Journal of Medical Science and Innovative Research*, which reported that half of the 300 corporate desk-job workers aged 22–40 surveyed in western India suffered from neck pain.

Obesity adds another layer of risk, overloading discs and joints, while obesity-related muscle loss and inflammation worsen pain. Nutrition, often overlooked, has a part to play too. Vitamin D deficiency softens vertebrae; magnesium shortages impair calcium absorption. In Chennai, 22-year-old architecture student Kavya Menon learned this the hard way. Living on processed snacks and avoiding outdoor activity, she was diagnosed with early osteomalacia, a condition where bones lose strength because they don’t mineralise properly. “First, I thought it was just exam stress,” she says, “but my bones were weaker than they should be.”

Stress, say experts, is perhaps the most underestimated factor. Cross-sectional data from Indian medical undergraduates, published in the *International Journal of Basic & Clinical Pharmacology* in 2024, confirmed a high frequency of low back pain, linked to stress, sedentary habits and poor ergonomics. At AIIMS Jodhpur, for instance, three out of four students had experienced at least one episode of low back pain in the past two years, and 41.8 per cent reported it within the past four weeks. What holds true for medical students reflects the experiences of many in other high-pressure professions as well. “Chronic stress keeps neck, shoulder and lower back muscles in a constant state of tension,” explains Dr Mathai. Over time, this distorts posture, compresses nerves, reduces mobility and can even trigger structural changes such as cervical spondylosis—age-related wear and tear of the neck vertebrae—and chronic lower back pain.

RESHAPING SPINE CARE

For decades, spine care relied on methods that now seem outdated. Back then, if you had a slipped disc or severe back pain, the standard advice was bed rest—sometimes for weeks. Today, that's seen as counterproductive: prolonged immobility can weaken muscles, increase stiffness and actually slow recovery. Doctors now nudge patients to get moving sooner, using gentle physiotherapy to rebuild strength and flexibility.

The same rethink is happening on other once-standard treatments. Bulky back braces and corsets, once routinely prescribed for chronic pain, are now used only in special cases, like spine fractures, scoliosis (a sideways curve of the spine) in teenagers or after certain surgeries. Research shows they don't offer much long-term relief. Traction, another mainstay for neck and lower back issues, has also fallen out of favour. It might ease pain temporarily but doesn't fix the underlying problem, and modern surgical techniques have largely rendered it obsolete. Even spinal injections—especially repeated epidural steroid shots—are being reconsidered due to their short-lived relief and inherent risks. Instead, newer biological therapies and more targeted interventions are slowly gaining ground.

The biggest leap in spine care has been the rise of minimally invasive surgery (MIS). Instead of cutting through large sections of muscle, surgeons can now access the spine through keyhole-sized openings, using slender tools and cameras to fix slipped discs, correct scoliosis or stabilise unstable vertebrae. Techniques like MIS-TLIF (Transforaminal Lumbar Interbody Fusion) and MIS-PLIF (Posterior Lumbar Interbody Fusion) are prime examples. In simple terms, these are ways to remove a damaged spinal disc and place a bone graft to fuse the surrounding vertebrae—all via incisions sometimes smaller than two centimetres. The costs? Rs 1.5 lakh to Rs 5 lakh.

"In the last two or three decades, technology has changed a lot," says Dr Sandeep Vaishya, executive director and head of neurosurgery at Fortis Memorial Research Institute, Gurugram. Along with advances in spine implants, he points to the growing use of intraoperative CT and MRI scans, which give real-time images during surgery, and neuro-navigation systems—digital roadmaps for the spine—that guide surgeons to place screws with pinpoint accuracy. "Many procedures can even be done under local anaesthesia," he adds, "with patients walking home the next day."

“The new minimal-access procedures have the same results as traditional surgery but involve much smaller incisions, less tissue injury, less requirement of blood and faster recovery”

DR BIPIN WALIA
Chairman, Neuro-surgery & Neurospine, Max Healthcare, Saket, Delhi

HOW TO CARE FOR YOUR SPINE

Good spine health isn't about sitting straight—it's about movement, strength and awareness. Small daily habits can prevent stiffness, support alignment and stop pain before it starts



POSTURE IN MOTION

Don't aim for a single 'perfect' position all day; keep moving. Shift between sitting, standing and walking to prevent stiffness and maintain spinal flexibility

“There's no single perfect posture. What matters is a dynamic, balanced lifestyle that keeps the spine supported, strong and mobile”

DR RAMAN KAPUR

Head of acupuncture, Sir Ganga Ram Hospital, New Delhi

spine surgery even further. "In the past decade, spine surgery has changed in ways once thought impossible," says Dr Hitesh Garg, head of ortho-spine surgery at Artemis Hospital, Gurugram. Robot-assisted systems, he explains, let surgeons control robotic arms that place screws and implants with millimetre-level precision, reducing the risk of nerve injury and helping patients heal faster. AR, meanwhile, lets surgeons see digital overlays of internal anatomy as they operate, almost like using a real-time X-ray visor. These cutting-edge tools don't come cheap: robotic spine surgeries cost around Rs 4–9 lakh, and procedures that use AR can cost even more. Backing all this are new kinds of implants—3D-printed titanium cages and expandable spacers—that are stronger, more body-friendly and can be custom-fitted to a patient's unique anatomy. For patients, this can mean shorter hospital

CORE IS YOUR ARMOUR

A strong core stabilises your spine. Include exercises like planks, bridges and swimming to build muscle support without compressing your vertebrae



LIGHTEN THE LOAD

Whether it's a backpack or groceries, carry weight evenly and avoid sudden, heavy lifting to reduce uneven stress on discs and joints



ERGONOMICS EVERYWHERE

Invest in a chair with lumbar support, a desk at the right height and a computer screen at eye level to prevent chronic strain



LISTEN TO THE WHISPERS

Early signs—stiffness, mild discomfort or tingling—are your spine's way of asking for help. Address them quickly to avoid long-term damage



stays, smaller scars and a quicker return to daily life.

The results can be transformative. "The new minimal-access procedures have the same results as traditional surgery but involve much smaller incisions, less tissue injury, less requirement of blood and, most importantly, faster recovery," says Dr Bipin Walia, chairman and head of neurosurgery & neurospine at Max Healthcare, Saket, Delhi. He recalls one striking case: a young girl who was paralysed from the neck down after a sports accident. Within a month of surgery, she was walking again. In three months, she had returned to an active life and even received a sports award from the President.

While surgery is becoming less invasive, an even more futuristic shift is underway—regenerative medicine, which tries to heal damaged discs instead of cutting them out or fusing the spine. Two of the most talked-about approaches are stem cell therapy and platelet-rich plasma (PRP) injections.

Stem cells are special repair cells in the human body that can transform into different types of tissue. A recent multi-centre study published in *Stem Cells Translational Medicine* found that injecting mesenchymal stem cells—sourced from bone marrow and fat—into degenerated spinal discs cut patients' pain scores by up to 70 per cent over two years. Similarly, a meta-analysis in *The Spine Journal* found that PRP—already used to speed up healing in sports injuries—showed promise for easing chronic low back pain.

In India, several private centres are experimenting with these treatments.

The NeuroGen Brain & Spine Institute in Mumbai positions itself as a leader in cell therapy for neurological and spinal disorders while Spine Surgery India offers stem cell options at multiple centres. Regen Ortho Sport in Delhi promotes regenerative spine treatments using stem cell concentrates, and hospitals like Tosh Trauma & Orthopaedic in Chennai and StemCellCareIndia in Delhi also advertise stem cell-based interventions for disc degeneration and spinal cord injuries. The costs vary from around Rs 3 lakh to Rs 8 lakh for a treatment cycle. Alongside this, PRP therapy has seen wider clinical use, too. The Delhi Pain Management Centre offers it for slipped discs and chronic back pain, and Max Healthcare promotes it for musculoskeletal and spine-related problems. It is available for Rs 10,000–30,000 per sitting.

That said, doctors urge caution. Both stem cell and PRP therapies are still experimental, and results can differ greatly depending on the patient and the method used.

Long-term data is scarce, costs are high and regulation remains patchy, raising concerns about overselling unproven treatments to patients looking to avoid surgery.

TOWARDS HOLISTIC WELLNESS

India is also drawing on traditional strengths. Ayurvedic therapies such as Kati Basti, where warm medicated oil is pooled over the lower back to ease pain and stiffness, and Pizhichil, in which warm herbal oils are rhythmically poured and massaged over the body, remain popular as complementary care. Panchakarma, an Ayurvedic regimen that combines massages, herbal therapies and five core cleansing procedures, is also prescribed for chronic pain, with the aim of reducing systemic inflammation. Yoga, too, is being adapted for spine care: 'digital detox yoga' for tech neck, 'wall rope yoga' for safe spinal traction and Iyengar Yoga therapy using belts, bolsters and props to restore alignment and strength.



PRECISION AT WORK
Surgeons performing
microscopic spine
surgery at Artemis
Hospital, Gurugram

CHANDRADEEP KUMAR

“In the past decade, spine surgery has changed in ways once thought impossible. Robot-assisted procedures allow millimetre-level accuracy. This lowers nerve risks and speeds recovery”

DR HITESH GARG, Head of Ortho-spine Surgery,
Artemis Hospital, Gurugram

Acupuncture—a traditional Chinese medicine practice that involves inserting thin needles into specific points on the body—is increasingly integrated into rehab programmes. “It can't realign bones, but it can relax muscles, improve blood flow and reduce inflammation,” says Dr Raman Kapur, head of acupuncture at Sir Ganga Ram Hospital, New Delhi. Often paired with postural retraining, core strengthening, stretching and physiotherapy, acupuncture offers a supportive, low-risk way to manage mild spinal misalignments and related discomfort.

But, sometimes, the pursuit of health can backfire. During the pandemic, 28-year-old Delhi resident Priya Malhotra began following online yoga tutorials without supervision. Attempting advanced backbends and twists, she developed a sharp lower back pain. “I thought yoga was always safe, so I ignored the warning signs,” she says. But an MRI eventually revealed lumbar strain with early disc changes. Finally, months of physiotherapy and guided training helped her recover.

To prevent such setbacks, experts emphasise awareness. “There's no single perfect posture,” says Dr Kapur. “What matters is a dynamic, balanced lifestyle that keeps the spine supported, strong and mobile.” Dr Mathai advocates a holistic approach that emphasises prevention. Ergonomic chairs with lumbar support, medium-firm mattresses and pillows that preserve the neck's natural curve can ease everyday strain. Regular walking, swimming and supervised yoga help strengthen and align the spine, while timely medical intervention for pain can prevent chronic complications.

Education, especially in childhood, is crucial. Dr Chhabra stresses that teaching correct posture and load-bearing habits early is far more effective than correcting them later. Limiting schoolbag weights, enforcing screen-time rules and encouraging outdoor play can dramatically reduce long-term risk. Communities must also be trained to spot red flags like weakness, numbness or persistent pain that signal the need for urgent care.

On the policy side, Dr Chhabra, who also chairs the National Academy of Medical Sciences Taskforce on Spine Care, calls for nationwide adoption of the WHO's 2023 guidelines on chronic low back pain, workplace ergonomics incentives and broader insurance coverage for non-surgical care. District-level rehab units and outcome tracking, he argues, would improve both access and quality.

With education, policy reform and medical innovation working together, spine care in India is at a turning point. What was once a hidden epidemic of pain could become a model of proactive health, accessible care and longer, healthier lives. ■



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POLL CONFABULATIONS ▶

CM Nitish makes a forceful point to PM Modi; (right) Tejashwi and Ashok Gehlot during a presser to anoint the former as the MGB's CM face, Oct. 23



PTI



ASSEMBLY POLLS | BIHAR

MANAGING TENSIONS

TILL A LAST-DAY PATCH-UP SAW MGB NAME TEJASHWI AS CM FACE, BIHAR LOOKED LIKE A ROUND ROBIN LEAGUE—EVERYONE AGAINST EVERYONE

BY AMITABH SRIVASTAVA

T

HE BARD AND BIHAR. THEY MAY SEEM PLANETS APART, BUT WHAT UNFOLDED in Muzaffarpur, on stage at that, was like the classic comic interlude set within a dark and complex Shakespeare play. It was the day after Diwali. Nitish Kumar had just wrapped up a 28-minute speech. The National Democratic Alliance (NDA) candidates from two adjoining constituencies were called for the ritual *jeet ki mala*—an anticipatory garland of victory. Rama Nishad, the BJP candidate from Aurai, stepped up. Nitish reached out to garland her. Instinctively, Janata Dal (United) working president Sanjay Jha intervened, mindful of the optics. Would it be appropriate for the septuagenarian CM to garland a woman before the cameras?

Nitish paused, visibly annoyed, then went ahead anyway. The mic picked up his half-jocular snarl: “*Gajab aadmi hai bhai, haath kahe pakadte ho*” (What a man! Why are you holding my hand?)”

Friendly fire it was, but only a friendlier pocket edition of the fireworks that had been heating up Bihar. As it tears down the tarmac towards voting day, it’s no straightforward contest between two alliances, the NDA and the Mahagathbandhan (MGB). Instead, it has often looked more like a round robin league with a series of mini-matches. Everyone against everyone else—NDA vs NDA, MGB vs MGB, and smaller subsets of that within each constituent party.

Tejashwi Yadav, the pugnacious young supremo of the Rashtriya Janata Dal (RJD),

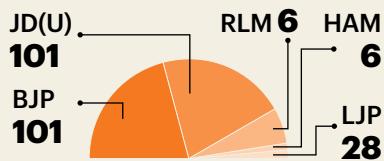


THE BATTLEFIELD

The seat distribution and caste break-up in the two alliances

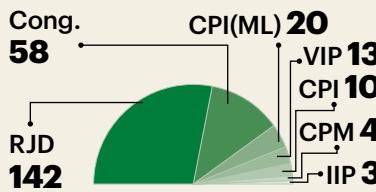
NDA

Candidates: 242



MAHAGATHBANDHAN

Candidates: 250*



*Friendly Fights: 9/ RJD vs Cong.: 4

two months ago. Mukesh Sahani of the Vikassheel Insaan Party (VIP), who was playing the unstable electron, too, has been placated by being named as deputy CM face. More crucially, the Grand Alliance had a dozen seats where friends were pointing firearms at each other, so to speak. The last-minute peace mission managed to whittle that down—but only to nine. Ambition needs space to grow, and that's a finite resource even in the 243-seat Bihar assembly map.

The lack of mutual adoration is more oblique in the NDA. Its internal schisms didn't ever spill over into constituency-level fights. But for the usual quantum of rebel candidates that every side faces, it had a neat arrangement. Yet they look less like partners, more like pugilists shadow boxing each other warily. At its heart is a formative tension: the JD(U) has never been short of pangs of existential dread, especially among its old Samata Party cohort, who fear predation by its expansionist national ally should the chips fall in unfavourable ways. Chirag Paswan of the Lok Janshakti Party (LJP) keeps the mix even more combustible.

What keeps it all sutured together is only the figurehead of Nitish, whose loyal vote base everyone could use right now. And yet, the BJP has not declared him the NDA's CM face—deferring that choice to a post-poll scenario. The MGB, having made amends belatedly with Tejashwi's coronation, is now zeroing in on this to claim moral high ground.

Maha Gadbad?

Meanwhile, the muddle in the MGB over seat-sharing risked going down in history as a full-blown case of that good, old ingredient of tragedies: hubris. The local landlord, RJD, had gone ahead and unveiled a full slate of 143 names—only one less than 2020. One cancellation trimmed that to 142. The Congress announced 60 candidates. Among the smaller allies, the CPI(ML) named 20; Sahani's VIP 14 after one cancellation; the CPI, 10; the CPI(M), four; and I.P. Gupta's Indian Inclusive Party (IIP), three.

That is, till October 23, the MGB had 253 candidates across 241 seats! Part-

wasted no time posting the Nitish clip on social media—these days, he pulls no punches while pointing to his opponents' eccentricities. But for oddities, he only needed to look at the space where he's Protagonist No. 1. At least till October 23, the last day for withdrawal

of nominations, when he was at long last declared the MGB's consensus face for chief minister. That not only met a key demand, it filled an odd gap for an alliance whose two biggest stars—Tejashwi and Rahul Gandhi—had biked around Bihar like fast friends barely



ners were in contest across 12 seats—in six, it was RJD vs Congress. The latter was contesting nine less than last time, but its cussedness on certain seats has created 10 overlapping contests. The air had turned acrid, panic was peaking.

That's when the Congress blinked, and sent former Rajasthan CM Ashok Gehlot as a peace emissary to Patna. He duly met Tejashwi and Lalu Prasad, and declared the alliance intact. A day later came the anointment of Tejashwi as CM face, and a withdrawal from two contests versus the RJD—the third was done by VIP. It was a breathless rescue act that may not have been needed had Tejashwi and Rahul bottled some of the camaraderie they radiated on their yatra and let it mature into the discipline of alliance-building.

The NDA Triangle

Seat-sharing was not entirely without friction for the five-party ruling coalition either, but it has managed a relatively neat arrangement. The formula: 101 seats each to the BJP and JD(U), 29 to Chirag's LJP, six each to Jitan Ram Manjhi's Hindustani Awam Morcha (HAM) and Upendra Kushwaha's Rashtriya Lok Morcha (RLM). But that external symmetry concealed internal antagonisms. The LJP had one nomination rejected (leaving 242 NDA candidates in the fray) but even its remaining 28 are enough to make the JD(U) see red. Why? Well, scenario-makers have painted a few trickily dynamic possibilities ahead—far from the idea of a unitary alliance.

For one, Chirag had famously gone solo last time, practically doing man-to-man marking on the JD(U), and costing it 34 victories. So, the feelings are not exactly comradely, and Nitish's loyalists harbour more than a hint of suspicion about motives this time too. What if the BJP improves upon its 67 per cent strike rate from 2020, gaining well over 70 seats, and the LJP, too, pools in a handy few? If the duo fall short of the majority mark of 122 by only 30-odd seats, and then corral together a few small parties and mu-



beyond the old Muslim-Yadav (MY) vote base with a more variegated candidate list. The RJD has 69 MY candidates among its 142—51 Yadavs and 18 Muslims. So, over half are other colours on the caste rainbow: 18 non-Yadav OBCs like Kurmi-Kushwaha, 19 Dalits, eight Vaishya, plus 14 forward castes. Notably, there are also 24 women. In Bihar, they call it 'A to Z'.

The Congress, too, has strikingly chosen to leaven its newly minted pro-social justice plank by reserving over a third of its tickets for forward castes: eight Bhumihaars, five Rajputs, seven Brahmins, one Kayastha. The idea seems to be to blunt the NDA's *savarna* edge while allowing the MGB to straddle the caste alphabet elsewhere. As many as 49 of the BJP's 101 are forward caste—it's traditional base that makes up only 15 per cent of Bihar's population. In fact, a third of all NDA candidates tick that box.

Prashant Kishor has strikingly recused himself from the contest, but despite Jan Suraaj's frailty, his viral broadsides against the BJP have inflected the narrative

tinous elements, post-poll equations could be unpredictable, with their dependence on Nitish and the JD(U) proportionately diminished.

The counter-intuitive thought: the JD(U) and RJD are in direct fights in some 95 seats, so some analysts have not been above predicting one last grand political pirouette by Nitish! The logic assumes a solid chunk of 95 seats being outside the BJP's reach, plus whatever the Congress and Left bring. Given Bihar's political past, no speculation can be accused of being too wild. If nothing else, both the BJP and the JD(U) will hold aces up their sleeve to up their bargaining power.

The Caste Abacus

The social profile of candidates creates some interest. The RJD's list of 142, the largest for any party, reveals its ambition to finish as the single-largest entity. Buttressing that is a variation on Akhilesh Yadav's PDA (Pichhda-Dalit-Adivasi) formula in Uttar Pradesh—namely, expanding

The Spoiler's Struggle

That leaves Prashant Kishor, the strategist turned self-styled sovereign. He entered with the swagger of a reformer, yet his Jan Suraaj is showing the frailty of a fledgling. His fiery press conferences and viral broadsides against BJP heavyweights dominate headlines, inflecting the overall narrative, but he's struggling to translate digital traction into political turf. PK has strikingly recused himself from contesting, and some of his recruits, too, seem to be reconsidering the cost-benefit of standing under his banner.

On October 21, PK alleged three of his nominees had been bullied into withdrawing their candidacy by the BJP—splashing pictures of Union ministers Amit Shah and Dharmendra Pradhan. He claims 14 others had been threatened. But the 240 in the fray could swing seats, even win a few. However, if he recedes to join the ranks of Bihar's umpteen small parties, it would be a cautionary tale of metropolitan rhetoric colliding with the rough texture of native politics. ■

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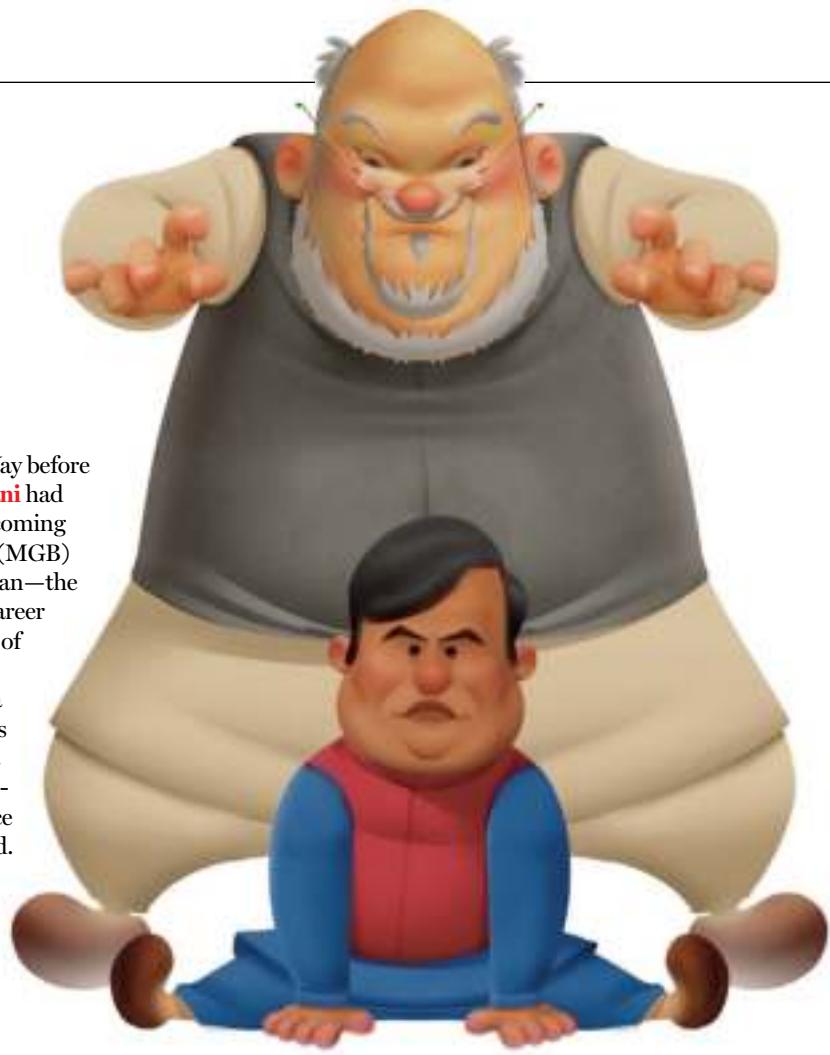




► MUKESH SAHANI

ABOARD DEPUTY CMSHIP

It's not for nothing that he has a party called VIP. Way before his alliance came around to the idea, **Mukesh Sahani** had already gone ahead and crowned himself as the incoming 'Deputy CM' in a hypothetical Mahagathbandhan (MGB) regime. That fits an old pattern, for the Vikassheel Insaan—the Expandable Man, if you like—has made a reasonable career out of amateur political dramatics. In 2020, on the eve of the previous assembly poll, he famously walked out of the MGB soon after its seat-sharing was announced—a career pivot that landed him in the NDA's camp after, as the gossip ran, a reassuring word from **Amit Shah**. Fast forward to 2025, Sahani's back in the MGB... did someone say *déjà vu*? His camp trumpeted a press conference on the very day Shah was in Patna. The cameras queued. But no PC. Wags have two theories: one, Sahani didn't get the go-ahead tug from his old minder, or the Congress has been whispering sweet-nothings in his ear. Anyway, unlike 2020, he's stayed put within the Grand Alliance, and is signing all correspondence as its would-be number two!



▼ STAR POWER

The Bhojpuri Spice Festival

If it feels more like the casting for a box-office double bill, that's because it's meant to be. For, what's elections without some stardust, even in dusty Bihar? If the RJD is paratropping the desi Adonis **Khesari Lal Yadav** into Chhapra, the BJP has enlisted the petite 25-year-old **Maithili Thakur** for Alinagar. To campaign? Nah! That idea morphed long back: now stars are incentivised to do their number with actual



tickets. They do what manifestos cannot: cut through the hum of policy-speak, and drag voters—and cameras—to the ground level. Khesari brings the Bhojpuri battering-ram of mass recall: stage presence and ready-made rural trust. Maithili offers a gentler cultural gravitas—and cross-generational appeal.

Will the script leap from marquee to mandate? Wait for the live auditions at Chhapra and Alinagar!

▼ BLAME GAME

SAMRAT STRIKES BACK

Samrat Choudhary has been quite the voodoo doll for **Prashant Kishor** of late—the turbaned deputy CM has all those pins dug into his past to show for it. On October 16, he hit back at a live Q&A. "*Main yahan nomination kar chuka hoon... koi bhag gaya chunav ladne se.*" Expanded, that goes: "Here I stand, publicly accused, yet I dare to face the people's court. By contrast, the accuser has vamoosed at the prospect of a contest." Dipping into cartoonish metaphor, he also likened PK to a "joker" in the political deck—the card that appears only to vanish!

▼ PROMISES

A SIMPLE WAY TO RAISE BIHAR'S GDP

Tejashwi Yadav may have a degree in quantum mathematics, for all you know. He has put out a grand promise that defies all conventional accounting: one government job to every family of Bihar that does not have anyone in that sector. A noble thought, yes. After all, the Bihar government has only a slim workforce of 2.5 million right now. And in all, only 2.6 million families have anyone with a job in the state or central government or a PSU. A pitiful ratio.



Problem is, Bihar has 27.6 million families. Subtract 2.6 million, and that's 25 million new government jobs. Assuming a basic Rs 39,000 monthly salary for each, as Union minister **Amit Shah** pointed out, that would mean a recurring annual salary bill of Rs 12.17 lakh crore! That's three times Bihar's annual budget of Rs 3.17 lakh crore. Thing is, Tejashwi had created much traction in 2020 by promising 1 million jobs. With Nitish having stolen his thunder, he had to up his ante. Hence, this multibagger stock!



▼ FAMILY MATTERS

Mere Paas Daadi Hai

Tej Pratap Yadav—the scion who went sideways—retains a bit of dad Lalu's flair for the amusing, albeit minus the armoury. Be that as it may, he decided to steal the limelight in Mahua on October 16, filing his nomination against the Rashtriya Janata Dal's official candidate. He clutched a framed photograph of his grandmother as if to announce, theatrically, that he needn't arrive with a political entourage. A mischievous, cinematic surrogate for the lack of familial backing. A day earlier, younger brother Tejashwi had completed the more orthodox ritual, filing from neighbouring Raghpur. The full family tableau was in attendance: Lalu, Rabri Devi, elder sis Misa. Tej Pratap, expelled from his natal party earlier this year for his erratic ways, had to go solo. Literally. Even so, he seemed to relish the optics, even saying the obvious line aloud: "Mere paas daadi ka aashirwad hai."



Fast Train On Slow Track

Designed for 180 kmph, India's flagship train hits barely half that. Its coaches may be modern and gleaming, but they are running on same old railway tracks, signals and systems

By AVISHEK G. DASTIDAR

Imagine buying a Tesla built to race at 200 kmph, only to find yourself crawling at 20 through potholes, boxed in by auto-rickshaws. The thrill of owning sophisticated engineering disappears as you inch forward in traffic. That's exactly what it feels like to ride India's flagship train, the Vande Bharat Express. Designed to cruise at 180 kmph and officially permitted to run at 160 kmph due to track and safety limits, these gleaming orange rakes—built to be India's fastest—average just 76 kmph across the network, barely faster than the Rajdhani Express trains introduced in 1969. The paradox is striking: world-class technology, but outdated systems.

The Vande Bharat dazzles both inside and out—streamlined nose, airplane-style seats, Wi-Fi and sleek interiors. Passengers click selfies, thrilled to board what many see as India's answer to Europe's high-speed icons; over 25 million have already chosen Vande Bharat since it was flagged off in February 2019. "It feels like flying on the ground—so clean, so modern," beams Maansi, 28, who travelled from Delhi to Katra recently. Each 16-coach set now costs between Rs 115 crore and Rs 134 crore, several times a regular train's price. India runs 78 pairs of Vande Bharat trains today, but aims

for 4,500 by 2047, investing billions to reshape rail travel. Trial runs have even touched 183 kmph, a testament to 'Make in India' engineering. The hype is real: with Vande Bharat, India seemed poised to enter the era of semi-high-speed rail.

But the illusion fades once the journey begins. In 2020-21, the trains ran at an average speed of 84.5 kmph. By 2023-24, that had fallen to 76.25 kmph. Speeds also vary across routes. The New Delhi-Varanasi service averages 95 kmph, but the Coimbatore-Bangalore Vande Bharat lumbers along at only 58 kmph—slower than many regular expresses (see *Slow*



► **ENGINEERING,
INTERRUPTED**
A Vande Bharat
Express train

Coaches). Even on its fastest stretches, such as parts of the Delhi-Agra line, the train sprints to 160 kmph for a few moments before braking back down. "I paid extra for speed, but the Vande Bharat only saved me about 25 minutes compared to the Shatabdi's time. I could have taken that," bemoans Som Basu, 42, a regular passenger from Bengaluru to Chennai. With a Vande Bharat ticket costing Rs 1,100 vs Rs 900 for Shatabdi, passengers like him wonder whether the premium you pay just for comfort is worth it if it is not accompanied by significant time savings.



THE VANDE BHARAT CRAWL

180
KMPH
Capable speed

160
KMPH

Permitted speed

76
KMPH

Average speed

HOW THE WORLD MOVES

Trains built for 200 kmph
typically average 120-160

Capable speed Average speed

CHINA: D-series

200-250
KMPH

140-180
KMPH

(Mixed-use 200 kmph lines
average 140-150 kmph)

GERMANY
Intercity lines

200
KMPH

120-150
KMPH

(Fewer halts push averages higher)

UK: Intercity lines

200
KMPH

120-145
KMPH

(The InterCity 125 historically
clocked 130-140 kmph on long runs)

"Speeding up trains above 150 kmph is fraught with safety issues. You need fenced tracks, automatic signalling, anti-collision devices, grade separators and automated maintenance"



MOHAMMAD JAMSHEED, Former Member (Traffic), Railway Board; Distinguished Fellow, Chintan Research Foundation

Why the Slowdown?

The reason is that track technology and upgrades never kept pace. More than 90 per cent of India's railway network tops out at 110 kmph (see *Why the Drag*). Curves, gradients, bridges—the system was never built for speed. Despite years of upgrades and announcements, not one corridor is ready to run 160 kmph from end to end. Schedules are riddled with pauses. Maintenance means perpetual short-notice restrictions—gangmen squatting next to the rails as a Vande Bharat snails through. And with freight trains and slow passenger services using the same lines, congestion strangles even the speediest. Railway data analysed by INDIA TODAY shows how speed limits turn journeys into jagged sections of acceleration and braking. On the Gwalior-Jhansi stretch, for instance, the Vande Bharat can reach its top speed of 130 kmph on just over half the route, otherwise it settles for 94-97 kmph.

Data show that as of end of March 2025, the rail network had around 17,000 speed restrictions of one kind or another. More

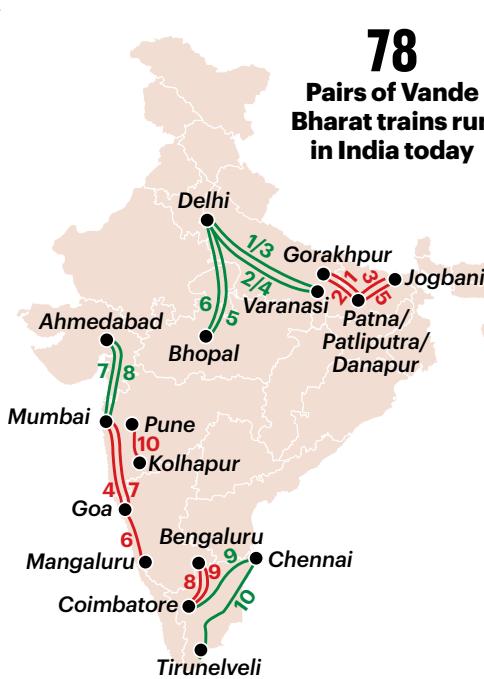
SLOW COACHES

Even the fastest Vande Bharat routes manage barely half of the permitted 160 kmph

10 SLOWEST ROUTES

Average speed

- | | |
|---|--|
| 1. Gorakhpur - Patliputra
54.23 kmph | 6. Mangaluru Central - Madgaon, Goa
56.57 kmph |
| 2. Patliputra - Gorakhpur
54.87 kmph | 7. Madgaon, Goa - CST, Mumbai
58.04 kmph |
| 3. Danapur - Jogbani, Bihar
55.7 kmph | 8. Coimbatore - Bengaluru Cantonment
58.11 kmph |
| 4. CST, Mumbai - Madgaon, Goa
55.76 kmph | 9. Bengaluru Cant. - Coimbatore
59.04 kmph |
| 5. Jogbani - Danapur, Bihar
55.8 kmph | 10. Pune - Kolhapur
60.19 kmph |



78

Pairs of Vande Bharat trains run in India today

10 FASTEST ROUTES

Average speed

- | | |
|---|--|
| 1. New Delhi - Varanasi*
94.92 kmph | 6. Nizamuddin, Delhi - Bhopal
92.01 kmph |
| 2. Varanasi - New Delhi*
94.91 kmph | 7. Ahmedabad - Mumbai Central
90.45 kmph |
| 3. New Delhi - Varanasi*
93.94 kmph | 8. Mumbai Central - Ahmedabad
89.08 kmph |
| 4. Varanasi - New Delhi*
93.89 kmph | 9. Coimbatore - Chennai
85.46 kmph |
| 5. Bhopal - Nizamuddin, Delhi
92.01 kmph | 10. Chennai Egmore - Tirunelveli
84.22 kmph |

*These routes have two pairs of trains

WHY THE DRAG

Over 90 per cent of India's network caps at 110 kmph. Why speed upgrades hit the brakes and how to fix them

LOOP CHOKING POINTS

Trains slow to 30 kmph on loop lines, even where mainline speeds are 130. Upgrades to 50 exist, but remain unused

►The fix: Raise loop-line speeds to 50 kmph using Thick Web Switches, already standard on freight corridors

RESTRICTIONS EVERYWHERE

As of March 2025, Railways had over 8,000 temporary and 9,000 permanent speed restrictions, many as low as 15-45 kmph

►The fix: Prioritise removal of all restrictions below 75 kmph

NEW LINES, OLD PROBLEMS

More than 140 newly built sections run below planned speed, some stuck at 70-80 kmph years after commissioning

►The fix: Enforce quality on new projects so they open at planned speeds, not decades later

WEAKEST LINK EFFECT

A line's performance is dictated by its slowest section; so averages collapse despite high-tech trains

►The fix: Don't just count kilometres laid, judge by sustained operational speed

than 140 newly constructed sections continued to permit speeds much lower than planned even years after commissioning. In most railway divisions, the level of speed restriction is determined by the Permanent Way Inspector, who is responsible for track maintenance.

Much of India's railway network also remains unfenced, cutting through fields, villages and crowded settlements. Cattle and people wander in freely. "Speeding up trains above 150 kmph is fraught with safety issues," says

Mohammad Jamshed, former member (traffic), Railway Board, and now with the Chintan Research Foundation. "You need fenced tracks, automatic signalling, anti-collision devices, grade separators and automated maintenance."

High Spend, Low Speed

Upgrades are doable, and better done early. To its credit, Indian Railways has invested heavily under the Narendra Modi government. High-speed sections of 130 kmph and

above have grown from 5,036 km in 2014 to 23,010 km in 2025, raising their share of the total track length from 6.3 per cent to 21.8 per cent. Over 3,500 km of fencing has been erected, 12,000 level crossings removed and the Kavach safety system installed on 1,465 km.

Yet the benefits are patchy. "Indian rolling stock has been good for 130 kmph for 20 years. Tracks never allowed it. For Vande Bharat, nothing has changed," says Subhranshu, who led the team at the Chennai-based



► **GEOMETRIC
LIMIT** A Vande Bharat Express on a bridge

Integral Coach Factory that designed India's first Vande Bharat trainset.

Former Railway Board member (engineering) Subodh Jain points to deeper flaws. "It is misleading to say averages are only because of speed restrictions," he says. "The real issue is track condition and the way recovery time is built into schedules. Stoppages for food, water, crew changes, brake checks stretch beyond what's needed. Add congestion near cities, and the delays multiply." According to him, Mission Raftaar, launched to push up speeds, failed because it became a numbers exercise. "You built third lines, but without cutting curves or improving geometry. You laid tracks, but didn't enable trains to run faster. It was about showing kilometres built, not delivering speed."

The pattern is not new. The Rajdhani Express was hailed as a revolution when introduced in 1969. By the 1980s, it was slowed by the same track limits. "The Delhi-Howrah Rajdhani started 57 years ago at 17 hours 20 minutes," Jamshed points out. "It still takes about 17 hours 10 minutes." Ditto with the Shatabdis that came in 1988. Promising a fast, business-class ride, they, too, were slowed down within a decade.

Where Indian Railways has moved faster is in rolling out new trainsets.

Curves, gradients, bridges—most routes were never engineered for higher speeds. Despite years of announcements, not one corridor is fit for 160 kmph end to end

Up next: the Vande Bharat Sleeper. A prototype touched 180 kmph in January 2025, with 200 sets planned for overnight journeys. Subhranshu calls it ironic: "Nowhere in the world have trainsets been run in sleeper mode—not in China, Europe or Japan. The whole point of a trainset is higher speed and shorter journeys of 6–8 hours, where a chair car is enough. At 12 hours, like Delhi-Mumbai today, you're not really getting the speed advantage. Why spend Rs 120 crore on a sleeper when a conventional Rs 60 crore LHB [German coach] train can do the same job?"

The sleeper sets are undeniably deluxe—cream-and-wood interiors,

cushioned berths wired for USB charging and reading lights; even hot showers in First AC, airlocked gangways, noise-attenuating insulation, WiFi and CCTV. They claim to offer more comfort than Rajdhonis. But unless the tracks catch up, they risk being luxury hotels on wheels—lovely and costly, but royally slow.

Tracks before Trains

Railways minister Ashwini Vaishnav, who has been engaged in resolving this long-standing problem, often faces questions about Vande Bharat's speed. His explanation? "The average speed of train services, including Vande Bharat, depends on the Maximum Permissible Speed (MPS) of the section, track structure and geometry along the route, including gradients and curves, as well as topographical conditions, number of stoppages en route, line capacity utilisation, maintenance works etc." The minister points to another aspect that often goes unnoticed. "In India, we face the unique challenge of keeping train operations running while we carry out track upgrade work."

A 2024 PwC report highlights the disconnect between procurement and readiness: "The performance of Vande Bharat trainsets is impacted by the unavailability of compatible track." In other words, India bought the Teslas before fixing its highways. But Vaishnav says, "Continuous improvement is the approach. We've gone from less than 40 per cent of tracks fit for 110 kmph in 2014 to more than 78 per cent today." Meanwhile, passengers are torn. Occupancy is strong, over 100 per cent. But online forums often bristle with complaints: "I reached in the same time as the Shatabdi. Where's the speed?"

Abroad, the lesson is clear (see *How the World Moves*). Britain runs 200 kmph Intercity expresses on tracks older than independent India. The trick was to fix the system first: fencing, signalling, grade separation. The trains themselves were not speed demons; it was the ecosystem that made speed possible.

In India, the Vande Bharat Express risks becoming a symbol of squandered opportunity unless the government invests in tracks, signalling and systemic upgrades with the same intensity it has shown for rolling stock. The question isn't whether the train can run fast—it's whether Indian Railways will ever let it. ■



ANGRY WATERS
Mamata reviews the
flood damage
in Darjeeling
district, Oct. 7

THE NATION
BENGAL FLOODS

A SPATE OF HUMAN FOLLY

The waters that drowned North Bengal and dislodged mountainsides in October were made of a cocktail of river basins choked by urbanisation, deforestation and climate change. Urgent action is needed to restore an ecological balance

By **ARKAMOY DATTA MAJUMDAR**

170

No. of tea gardens estimated to have been damaged, out of around 300 gardens in the Darjeeling hills and Dooars

30,000

Estimated number of livestock, including cattle, hens, goats, ducks etc. that have been lost

14,000

HECTARES

Area of flood-affected agricultural land

20,000

People evacuated; around 10,000 sheltered in relief camps

₹5 lakh

Amount to be given to the families of each of the over 40 persons killed

T

THE ALARM THAT THE COMBINED FORCES OF CLIMATE CHANGE and human action could spell disaster for the fragile ecosystem of North Bengal had been raised in recent years, but ignored. That proved costly, as on October 5-6, a calamity of enormous proportions struck this region of mountains, lush foothills (the Dooars) and alluvial plains watered by fast-moving streams. Over 300 mm rainfall in 12

hours triggered hundreds of landslides in the Alipurduar, Cooch Behar, Jalpaiguri and Darjeeling districts. Rivers broke their banks, roads were blocked, villages cut off or decimated. The roster of human misery read over 40 dead, with 10,000 sheltering in relief camps. “Of the 32 livestock I had, 22 are either dead or lost. In our tea garden, at least 70 families are affected,” says Sikander Majhi, 41, a resident of the Tandu tea garden in the Nagrakata block of Jalpaiguri district. North Bengal had been forewarned too: on October 4, 2023, a glacial lake outburst flood in Sikkim overwhelmed the Teesta III dam and caused havoc downstream.

This latest symptom of a deepening ecological crisis is a deadly brew—rampant concretisation in river channels that reduces the capacity to absorb monsoon water, deforestation that accelerates water runoff and ever-intensifying rainfall.

Politics duly laid its fingers over the calamity. The BJP holds the Trinamool Congress (TMC) government responsible. “TMC-run authorities have allowed illegal sand mining, construction on river beds and felling of trees,” says Sukanta Majumdar, BJP leader and Union minister of state for education and development of northeastern region. The TMC claims it is the state which is providing for the victims, while BJP leaders are nowhere to be seen.

The rivers that feed North Bengal—Teesta, Torsa, Raidak, Jaldhaka, Kaljani, Sankosh and their tributaries—descend from the eastern Himalayas. Often changing course, they once formed vast networks of abandoned channels and backswamps that absorbed floodwaters. But now they are undergoing rapid conversion into land for agriculture and urbanisation. A 2025 study by Jiarul Alam and others at the University of North Bengal documents this in the Raidak river basin. The total area of abandoned channels there shrank from 24.87 sq. km in 1980 to just 9.01 sq. km by 2024—a loss of nearly 64 per cent. In this same period, a much larger area of former channels comprising 104.05 sq. km was turned

into farmland and 85.90 sq. km into built-up areas. Now, over 97 per cent of the Raidak basin can retain water for only 3-4 months a year, leaving monsoon water to flow across the land. Downstream districts such as Cooch Behar and Alipurduar report frequent flash floods—a pattern tied to the loss of channels. Likewise, the Torsa has lost much of its old channels to farmland. The Kaljani and Jaldhaka are heavily embanked, severing them from their floodplains. The mighty Teesta has lost tie channels that connect it to wetlands to urban expansion around Siliguri and Malbazar towns. Former flood storage zones in towns like Alipurduar and Tufanganj are now covered with buildings.

However, with the Raidak, Torsa, Jaldhaka, Sankosh and Manas entering north Bengal from Bhutan, there have been persistent demands in Bengal for an Indo-Bhutan river commission, arguing that recurring floods caused by these rivers require a mechanism like the Indo-Bangladesh Joint River Commission. “The BJP and the Centre have turned a blind eye to Bengal’s demand. I had raised the question in Parliament,” says Ritabrata Banerjee, TMC member in the Rajya Sabha. In answer to Banerjee’s query, the Jal Shakti ministry said in August 2025 that no such proposal exists, citing existing expert groups on flood management and forecasting.

VANISHING FORESTS

In the Dooars areas of Darjeeling, Jalpaiguri, Cooch Behar and Alipurduar, once-contiguous forests are now fragmented by tea gardens, settlements and cropland. The two hill districts of Darjeeling and Kalimpong have lost 42.17 sq. km of forest cover between 2013 and 2023. These forests are vital flood regulators. They slow runoff, trap sediment, and allow water to percolate into the soil. Their loss means water rushes into rivers faster, carrying silt and debris that raise riverbeds and reduce channel capacity. The Raidak, Torsa, Teesta and Jaldhaka have become more prone to overflowing.

In hilly Darjeeling and Kalimpong,

A DISASTER WAITING TO HAPPEN

How the North Bengal floods unfolded and future steps that can stop such debacles

Graphic by
NILANJAN DAS

SLIPPERY SLOPES

In hilly Darjeeling and Kalimpong, mountainsides are prone to landslides as they are made of shale and sandstone and heavy annual rainfall. It is worsened by urbanisation, construction

EFFECT

When over 300 mm of rain fell on Oct. 5-6, it triggered landslides that tore into tea gardens, roads, settlements, and injected sediment into rivers, worsening floods downstream

DENUDED FORESTS

Forests in Himalayan foothills (Dooars) in Darjeeling, Jalpaiguri, Cooch Behar slowed rainwater runoff. They are now pierced by tea gardens, settlements

EFFECT

During monsoon, water gushes through deforested areas and into rivers faster, carrying silt and debris that reduce channel capacity
In early October, rain water hurtled down unchecked to the rivers, which could not contain it

WAYS TO SAVE THE SITUATION

Human encroachment in abandoned river channels must be stopped; land use in floodplains strictly regulated

Urban planning in Darjeeling, Kalimpong towns must integrate landslide susceptibility maps that mark high-risk zones

Roads, settlements must avoid blocking natural drainage; river banks need buffer zones

ISRO's Persistent Scatterer InSAR, which detects slope movements, can provide early landslide warnings

Remote sensing, machine learning can map land-use changes over time, guiding targeted interventions



ANGRY RAINS

Climate changed has altered rainfall patterns—monsoons now marked by short, intense spells

EFFECT

- Torrential rain from the cloudburst in early October fell on deforested slopes and urbanised plains, overwhelming the landscape
- Critical infrastructure and economy damaged in the floods include highways, the Darjeeling Himalayan Railway, tea estates and croplands

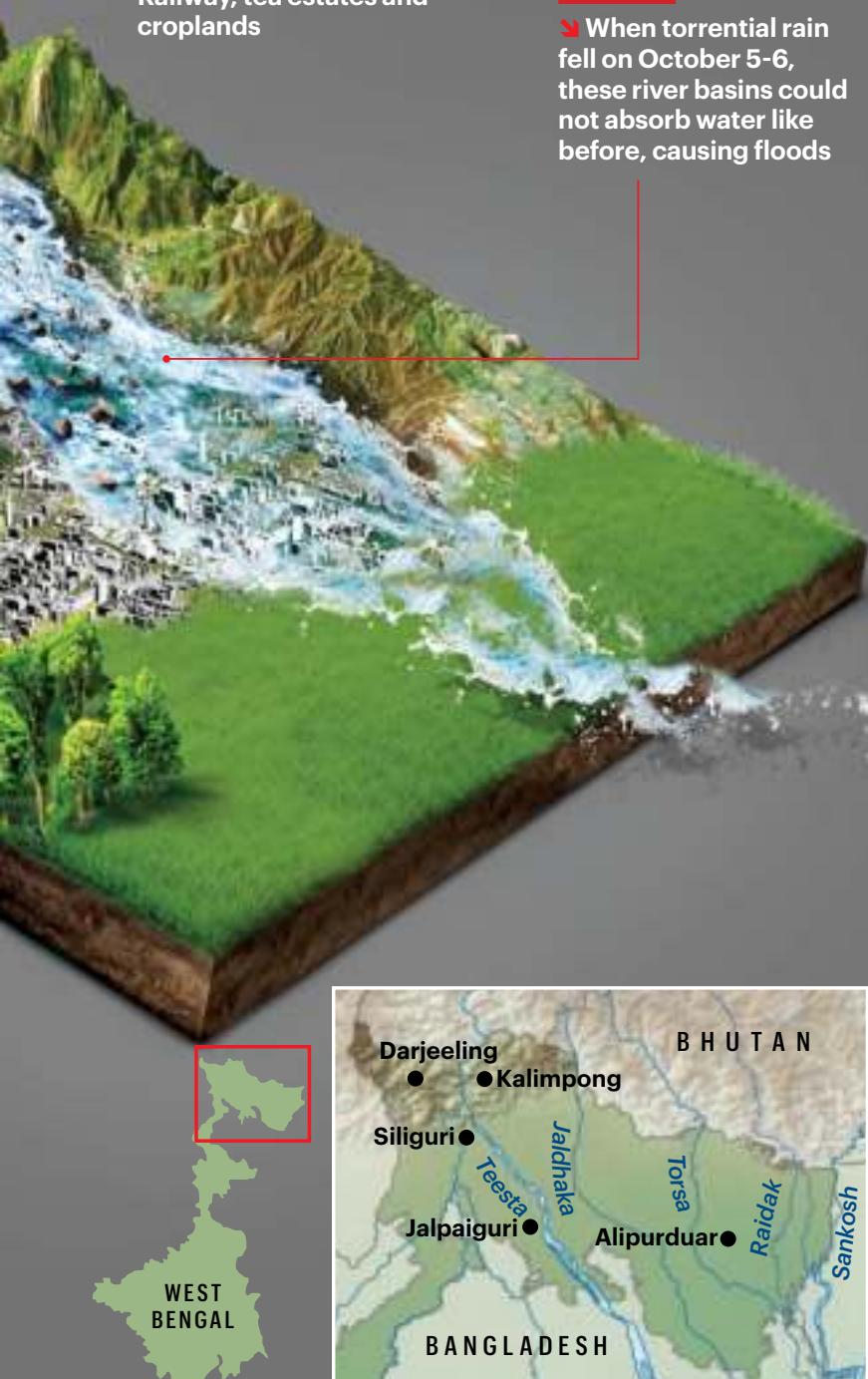
CLOGGED RIVERS

N. Bengal rivers have lost old channels, wetlands and floodplains to agriculture & urbanisation

- Torsa and Raidak:** Lost old channels to farmland
- Kaljani, Jaldhaka:** Heavily embanked
- Teesta:** Lost channels connecting it to wetlands to habitations

EFFECT

- When torrential rain fell on October 5-6, these river basins could not absorb water like before, causing floods



THE NATION BENGAL FLOODS

mountain sides are composed largely of shale, sandstone and metasediments, which are inherently unstable. Annual rainfall between 750 mm and 1,000 mm make them among India's most landslide-prone areas. Data from the Indian Space Research Organisation's (ISRO) Landslide Atlas of India (2023) shows 172 mapped landslides in Bengal between 1998 and 2022, almost all in these two districts. Hundreds more go unmonitored. Slope failures here evolve into debris flows that tear through roads, tea gardens and settlements. Population density and infrastructure on fragile slopes heighten vulnerability. Rainfall, of course, is the primary trigger for landslides and floods. Driven by climate change, the monsoon is now marked by short, intense cloudbursts. When torrential rain falls on deforested slopes and urbanised plains, the land's ability to absorb water collapses.

FUTURE COURSE OF ACTION

Experts argue that the only road forward is to restore the landscape's natural resilience. Rivers must be reconnected to their floodplains. Encroachment must be halted, and land use regulated. Urban planning in Darjeeling and Kalimpong towns must integrate landslide susceptibility maps. Emerging technologies offer new tools: ISRO's Persistent Scatterer InSAR (PSInSAR) can detect slope movements at the millimetre scale, providing early warnings of landslides. Remote sensing can map land-use changes over time, guiding targeted interventions.

"Intense rainfall, reckless development and institutional neglect are damaging assets like hydropower projects, highways and military infrastructure. India must create Himalayan-focused institutions for disaster management," says Prof. Mahendra P. Lama, former member of the National Security Advisory Board. He supports the demand for an Indo-Bhutan river commission.

The October 5 floods serve as a warning—unless rivers, forests, hills and settlements are brought back into ecological alignment, a seasonal challenge will become a chronic disaster. ■

THE NEW AIICONS OF BOLLYWOOD

Artificial intelligence is making its presence felt in the creative realm of Indian cinema. The fraternity remains divided on its potential, with one side viewing it as a creative force, the other side as a disruptive one

By SUHANI SINGH



Shakun Batra, writer-director of the emotionally charged *Kapoor & Sons* and *Gehraiyaan*, is not the kind of filmmaker you'd expect to deliver riveting car chases. "People see me as an emotional, personal-dynamics filmmaker, so nobody would give me the money to do one [an action sequence]," he says, seated in Dharma Entertainment's office. But after experimenting with artificial intelligence [AI] tools like ChatGPT, Sora and Google Veo, Batra has done exactly that, conjured his first high-octane short, *The Getaway Car*, and set it in Montreal. "Had I done it the traditional way, it

would have required a 50-member crew, cars and permission from local government to block streets, a stunt team, security, flying in actors to Montreal and putting them up in hotels," he says. Instead, a bit of deft prompt engineering (instructing AI precisely for a desired, superior result), and Batra was able to step out of his comfort zone and explore a genre he'd never handled before.

The Getaway Car wasn't Batra's first tryst with AI. He had begun dabbling with advanced AI tools while shooting commercials. "I created an AI-powered shot, which, funny, the client chose over the one I had actually shot on set," recalls Batra. "I didn't know if I had failed as a traditional filmmaker or succeeded on the AI front." The spark thus lit, Batra soon began sharing AI-generated teasers on Instagram. He'd eventually collaborate with Google Gemini to make *The Getaway Car*. Today, he uses ChatGPT to generate quick script synopses, character breakdowns and "even to understand the psychological dynamics of a character".



THE GETAWAY CAR





MADE BY AI Stills from Collective Media Network's microdrama *Mahabharata*, Shekhar Kapur's *Warlord* and Shakun Batra's *The Getaway Car*



"AI's penetration into the film industry is not an if but a when question"

VIJAY SUBRAMANIAM
Founder & Group CEO, Collective Artists Network



"AI will allow us to do things we haven't done before. Some may see it as a threat to jobs, but the other side is that it makes my life easy"

SHAKUN BATRA
Creator, The Getaway Car

Batra is part of a growing tribe of creators embracing AI with gusto. Singer-composer Shankar Mahadevan recently turned to Google's Music AI Sandbox and its generative music model Lyria to produce the song 'Rubaro'. At the recently-concluded FICCI Frames, filmmaker Ram Madhvani called "prompt engineers" the new heroes of the film industry, and Ashwiny Iyer Tiwari spoke about using the technology responsibly.

AI has also been a boon for the burgeoning microdrama industry, which runs on short timelines and small budgets. In feature filmmaking, it has become the go-to tool for pre-visualisation, earlier known as storyboarding, look design, and visual effects—where AI-powered backgrounds are fast replacing blue and green screens. "It will allow us

to do things we haven't done before," says Batra. "Some may see it as a threat to jobs, but for me it makes life easier."

The future, it seems, is here. Shekhar Kapur's AI-generated *Warlord* is already in the development stage, while Sunny Leone's AI-powered avatar will headline *Kaur vs Kore*, touted as "India's first full AI superhero film" and "full-length AI feature film". That claim could come undone if *Chiranjeevi Hanuman—The Eternal*, expected to release in April 2026 in time for Hanuman Jayanti, beats it to theatres.

AI, says Dipankar Mukherjee—founder of Studio Blo, which is working with Kapur on *Warlord* and developing three other AI-driven IPs—has democratised filmmaking by bringing big scale within affordable reach. "2025 is year zero for AI," he says. "Everyone's evaluating it—cautious yet curious."

Approach with Caution

If there's trepidation in the industry around AI's disruptive potential, it stems from one unfortunate episode. On August 1, Aanand L. Rai's tragic romance *Raanjhanaa* was re-released in cinemas—only it wasn't entirely the same film Rai had made way back in 2013. Producers Eros changed the film's ending to a happy one, something Rai would discover through social media. "I totally believe AI is the future, but it should not be used to change the past," Rai told INDIA TODAY. The move sent ripples through the industry, with many expressing concern about the gross misuse of the technology and the need to introduce legal guidelines to protect the rights of artists. "Legally, we know it belongs to the studio, but that doesn't mean we aren't taking any action against them," Rai said. "We are finding different routes so that we can safeguard ourselves in the future from this ruthlessness."

Personality rights is another area AI is causing concern. Several actors such as Amitabh Bachchan and Anil Kapoor, and artists like Arijit Singh, have moved courts to stop the unauthorised use of their name, voice, mannerisms or any other personal attribute, by AI. Aishwarya Rai and Abhishek Bachchan recently filed a lawsuit against YouTube and Google over

FIGHTING DIGITAL CLONES

Few professionals are as jittery about artificial intelligence as actors. As deepfakes and digital replicas proliferate, law firms such as Naik Naik & Co. and intellectual property (IP) specialists like lawyer Priyanka Khimani have become hotlines for celebrities seeking to guard their likeness, voice, iconic dialogues and persona from misuse. **Amitabh Bachchan**

was among the first to draw a line—moving the Delhi High Court and successfully restraining a jeweller from exploiting his "celebrity status". Soon after, **Anil Kapoor** secured a similar order protecting his personality rights from unauthorised commercial use.

The anxiety runs deeper. Voice and dubbing artists, too, are lawyering up—worried that AI could clone their work and recreate new performances without credit or pay. The Association of Voice Artists (AVA) has enlisted lawyer Akshay Shetty to educate its 1,000-odd members on royalty clauses. "If a voice is used to train an AI model, it can get replicated to create a new product. Ideally, the artist should be paid for the derivative work as well," says Shetty. The AVA has even drafted a standard contract aimed squarely at such AI-enabled projects—signalling the times to come.



"I totally believe AI is the future, but then it should only be used for the future and not to change the past"

AANAND L. RAI
Director, Raanjhanaa



आज तक

देश का नं. 1 हिंदी न्यूज ऐप

जुड़े रहिए हर खबर से,
कहीं भी, कभी भी

अभी डाउनलोड करें

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उपलब्ध है



AI-generated deepfake videos they said violated “their personality and intellectual property rights”, seeking Rs 4 crore in damages. Suniel Shetty, too, had to seek legal protection for his personality rights after a deepfake image of him and his grandchild went viral. Akshay Kumar had a whole AI-generated film trailer featuring him as Maharishi Valmiki doing the rounds on social media. “I want to clarify that all such videos are fake,” Kumar wrote in an online post. “In today’s time, when misleading content is being produced at great speed through manipulative AI, I sincerely request media houses to verify and report only after authenticating the information.”

Beyond these violations, there is also growing anxiety around AI taking over jobs. Hollywood was all astir recently when news broke that talent management agencies were courting AI-generated actress Tilly Norwood. “I see AI not as a replacement for people, but as a new tool, a new paintbrush,” said Eline Van der Velden, Norwood’s creator and an actor herself. “Just as animation, puppetry or CGI opened fresh possibilities without taking away from live acting, AI offers another way to imagine and build stories.”

As technology evolves, so do insecurities, as the lines between digital and human creativity blur. “There may come a time when we would not need actors and just create them,” Varun Dhawan said at the trailer launch of *Sunny Sanskari Ki Tulsi Kumari*, while highlighting the need for laws to protect artists’ rights.

It’s for this reason that Dipan-kar Mukherjee is betting big on the adoption of FAIMOUS, touted as the world’s first ethical celeb cloning platform. It allows celebs or celeb management firms to create verifiable, traceable and authorised clones of their voices and faces, and then lease it out to any agency, brand or filmmaker for a limited tenure. “Any asset generated comes to the celeb for consent,” says Mukherjee. “A unique digital identity helps track down unauthorised use.”

Change is Inevitable

Not everyone views AI with scepticism. Many in the industry recognise the need to adapt and upskill to remain relevant. Even the writers of *Saiyara*, the biggest romantic blockbuster of 2025, took to ChatGPT for ideas when stuck on an ending. It’s a different thing that ultimately they relied on their own instinct and settled for a happier one.

Among AI’s most enthusiastic advocates is Vijay Subramanian, founder and CEO of Collective Artists Network (CAN). In July 2024, CAN



“AI is the most democratic technology ever.... Soon kids will be able to create content that was once the realm of big budget studios....at a tiny tiny tiny fraction of your budgets”

SHEKHAR KAPUR
Filmmaker, on X

acquired the Bengaluru-based AI-driven influencer marketing platform Galleri5 to expand his business.

On its rolls now are AI-generated influencers, including Kabir Manja, a millionaire who has turned to easy living; Radhika Subramaniam, a software engineer who left her day job to explore India; and Kavya Mehra, an uptown fashionista. “These are characters and stories we are building, and brands are connecting with them,” boasts Subramaniam. That’s not all,

there’s also an AI-generated spiritual rock band called Trilok.

But Subramanian isn’t done yet. He has started a content vertical called Historyverse, which will use AI extensively to churn out stories rooted in Indian mythology and history. Its debut AI feature, *Chiranjeevi Hanuman*, created in collaboration with Abunduntia Entertainment, has a team of 50-plus engineers from Galleri5 working with cultural scholars and literary experts to bring the legend of Hanuman to life in less than a year. “This majestic project is built on efficiency, speed and creative experimentation, showing how technology when combined with culture and history can expand the way stories are brought to life in theatres,” says Subramanian.

Filmmakers Anurag Kashyap and Vikramaditya Motwane didn’t exactly share the enthusiasm. “So much for looking after and representing the interests of creators,” Kashyap wrote on Instagram. “End of the day, all these agencies are only interested in making money off you and since they choose turkeys after turkeys for you and you’re not making enough for them, they are going all AI.” Motwane, who directed *CTRL*, a Netflix film exploring the dangers of artificial intelligence on human intelligence, also voiced his criticism: “And so it begins... Who TF [the f**k] needs writers and directors when it’s ‘Made in AI’.”

Subramanian dismisses the detractors and insists that some things will never change. “Stardom will never go away. Touch and feel will never go away,” he says. “AI will have orchestrators who are creators. I believe it will give birth to more efficient writers and for those on the video side, editing will become easier. It’s not replacement, it’s enhancement. Time is the only commodity you cannot control and AI will save you time.” His tribe is convinced AI in filmmaking is not a question of if, but when. “There’s no escaping it,” Subramaniam predicts. “This is the new internet. Get in with the party or be left out. You cannot fight it.” ■

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मोबाइल..... ईमेल.....



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FILM: FROM ACTOR TO AUTEUR PG 54

BOOKS: K.M. PANIKKAR'S LEGACY PG 56

ART ▾

Framing Stillness and Light

SHIBU NATESAN'S WATERCOLOURS—PAINTED OVER THE PAST DECADE AND SHOWING CURRENTLY AT ART ALIVE—ARE MASTERFUL DEPICTIONS OF THE INTERPLAY BETWEEN LIGHT AND SHADOW, BETWEEN DOCUMENTATION AND STORYTELLING

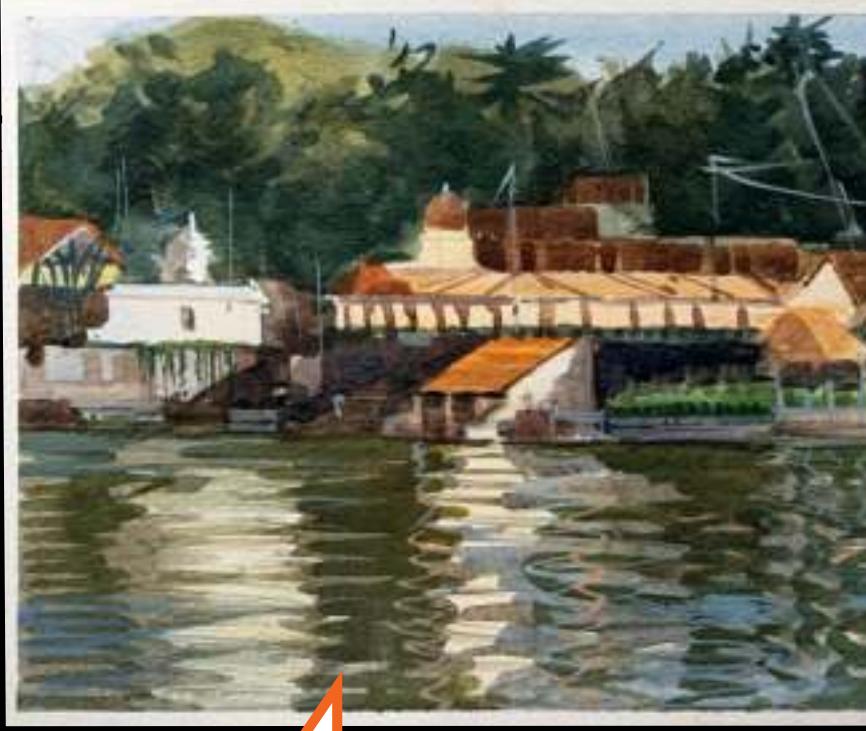


Photograph by RAJWANT RAWAT

In

Shibu Natesan's watercolour work 'A Day in the Life of a Construction Worker', we see the subject sitting quietly by himself at a construction site, even as the criss-crossing bamboo all around acts as a natural 'frame'. The framework has contained the worker entirely—he cannot escape these punishing terms his life is defined by, and yet at the same time, there is an undeniable peace and stillness in this moment. It's a simple yet powerful demonstration of the softness and grace associated with watercolours. The painting is part of the 59-year-old artist's ongoing solo exhibition *Mirror Man, Mirror Me* at Delhi's Art Alive Gallery—on till November 20—which brings together an array of watercolour paintings he has created from 2014–2025, alongside a small number of oil paintings as well. From the villages of Kerala to the markets of Uzbekistan to the hilly vistas of Uttarakhand, Natesan's watercolours are masterful depictions of the interplay between light and shadow, between documentation and storytelling.

"I love travelling and I love painting while travelling," says Natesan during an interview. "I go all across the country by myself, and even outside of the country. Painters who like to work on the move cannot carry so much equipment with them at all times. So, they prefer watercolours because they're quite portable. And personally, I have always loved watercolours, because of the ease with which you can capture natural light, and also because of how warm the colours are."



A number of paintings capture a moment of performance, or an aspect of performativity in what is otherwise a 'regular' interaction

A number of paintings in *Mirror Man, Mirror Me* capture a moment of performance, or an aspect of performativity in what is otherwise a 'regular' interaction. For example, a number of his oil-on-panel paintings use dolls and figurines as subjects, like 'Still Life' (20 x 16 inches) or 'Ladies Watch' (5.25 x 10 inches). According to Natesan, they carry the "essence of life" within their stillness, within their frozen-in-performance state. You can easily notice this aspect within some of the human-subject paintings as well, like 'Sales Girl' (72 x 60 inches, oil) and 'Beach Shop' (48 x 60 inches). But the peak of this phenomenon is 'Ophelia (After Millais)' (24 x 18 inches, watercolour), Natesan's homage to 'Ophelia', an 1851 oil painting by John Everett Millais, who

drew the *Hamlet* character Ophelia as she drowns in a rather picturesque stream, surrounded by flowers and greenery. It is a distinctly cinematic framing and, indeed, down the years, a number of acclaimed filmmakers like Andrei Tarkovsky and Lars von Trier have made visual allusions to this image in their work.

"I love that painting, 'Ophelia,'" says Natesan. "It's part of Tate's collection in London and whenever I am in London, I always make time to go and see it. The artist John Everett Millais was one of the founders of the 'pre-Raphaelite' group of artists. Because it's a Shakespeare character being depicted here, it's obviously a very dramatic bit of storytelling. I wanted to highlight that feeling, but in an Indian setting. The landscape that you see in my painting is from Uttarakhand."

The exhibition also includes a series of self-portraits Natesan has created over the past decade, and it's fascinating to see how an artist comes to terms with his own ageing...especially an artist like Natesan, whose artistic gaze is marked by instant warmth and compassion, as opposed to a rigorous, cinema verité-like dedication to accuracy and 'the truth'. According to the artist, his finished products look like they took



AN ARTIST AT HOME
 'Temple Tank 2, Varkala'
 watercolour
 on paper
 (2022)
 by Shibu
 Natesan

a lot of planning, or a lot of waiting to get just the right angle of sunlight—but in reality, it was the exact opposite scenario.

"When I arrive at a place and I feel like I want to sketch or paint some part of it or some people who are there, I don't overthink the process," says Natesan. "It's more like a stream of consciousness; it's about allowing your instincts to take over. I may interact with a shopkeeper or a salesperson occasionally. Usually, they express an interest in being sketched, because in today's day and age, a travelling painter is something of a novelty, although it was very common during my formative years as an artist." You'd be well-advised to spend some quality time with these paintings. ■

—Aditya Mani Jha

EXHIBITION ▼

Blessed Craft

In Celestial Company at MAP, Bengaluru, draws from the museum's extensive collection of over 100,000 artefacts to spotlight the companions of Hindu deities



This festive season, the Museum of Art & Photography (MAP), Bengaluru, invites visitors to step *In Celestial Company*, a captivating exhibition that brings to life the divine helpers, mythical creatures and wondrous attendants who accompany gods and goddesses through legend and ritual. On view until February 15, 2026, the show draws from MAP's extensive collection of over 100,000 artefacts. The

exhibition invites viewers to reflect on how imagination, faith, and artistry have long intersected to shape the sacred imagery. Through its vibrant design and layered curation, the show celebrates India's artistic heritage and the universal appeal of its mythic imagination. Curated by Priya Chauhan, it turns the spotlight towards such creatures as Garuda, Nandi and Mooshika to the more enigmatic Apsaras, Kinnars and Gandharvas. Through sculptures, textiles, brass

Chauhan's curatorial approach illuminates how these beings, half-human and half-divine, serve as metaphors for the desire to connect with the sacred and the unknown.

The exhibition's design deepens engagement through interactive and inclusive experiences. A tactile book allows visitors with visual disabilities to explore the gallery layout and artworks, complemented by an audio guide. Those with hearing disabilities can access stories of the celestial beings via the Bloomberg Connects app. Families are invited to step into an immersive storytelling booth, offering a 360-degree audio-visual journey into the adventures of 'Garuda, the King of Birds'. For visitors, a beautifully designed foldout takeaway provides stories to carry home, a memento of their divine encounter.

By bringing these mythic beings "from the shadows to the light", MAP encourages visitors to rediscover the celestial fabric woven into India's collective imagination. The exhibition honours figures that lingered in the periphery and now command the spotlight—radiant, powerful and profoundly human in their divine purpose. ■

—Nikhil Sardana



WONDER FIGURES Top, a wooden figure of a Gandharva; right, an angel holding a fan depicting Kartikeya, in wood and metal

The exhibition shows how these beings, **half-human, half-divine**, are metaphors for the desire to connect with the divine

figurines, paintings, chariots and wooden artefacts, the display reveals how these hybrid beings embody transformation, devotion and symbolism that transcend cultural and religious boundaries.

While deeply rooted in Indian mythology, *In Celestial Company* also acknowledges cross-cultural narratives—angels and colonial-era artefacts that testify to centuries of exchange and artistic reinterpretation.

From Actor to Auteur

LOVE SEX AUR DHOKHA AND CHAURANGA ACTOR ANSHUMAN JHA MAKES HIS DIRECTORIAL DEBUT WITH LORD CURZON KI HAVELI

WHILE TINKERING WITH THE THIRD DRAFT OF *LORD CURZON KI HAVELI* (2025), actor and producer Anshuman Jha started to think aloud about who'd be perfect for each role, the kind of lens to shoot with, and even the film's music. That's when screenwriter Bikas Ranjan Mishra suggested that Jha direct the film himself. "I took a week to decide... what tipped the scales was my conviction about the script," he says. Starring Rasika Dugal, Arjun Mathur and Paresh Pahuja, the dark thriller is a chamber drama that

revolves around two unlikely South Asian couples who meet at a countryside manor in England.

It was Jha's love for the genre that triggered the film. "Alfred Hitchcock's *Rope* (1948) is one of my absolute favourite films. In 2005, I directed the German play, *Mr Kolpert*, which pays homage to *Rope* and since then I've been wanting to work in this genre. In Indian cinema, especially Hindi films, we don't see this genre a lot. The only film I can think of is *Trapped* (2016)." The 39-year-old wanted the

film to explore issues of identity, migrant trauma and racism. And the title is inspired by Curzon Maidan, a historic park in Bhagalpur, Bihar, where Mishra grew up. "Through his growing up years, he often wondered about the existence of 'Curzon ground' in the middle of this

town in Bihar. As the Viceroy of India, Lord Curzon's tenure in India was very controversial, especially the Partition of Bengal in 1905," says Jha. It took Mishra and Jha two years to perfect the script.

Jha, who made

his acting debut in Dibakar Banerjee's *Love Sex Aur Dhokha* (2010), drew from what he had learnt on that set while directing his first feature. "There's a certain magic when actors are allowed to discover the nuances of their characters and the film through the process of the making of it. This is exactly

what Dibakar had done for me and that's what I did on *Lord Curzon....*" The actor has been keeping busy, and has already helmed another film—a sequel to 2023's *Lakadbaggha*, about an animal-loving vigilante. "This is a big action film, with Chinese actor Sunny Pang. We've finished shooting, and it should be up for release early next year." ■

—Karishma Upadhyay

ZOOM IN After *Lord Curzon...*, Anshuman Jha has another film in the can, a sequel to 2023's *Lakadbaggha*



THE RAW TRUTH

Actor **Priyanka Bose** returns to independent cinema with *Agra*, a haunting exploration of desire, repression and the messy truths of being human



Priyanka Bose has always been drawn towards stories that “don’t try to ‘neaten’ the chaos of being human”. “Independent cinema gives me that freedom—to question, to fail, to be messy, to not have all the answers,” affirms the actor, known for her roles in films such as *Love Sex Aur Dhokha*, and the Oscar-nominated *Lion*.

This quest continues in her latest project, *Agra*, a stark, unsettling portrait of a young

man’s sexual awakening and emotional confinement within the claustrophobic walls of his family home. Bose believes that her role of Priti—an older woman with a limp who runs an internet café and becomes entangled in a fragile, unsettling relationship—exemplifies how discomfort can reveal deeper truths. “I don’t see discomfort as something negative anymore; it’s just another way of finding honesty,” she elaborates. “When you strip

away all the machinery of big productions, what’s left is just you, the character, and the camera—and that’s an incredibly intimate space....”

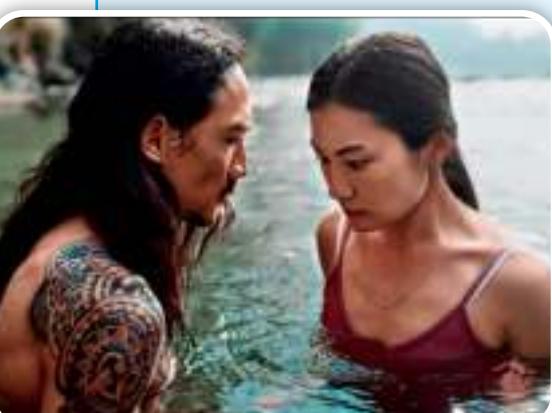
Agra had its world premiere at the Cannes Film Festival in 2023 and has been wowing audiences globally since then. Written by Kanu Behl and Atika Chohan, the film also stars *Aashiqui* actor Rahul Roy. It is set to release in theatres on November 14. ■

—Deepa Natarajan Lobo

Written by Kanu Behl and Atika Chohan, *AGRA* stars Priyanka Bose and Rahul Roy. It releases in theatres on Nov. 14

MOUNTAINS, MEMORIES, **MOVING IMAGES**

THE DHARAMSHALA INTERNATIONAL FILM FESTIVAL RETURNS WITH A FINELY CURATED SELECTION OF PERSONAL, POWERFUL STORIES FROM SOUTH ASIA AND BEYOND



South Asian titles with a bent towards personal storytelling.

Among the highlights in the features section is Bhutan’s entry for the Oscars, Dechen Wangmo Roder’s *I, The Song* (left), which has a schoolteacher seeking out her doppelgänger after a viral video jeopardises her job and reputation.

The tale of another schoolteacher is a must-watch: Nidhi Saxena’s *Secret of a Mountain Serpent*. Premiered at the Venice Film Festival, it won the Biennale College Cinema Fund; Saxena is the first Indian woman to receive this grant. Set in a remote Himalayan town in the ’90s, Saxena’s film tracks a married teacher who gets drawn to a mysterious outsider disrupting the myths and silence of her village.

Among international titles, Rich Peppiatt’s acclaimed comedy drama and Ireland’s Oscars 2026 pick, *Kneecap* (below) is to watch out for. Also don’t miss Carla Simón’s Palme d’Or-nominated *Romería*, which follows its 18-year-old female protagonist as she travels to learn about her estranged father, who died of AIDS. In docufiction, there’s *The Wolves Always Come at Night*, which highlights the travails of a Mongolian shepherd family. ■

—Devarsi Ghosh

FILM FEST
DIFF 2025 will
take place
from Oct.
30-Nov. 2 in
McLeodganj

With Mumbai’s MAMI film festival cancelled, the Dharamshala International Film Festival (DIFF) is set to be the first major film fest this season. Organised by Dharamshala-based filmmakers Ritu Sarin and Tenzing Sonam, it will take place within the Tibetan Children’s Village in Mcleodganj. As always, the festival is non-competitive, committed to featuring high-quality



BOOKS ▾

A Life Larger Than History

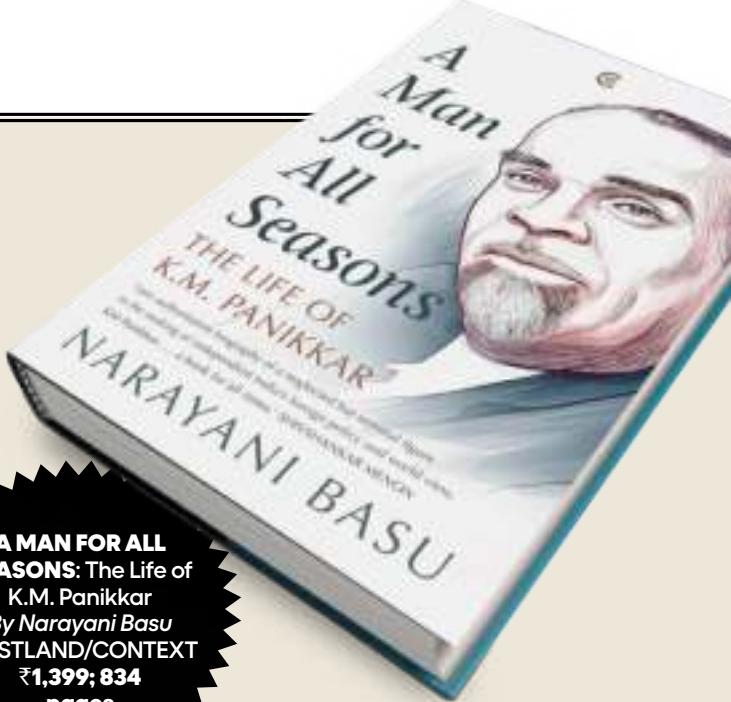
NARAYANI BASU'S A MAN FOR ALL SEASONS BRINGS K.M. PANIKKAR'S DAZZLINGLY VARIED LIFE—SCHOLAR, DIPLOMAT, HISTORIAN—VIVIDLY BACK INTO THE SPOTLIGHT

A

A Man for All Seasons, through which biographer Narayani Basu tracks the crowded and intensively lived life of K.M. Panikkar, is both finely crafted and immensely readable despite its voluminous 800-plus pages. Panikkar hailed from a modest family in present-day Kerala, but was a precocious child, absorbing, like a veritable sponge, the swirling intellectual currents of his time. The first decades of

the 20th century were when history was being made. India was caught up in the political and social maelstrom, struggling to throw off the yoke of colonialism but having to navigate a complex political landscape of feudal principalities, communal and linguistic fault lines but layered with nascent modernity. Panikkar embodied all these currents in his eventful life, serving suc-

cessively in the princely kingdoms of Patiala, Kashmir and Bikaner, as a Congress Party functionary and as a diplomat serving independent India. Basu captures his multi-faceted personality in language that gives fulsome credit but acknowledges his weaknesses and vulnerabilities in equal measure. What is unique about this biography is the skill with which the author uses the prism of

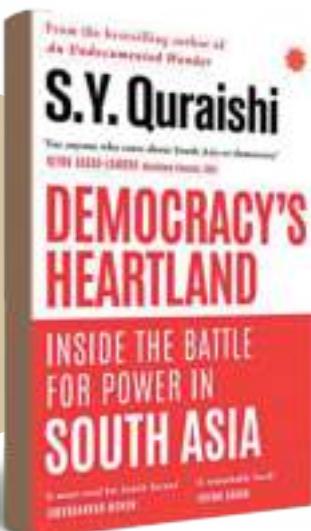


A MAN FOR ALL SEASONS: The Life of K.M. Panikkar
By Narayani Basu
WESTLAND/CONTEXT
₹1,399; 834 pages

THE LISTICLE

RECENT BOOK RELEASES THAT SHOULD BE ON YOUR READING LIST

DEMOCRACY'S HEARTLAND Inside the Battle for Power in South Asia
By S.Y. Quraishi
Juggernaut
₹799; 520 pages



Reframing the Narrative

This book by former chief election commissioner of India S.Y. Quraishi sets out to right a wrong. "A striking paradox in contemporary global discourse on democracy is the relative marginalisation of South Asia as a collective democratic space. Despite the region encompassing nearly a quarter of the world's population and 40 per cent of the world's democracy, and also hosting some of the most complex and enduring democratic practices, it remains under-represented in comparative democratic scholarship," he says in the Introduction. Despite all the volatility South Asia has been subject to—from Pakistan's failed experiment with democracy, Nepal's constitutional churn and Afghanistan's sharp descent into extremism—it is Quraishi's argument that no region has embraced democracy with more gusto than the Indian subcontinent. *Democracy's Heartland* is a definitive portrait of South Asia's tryst with democracy, warts and all.

Panikkar's life to give the reader a ringside view of the unfolding saga of the two world wars, of revolution and of fascism, of national movements and social fractures, of power play and nation-building.

Panikkar was a true polymath. He was equally at home penning verses in Malayalam and Sanskrit as he was exploring India's ancient connections with Asia and beyond. He was always looking for broad conceptualisations to explain complexity. He

state. As he wrote to his friend Syed Mahmud, "I have for a long time now been a Pakistani. Without the separation of Pakistan, a central government will not be possible in India. The fear of Hindu majority at the centre, whatever safeguards you may create and whatever pacts you may work out, will drive the Muslims to unreasonable madness."

Panikkar manifested in his own prodigious writings the contradictions of his age, attempting, through

Indian History in 1945. He was one of the first scholars to identify the absence of sea power as the reason why India fell prey to western imperialism. For independent India, he said, having a strong navy was indispensable to maintaining its sovereignty and territorial integrity.

In the final phase of his eventful career, Panikkar excelled as a diplomat, serving as India's ambassador to China and later to Egypt. He established close relations with China's revolutionary leaders, Mao Zedong and Zhou Enlai, but was criticised for ignoring the warning signs already visible about the clashing nationalisms of the two emerging Asian powers. His stint as ambassador to Cairo brought all his skills as a diplomat to the fore, presaging the subsequent birth of the Non-Aligned Movement.

Panikkar died in 1963, while serving as Vice-Chancellor of Mysore University. He was mourned not only throughout India but across the world. He was witness to history but also an active participant in it. Basu's biography is a fine tribute to one of the giants of our age. ■

—Shyam Saran

PANIKKAR SERVED IN PRINCELY KINGDOMS AS WELL AS INDEPENDENT INDIA, EMBODYING THE ERA'S POLITICAL CHURN

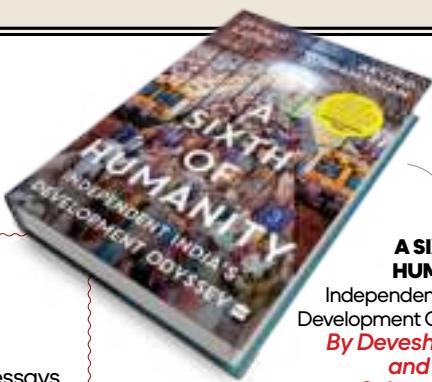
was not communal but saw Hinduism as providing the cultural fabric that kept India whole through the ages. He was convinced that an independent India needed a strong centre to survive and flourish. He accepted Partition as necessary to enable a strong centre in both the succeeding states of India and Pakistan. Accommodating Muslim aspirations would only have been possible in a weak, undivided

his study of history, to comprehend the deeper currents shaping the 20th century. Some of his books still remain the authoritative sources for the study of Indian history, the best known being his volumes on the Indian Ocean. *The Strategic Problems of the Indian Ocean* was published in 1944 followed by the more substantive *India and the Indian Ocean: An Essay on the Influence of Sea Power on*

MIND MUSINGS

A collection of essays by one of our foremost public intellectuals, *India and Her Futures* touches upon subjects as varied as foreign policy, pressing domestic matters, biographical homages, appraisals of key public institutions, and the very notion of India. A must-read if you are concerned about where we are headed as a nation.

INDIA AND HER FUTURES: Essays
By Gopalkrishna Gandhi
BLOOMSBURY INDIA
₹899; 400 pages



A SIXTH OF HUMANITY
Independent India's Development Odyssey
By Devesh Kapur and Arvind Subramanian
HARPERCOLLINS INDIA
₹1,299; 760 pages

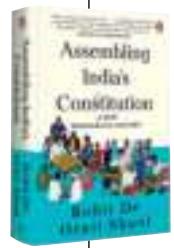
GROWTH STORY

This monumental developmental history of modern India, penned by political scientist Devesh Kapur and economist Arvind Subramanian, charts how a large, multicultural nation has attempted four concurrent transformations—"building a state, creating an economy, changing society and forging a sense of nationhood"—all while putting democracy first.

A PEOPLE'S PROJECT

Historians Rohit De and Ornit Shani take a refreshing approach to the creation of the Indian Constitution and show ordinary citizens, not just the Constituent Assembly, shaping the document through a process which included debates, petitions and struggles.

ASSEMBLING INDIA'S CONSTITUTION
A New Democratic History
By Rohit De and Ornit Shani
PENGUIN INDIA/ ALLEN LANE
₹799; 400 PAGES



—Compiled by Amit Dixit

BOOKS ▼

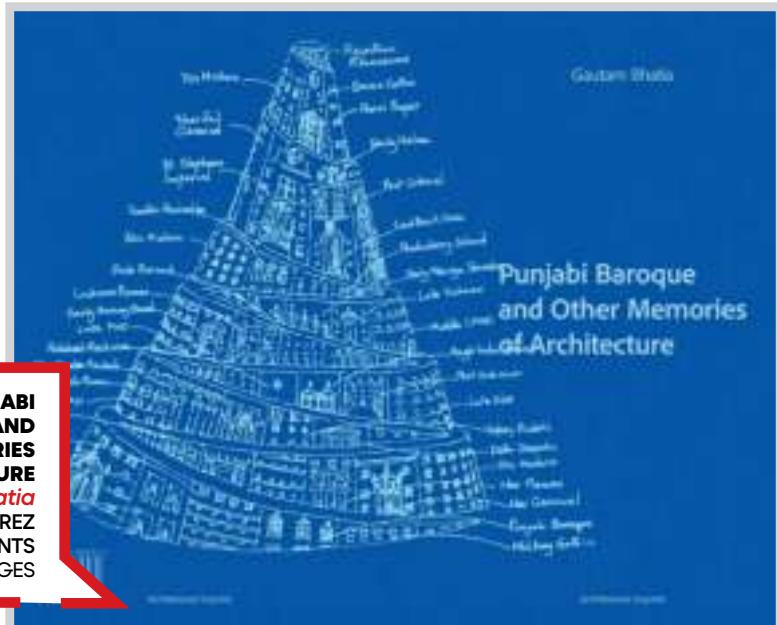
BUILDING ON IRONY

AS ARCHITECT GAUTAM BHATIA'S *PUNJABI BAROQUE* RETURNS IN A NEW EDITION, HIS REFLECTIONS ON INDIA'S ARCHITECTURAL EXCESSES REMAIN AS RELEVANT AS EVER

In the 2023 movie *Rocky Aur Rani Kii Prem Kahaani*, the protagonist Rocky Randhawa (Ranveer Singh) belongs to a wealthy Delhi family that for some reason, lives in a replica of the White House. But if you think that was an unrealistic flourish on the writers' part, think again. Nearly three decades before the film, the architect, writer and artist Gautam Bhatia had described headstrong and tasteless clients exactly like the Randhawas in his 1994 book *Punjabi Baroque*. Bhatia wrote, "I have spent evenings discussing stylistic expediency, the fluent austerity of modernist forms, and other important clichés of the profession, only to be told by the client that the exterior of the house should be done in French Renaissance or Venetian Gothic, or any other style that would look good in downtown Lucknow." In a similar vein, the author was tasked with recreating Thomas Jefferson's home 'Monticello' in Delhi's Qutub Enclave—the kind of thing that can drive an architect up the wall.

Punjabi Baroque, initially published by Penguin, is being reissued in November by Architexturez. It is a collection of essays recounting Bhatia's professional experiences, especially interactions like the one described above. And because architecture lies at the intersection of science, philosophy, public policy and a bunch of other disciplines, this gives Bhatia the opportunity to make many thought-provoking observations about post-independence India's blind spots. Talking about his writings during an interview, Bhatia says, "Architecture is a very public profession, in a way that's not true for, say, lawyers or dentists. Our successes are out there in the open for the

**PUNJABI
BAROQUE AND
OTHER MEMORIES
OF ARCHITECTURE**
By Gautam Bhatia
ARCHITEXTUREZ
IMPRINTS
₹650; 275 PAGES

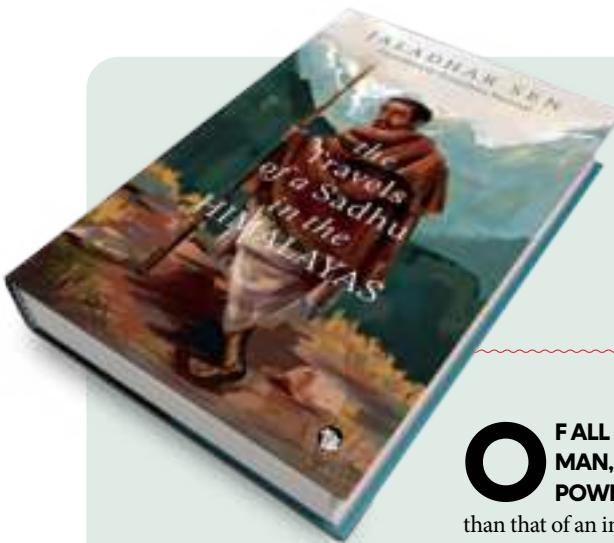


"IN THE LARGEST INDIAN CITIES," SAYS BHATIA, "OUR ARCHITECTURAL FAILURES FAR OUTNUMBER OUR TRIUMPHS... BOTH IN AESTHETICS AND UTILITY"

public to see, and our failures even more so. And if you look at the largest Indian cities, it's clear that our failures—at the architecture level, at the urban planning level—far outnumber our triumphs. Forget aesthetics, even the utilitarian parts of our cities are subpar in most cases."

Complicating notions of utility and 'uselessness' were also central to Bhatia's recent exhibition of sculptures, *A Beautiful World*, held at Delhi's Bikaner House. The sculptures in question were soldered together in odd pairings—a cricket bat that morphs into a sniper rifle, a camera that melts into a locker, a sarod with a shower-head attached at the end, and so on. Bhatia says, "I wanted to take these objects beyond the realm of 'usefulness', and invite people to form new relationships with these objects... The inherently 'useless' nature of art has always interested me." ■

—Aditya Mani Jha



**THE TRAVELS OF
A SADHU IN THE
HIMALAYAS**
*By Jaladhar Sen
Translated by
Somdatta Mandal*
SPEAKING TIGER
₹499; 264 pages

BOOKS ▼

In Search of the Sublime

A 19th-century travelogue offers a meditative glimpse into an era when pilgrimage to the high Himalayas was a journey of the soul

OF ALL IMAGES KNOWN TO MAN, THERE IS NONE MORE POWERFUL AND POIGNANT than that of an individual embarking on a quest, battling the elements in the mountains. And therefore the surfeit of literature on mountain pilgrimage. But, in the Uttarakhand Himalayas, a region that has attracted pilgrims since times immemorial, one finds very few genuine travel accounts that can give us a peek into the past. After the devastating 2013 floods in Kedarnath, I began searching for old maps and literature on ancient pilgrim routes that could be mapped as future rescue pathways. I found few authentic accounts and maps in Hindi and English. The walking routes had faded from public memory too. However, digging deeper, I unearthed a wealth of material in the vernacular—Bengali, Tamil, Maithili, Telugu, even French.

Jaladhar Sen's *The Travels of a Sadhu in the*

Himalayas (translated from Bengali by Somdatta Mandal), an account of his travels in the Badrikashram region, describes the pilgrimage in the 1890s. The work is significant as it allows us to understand how the Himalayan pilgrimage has transformed—from being an exercise in just being there frugally, moving body and mind, waiting for the next experience to present itself, to its current status of commercialised holiday.

To my mind, the book is special in two ways. Firstly, it narrates the travel journey not from the point of view of an over-enthusiastically devout pilgrim, but presents the experiences of a *paribrajak* sadhu, a secular sojourner. What also makes the book special is that the translator manages to tread the thin line between over-simplification and over-explanation. And therefore, while it amusingly retains all the prejudices of a Bengali struggling to survive the mountains, it also presents a deeply reflective experience of being overwhelmed by the natural splendour of the Upper Ganga region.

This is a book that describes a truly sublime and transformative experience, that starts out as an escape from reality but eventually becomes a release from illusion. ■

—Lokesh Ohri

BOOKS ▼

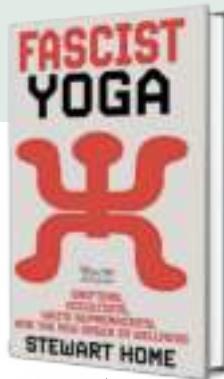
Posture Politics

In *Fascist Yoga*, Stewart Home challenges modern yoga's sanctity, tracing its roots to European nationalism

Swami Vivekananda, one of yoga's great proponents, looked down upon what is today its most popular incarnation—*asanas*, or the postures one strikes for better health. He thought them fit only for "sorcerers, fakirs and *jogis*", writes historian Meera Nanda in a 2011 piece cited in Stewart Home's *Fascist Yoga*, a recent book arguing that yoga's spiritual aspects—traceable at least to the 2,000-year-old texts by Patanjali—have nothing

to do with its physical ones. Historians say that the origin is just 100 years old, when white journalists, religious leaders and military men started using "orientalist fairy dust" to legitimise Aryan supremacy through what were essentially very European gymnastics.

Home's book mentions several proponents of this 'eastern' wisdom who influenced—or were directly enrolled with—the Nazis, the Iron Guard or Mussolini's fascists. While the book lacks



FASCIST YOGA
Grifters, Occultists,
White Supremacists,
and the New Order In
Wellness
By Stewart Home
NAVAYANA
₹499; 224 pages

narrative and reads like a leaden 'Yoga's Top 10 Villains' list, Home traces well their lineage down to modern-day conservatives like Donald Trump, Steve Bannon, Andrew Tate and Alex Jones.

Today, you find anti-vaccine rhetoric, disdain for left-wing politics and appeals to harness an "inner masculinity" across yoga centres in the West—not to mention a litany of sex offences.

"'Scientific' studies of yoga...merely demonstrate that exercise is good for you, rather than proving yoga is a superior form of exercise," writes Home. Fewer rants and repetitions would have helped, but the book's academic rigour justifies its *raison d'être*: proving yoga is multicultural now and no longer essentially Hindu or Indian, with a history that's neither as harmless nor holy as often portrayed. ■

—Udbhav Seth

REVIVING TRADITION

Radhikaraje Gaekwad blends heritage and inclusivity through the Heritage Garba and Urja crafts festival

Photograph by BANDEEP SINGH

Q. The Lukshmi Vilas Palace, Vadodara, hosted the garba recently. What has been your guiding light in hosting what has come to be one of the most anticipated garbas in the garba capital of Gujarat?

The Heritage Garba is our flagship fund-raising event and spreads awareness about the Shri Maha-

rani Chimnabai Stree Udyogalaya (MCSU). Traditionally, there is no record of the royal family participating in the garba, being a Maratha family, perhaps. But I am a Gujarati and a full garba fanatic. My husband and I decided to give our patronage and start a new tradition. In the third year, in 2024, it was my hus-

band's idea to move the Heritage Garba to the Palace grounds.

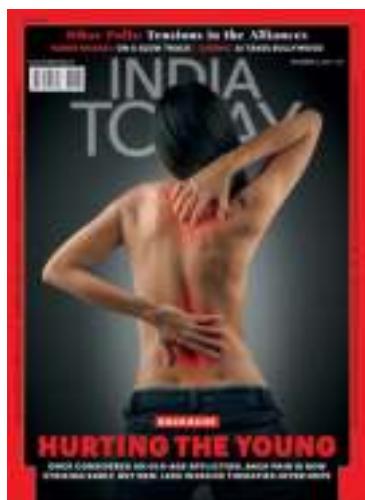
Q. MCSU has taken up the cause of artisans through various activities, one of them being the two-day Urja craft festival, now held on the Palace grounds. How was the festival conceived and how has it evolved?

Urja started in 2020 during the pandemic when artisans were frantic after their orders were cancelled. I was feeling helpless for them, so I started circulating PDFs of their products in my networks and on social media. Then I realised we could provide them a stage and sensitise people. Urja started with 30 exhibitors—20 artisans and around 10 design studios—to help them connect with each other and with the end-consumer.

Q. How is Urja curated? What is your philosophy in putting together the event?

I curate Urja as a continuous process round the year through my travels and the multiple channels through which I am connected in the crafts network and to artisans. I keep an eye out for diversity, region and product diversity. The fifth edition moved to the Palace as we required more space.

—with Jumana Shah



INDIA TODAY MAGAZINE ON THE WEB

COVER STORY: BACKACHE

HURTING THE YOUNG

Once considered an old-age affliction, back pain is now striking early. But new, less invasive therapies offer hope

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