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Hyderabad real estate juggernaut losing steam as sales drop drastically

Hyderabad: A painstakingly built real estate juggernaut appears to be losing its steam and threatening to go off the rails.Hyderabad's property market that flourished over the decade, growing leaps and bounds and encompassing wide swaths of hitherto untapped acreages on the city outskirts and beyond, is now in a quandary.

Even as property seekers choose a wait-and-watch approach, the sales have started to drop, enquiries dwindle, unsold inventory goes up and new launches clearly seem to be on hold.Offering a perspective on the prevailing situation in Hyderabad is the study of top seven cities released by Anarock on Thursday. According to Anarock data, Hyderabad in the year 2024 registered a decline of 5 per cent in unit sales compared to year 2023 and also 24 per cent drop in new supplies during the same time period.The city-wise housing sales shows that a total of 61,715 units were sold in Hyderabad last year and the numbers have dropped down to 58,540 units – a 5 per cent year-on-year decline. During this period, Mumbai Metropolitan Region (MMR) and Bengaluru witnessed an annual rise, albeit marginal.

In the city-wise new launches overview, the Anarock study has Hyderabad recording a decline of 24 per cent with only 58,335 units this year as against launch of 76,345 new units last year. This drop in new launches paints a grim picture for Hyderabad since during the same period, National Capital Region logged in a rise of 44 per cent and Bengaluru recorded 30 per cent rise.According to the Anarock report, strong homebuyer demand and hardening property prices coupled with the general and State elections dented India's residential growth momentum in 2024. Its data indicates that housing sales in the top 7 cities witnessed a marginal 4 per cent decline in 2024 with approximately 4,59,650 units in 2024 against 4,76,530 units in 2023.Anuj Puri, Chairman – Anarock Group, says, "Average residential prices hikes will stabilise in the coming year, though there will be steady growth amid increased input costs and high demand. 2025 will also see generous new supply infusions by listed developers, who have significant

inventory lined up."Among budget categories, luxury housing demand and new supply increased exponentially in 2024 as homebuyers demand continued the post-pandemic trend of bigger, better homes by branded developers. The new luxury supply addition across the top 7 cities rose by 24 per cent in 2024 against 2023.

Fresh alarm in Nalgonda as new cases of fluorosis detected

Hyderabad: In an alarming development, fresh cases of dental fluorosis were reported from Marriguda mandal of Nalgonda district, just three years after the union Government patted Telangana for getting rid of the flourosis problem largely through supply of potable water through taps under the ambitious Mission Bhagiratha scheme, the brainchild of former Chief Minister K Chandrashekhar Rao.Marriguda mandal in Nalgonda district, once a fluoride hotspot, has now reported new cases of dental fluorosis identified among children. It indicated a relapse in the fluoride problem reigniting concerns over water contamination issues in the region.Alarmed by these new instances, the district administration has ordered a door-to-door survey covering over 13,000 households in Marriguda mandal. This survey, led by Asha workers, has already identified some 140 cases of dental fluorosis within the past five days and will continue for another ten days.Similar complaints have emerged from villages in Munugode, Nampally and Devarakonda mandals, despite these areas receiving 100% tap water supply coverage under the Mission Bhagiratha programme. The recurrence of fluorosis cases has raised questions about the effective implementation of the programme of late.

The first fluorosis case in the district was detected in Bhatlapally village in Marriguda mandal back in 1945. Since then, excessive fluoride has been found in the groundwater of 967 habitations in the former Nalgonda district, severely impacting the quality of life for three generations.After a long drawn struggle, several measures were initiated addressing the gravity of the situation. In 2020, the BRS government announced that no new fluorosis cases had been detected in Telangana, and the union Health Ministry also endorsed the claim in Parliament, attributing the success to Mission Bhagiratha.The recent detection of new cases has come as a shock, largely attributed to the consumption of rice and vegetables irrigated with fluoride-contaminated groundwater. The district administration's ongoing survey has so far covered over 7,500 people, said the health officials. If neglected further, these dental fluorosis cases could progress to skeletal fluorosis, potentially crippling the victims.Kanchukatla Subash, convener of the Fluorosis Vimukthi Porata Samithi, attributed the rise in fluorosis cases to the use of groundwater potentially leading to the new cases. He appealed to Chief Minister A Revanth Reddy to expedite special measures in the district to address the issue.

Mangoes arrive early than usual this season in Hyd

Hyderabad: Mangoes have hit the city a bit early than usual and have arrived albeit on a smaller scale from God's Own Country- Kerala.The fruit is sold at the markets across the city at a price between Rs.150 and Rs.400 a kg. For now, only two varieties 'benishan' and 'banganapalli' are available in the markets in the city.The mangoes arrivals in the city usually start around January-end and continue till first week of the July. The peak season for the harvesting of the fruit is between March and June and around the period trucks laden with mango loads arrive from Andhra Pradesh, Karnataka, Maharashtra, Uttar Pradesh and Gujarat in the city."Arrivals of mangoes started since the beginning of the month. Anywhere between 10 and 80 quintals of mangoes are now arriving at the market every day," said an official at the Batasingaram market.

What is South Africa cancel coal case explained

Civil society organisations claimed a landmark victory against fossil fuel power in South Africa on December 4 when the High Court in Pretoria turned down the national government's plan to add more coal-fired power stations to the country's power grid. According to the court, the government's plan was "inconsistent with the Constitution of the Republic of South Africa" and thus unlawful.The 'Cancel Coal' caseIn its Integrated Resource Plan (IRP), the government of South Africa announced in October 2019 that it plans to add 1,500 MW of coal power to the country's national grid – 750 MW by 2023 and another 750 MW by 2027.IRP 2019 | Photo Credit: Government of South AfricaThe Minister of Mineral Resources and Energy and the National Energy Regulator of South Africa in 2020 backed the announcement.

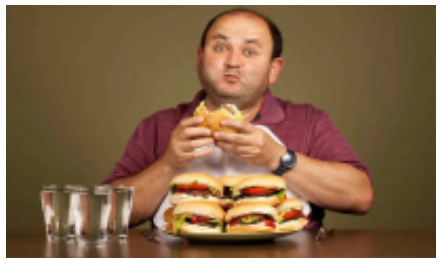
In 2021, youth-led civil organisations including the African Climate Alliance, the Vukani Environmental Justice Movement in Action, and the Groundwork Trust, represented by the Centre for Environmental Rights, brought the case against the government's plan. The group alleged that the plan would harm the environment and cause health issues, especially among children. The case soon acquired the popular monicker "Cancel Coal".South Africa's energy mixLike most economically developing nations, South Africa is heavily dependent on coal for its energy needs. According to estimates by the International Energy Agency, almost 71% of the country's total energy supply came from coal power in 2022.

According to an analysis of global emissions through history by Climate Watch, South Africa is the world's 16th largest emitter of greenhouse gases.South Africa has ratified the Paris Agreement, which means it is legally bound to cut its greenhouse gas emissions and contribute to mitigating global warming. According to the Nationally Determined Contributions South Africa submitted in 2021, the country plans to cut 350-420 million tonnes of carbon-dioxide-equivalent (MtCO2e) of greenhouse gas emissions by 2030. It has also committed to reaching net-zero by 2050.In July 2024, the country's President Cyril Ramaphosa signed the Climate Change Act into law, which includes a clause to reduce greenhouse gas emissions.Details of the judgement

Civil society organisations contended that the government's plan to add more coal power didn't consider the rights of children as granted by the Constitution of South Africa.According to the Constitution, South African citizens have the right "to have the environment protected, for the benefit of present and future generations". This is to be ensured through measures that "prevent pollution and ecological degradation, promote conservation, secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."The court ruled that the Minister of Mineral Resources and Energy and the National Energy Regulator couldn't provide enough evidence to show that the ill effects of the coal power on the environment and the health of the people, especially children, had been considered, suggesting they didn't "comply with their constitutional obligations".Speaking to The Hindu, Ritwick Dutta, environmental justice lawyer and associate of Doughty Street Chambers U.K., said the order is a significant development in the field of climate litigation."Although, at the core, the judgment still follows the basic principles of administrative law – duty to give reasons and non–application of mind to relevant consideration – what is however significant is the fact that the court held that the minister, while according approval, did not take into account the interest of the future generations or the unborn generations."He also highlighted the fact that "since the Court relied on Section 28 of the South African Constitution, which requires the state to protect the child against 'neglect and degradation' to hold that the governments/minsters decision was not in the 'best interest of the child'. The implication of this judgment as I see it is the requirement that a minister/government decision must not be based on the immediate short-term need but must consider a long-term holistic view," Mr. Dutta said.A 2019 study published in the International Journal of Environmental Research and Public Health reviewed epidemiological the literature to understand the impact of coal-fired power plant emissions on children's health. It concluded that they affect children negatively due to their "developing physiology, anatomy, metabolism, and health behaviours". The review also observed that children who lived near a coal-fired plant exhibited more asthma and respiratory-related conditions.Environmental justiceThe case is also an example of environmental justice in the context of transitioning away from coal worldwide."Even in India, for the first time three ministries – Ministry of Power, Ministry of Environment, Forest and Climate Change and the Ministry of New and Renewable Energy – jointly filed an affidavit before the Supreme Court in the case of M.K Ranjitsingh versus Union of India that India will have to move from polluting coal to wind and solar not only to ensure cleaner air but also to meet its commitment under the Paris Agreement," Mr. Dutta said. "Coal will continue to meet the energy requirement in the short run, but it is now accepted that transition is a must if the world has to slow down climate change. The fact that courts globally are recognising this reality is ... only natural."The lawyer also said that even though this case is limited to coal power, combating climate crisis goes beyond it. "Judicial decisions on climate change are a recognition of both the urgency to deal with climate crisis and the fact that civil society groups and citizens have an important role to play in tackling the crisis. It should not be forgotten that the South African judgement is an outcome of litigation undertaken by three civil society groups. It is therefore crucial that the state and the judiciary are more open and receptive towards divergent views on dealing with the crisis of an unparalleled nature," he added.

Brain chemicals work together in controlling eating, says study

New Delhi: A study has found that brain chemicals such as dopamine and serotonin work together in controlling hunger and food intake, a finding which can possibly help in developing improved anti-obesity drugs.Working with animal models, researchers, including those at the Baylor College of Medicine, US, found that two brain chemicals — the excitement-causing dopamine and calm-inducing GABA, or gamma-aminobutyric acid — arrest the production of serotonin when one initiates a meal.



Serotonin, known to act as a 'mood stabiliser' and produce calming effects, is created mainly in the dorsal Raphe nucleus, located in the midbrain — the topmost part of the brain stem that connects the brain to the spinal cord."Working with animal models, we found that when animals are hungry, serotonin-producing neurons in the (dorsal Raphe nucleus) are inhibited by GABA and dopamine. This reduces the levels of serotonin in the brain, which allows the initiation of a meal," Yong Xu, a professor of pediatrics-nutrition and corresponding author of the study published in the journal Metabolism, said.

As the animals feed and reach satiety, more serotonin is produced, which then travels to the 'arcuate of the hypothalamus', or ARH, thereby conveying a message to 'slow down on eating', Xu explained. The ARH region monitors energy in the body and regulates metabolic responses."What's unique about this is that GABA and dopamine act synergistically (together) — when both are present, serotonin neurons appear to be more inhibited than when only one of the neurotransmitters is present," the author said.

Shubh Kalash Jewellers Celebrates Lucky Draw Winner of a Brand New Honda Activa

Hyderabad:Shubh Kalash Jewellers proudly hosted a Bumper Lucky Draw event at their store located beside Himalaya Book World, Panjagutta, Hyderabad, which culminated in the announcement of the lucky winner. The event was graced by the founders along with influencer Aparna Reddy.The highlight of the event was the draw for a brand new *Honda Activa*, which generated tremendous excitement among attendees. After a thrilling anticipation, Padma Bhalla from Sainikpuri, Hyderabad, was announced as the lucky winner. Influencer Aparna Reddy joyfully picked Padma's coupon from a total of 200 plus entries.

The lucky draw campaign began on October 18, 2024, inviting customers to participate by receiving one coupon for every ?11,000 spent. The promotion saw an enthusiastic response from patrons of Shubh Kalash, who took advantage of the opportunity to enhance their jewellery collections while also standing a chance to win.Speaking at the event, Mr. Dhairya Goel and Kaushik chowdhry , Founder of Shubh Kalash Jewellers, expressed gratitude to customers for their participation, stating, "We are thrilled to host events like these, and we plan to continue this series of lucky draws in the future. Just last time, we presented a lucky winner with a stunning 1.2 Lakh Haram. We appreciate the loyalty of our customers and are committed to creating memorable experiences for them."Shubh Kalash Jewellers specializes in creating affordable yet exquisite gold, diamond, and mixed jewellery pieces. With a wide variety of silver, gold, and diamond designs available under one roof, Shubh Kalash continues to cater to the unique tastes and preferences of its customers in Panjagutta, Hyderabad.At Shubh Kalash, every piece of jewellery is crafted with care, aiming to provide an experience that transcends time and trends, allowing customers to forge a lasting connection with their treasures.

The insurance "Techade"- leading the charge in insurance innovation: Innovate, Integrate, and Liberate in 2025

Hyderabad:As 2025 approaches, the insurance industry stands at a transformative crossroads. Technology, driven by large data sets, is reshaping every aspect of our business and the future of insurance is being defined by those who innovate on, integrate with, and liberate customer encumbrances. Insurers are rising to the challenge of thriving in a world where personalized solutions and communication, seamless digital experiences, and strategic partnerships are essential.The journey ahead is driven by four key pillars which are the foundation for the future of insurance—one that is more connected, customer-focused, and dynamic than ever before.

1. Level up AI-driven efficiency in transforming operations: AI will continue to transform operations in claims management, underwriting, and fraud detection, with generative AI enhancing everything from customer support to pricing and claims processing. Precursors to AI like Robotic Process Automation (RPA) is streamlining back-office operations, delivering significant ROI while enhancing customer satisfaction. Insurers investing in these technologies will enhance their people productivity, service offerings and drive greater customer satisfaction, unlocking new possibilities like on-demand insurance and real-time pricing.

2. Customer-Centric personalized advisory with hassle-free buying: Today's customers expect more than just a product—they demand personalized, real-time advisory services and seamless self-service options. Insurers will respond by enhancing digital platforms with features like instant quotes, real-time claims tracking, and automated workflows. AI-driven voice systems and data analytics will transform customer interactions, enabling personalized recommendations and faster response times. As insurance shifts toward tailored, goal-oriented solutions, insurers will rely on technology to provide real-time advisory, helping customers make informed decisions and boosting customer loyalty.

3. AI-Driven embedded insurance-Seamless Protection, Anytime, Anywhere: Embedded insurance is emerging as a powerful growth driver, revolutionizing how coverage is delivered. By seamlessly integrating insurance products into non-insurance services, insurers are poised to enhance accessibility and convenience. Strategic partnerships with sectors such as automotive, real estate, and healthcare will enable insurers to tap into real-time data, ensuring that coverage meets the immediate needs of customers at the moment of necessity. AI-powered solutions will be central to this transformation, automating processes and offering real-time, personalized experiences. By analysing context and individual customer needs, AI will provide tailored protection, making insurance an effortless part of daily life. This shift will redefine how consumers engage with insurance, creating a frictionless experience that is as natural as any other service they use regularly.

4. Seamless ecosystem collaboration: Insurers will operate within interconnected digital ecosystems, powered by APIs, cloud-native architectures, and microservices. The future of insurance will be driven by collaboration. In 2025, insurers will operate within connected digital ecosystems, using APIs, cloud-native architectures, and microservices to exchange data and work with tech firms and service providers. Real-time data from sectors like automotive (vehicle telematics), smart homes, and IoT will enable insurers to offer dynamic, usage-based coverage that adapts to customers' evolving needs. The power of connected ecosystems will allow insurers to stay ahead of emerging risks and continue innovating in ways that enhance both customer experience and operational efficiency.

Telangana girl Pidamarthy snigdha craked perfect miss of India title crown

Hyderabad:Perfect miss of India beauty peagent was bagged by Pidamarthy snigdha from Khammam district Telangana state. Snigdha is a clinical cosmetologist and human rights women empowerment secretary and as vice president for youth for anti corruption and social activist she's super ambitious and strong personality she Participated in peagent to start her passionate field.

She's the elder daughther her parents were super proud for the success she told she carry the crown with utmost honour and dignity to bring many more women just like her

Rachakonda Commissioner Honors Retired Police Officers

Hyderabad:Rachakonda Police Commissioner Sudheer Babu felicitated two police officers who retired on Tuesday. The honored officers were R. Lachhiram, SI of the Police Control Room, and G. Krishna, Head Constable from Uppal Traffic Police Station, who took voluntary retirement. The ceremony took place at the Rachakonda camp office in LB Nagar.On this occasion, the Commissioner commended the officers for their disciplined and efficient service during their tenure in the police department. He wished them a peaceful and healthy retired life and advised them to prioritize their health and maintain discipline in managing pension and financial matters. He also instructed officials to ensure that all the benefits due to the retired officers are processed promptly.Highlighting the welfare measures for retirees, Commissioner Sudheer Babu mentioned the special pension desk he initiated. Through this desk, Lachhiram was granted immediate pension benefits on his retirement day, for which he expressed his gratitude to the Commissioner.The event was attended by DCP Admin Indira, DCP LB Nagar Praveen Kumar IPS, DCP Cybercrime Nagalakshmi, Estate Officer R.I. Naidu, Police Officers' Association President C.H. Bhadrareddy, Krishnareddy, and others.

Why better prediction of cyclone intensity, heavy rainfall is needed

Tropical cyclones rank among the most devastating natural phenomena, with the potential to inflict significant destruction and loss of life. While the North Indian Ocean basin experiences fewer cyclones compared to other regions, it remains highly susceptible to their impacts due to densely populated coastal areas. This vulnerability was tragically highlighted by the Bhola cyclone of 1970, the deadliest tropical cyclone on record. Observational evidence indicates shifts in the patterns, intensity, and frequency of tropical cyclones, underscoring the need for adaptive measures in vulnerable regions.Climatologically, the Bay of Bengal experiences a higher frequency of tropical cyclones compared with the Arabian Sea. made landfall near Puducherry on the night of November 30. Uniquely, the system stalled upon reaching the coast due to a rare balanced steering flow, allowing it to maintain its intensity even after landfall until the evening of December 1. This persistence was fuelled by abundant moisture from saturated coastal soils, already soaked by preceding rains. The stalling cyclone unleashed unprecedented rainfall, with several locations across Puducherry and Villupuram districts recording 40-50 cm in a single day. Neighbouring districts, including Cuddalore and Tiruvannamalai, also experienced torrential downpours exceeding 20 cm within 24 hours. The deluge submerged vast stretches of farmland, resulting in catastrophic losses for farmers and severely impacting local livelihoods.

In recent years, there has been a 52% increase in the frequency of cyclonic storms in the Arabian Sea, alongside a threefold rise in the duration of very severe cyclonic storms. There is a greater likelihood of cyclonic storms intensifying into severe cyclonic storms. In the satellite era, the accumulated cyclone energy over the North Indian Ocean has shown an increasing trend. These trends are driven by environmental factors such as rising ocean heat content and decreasing vertical wind shear.In future climate change scenarios, anthropogenic climate change is likely to fuel more powerful tropical cyclones. Additionally, the tropical cyclone precipitation rates are projected to rise, driven by increased atmospheric moisture associated with global warming. Ocean basins may also experience a higher frequency of rapid intensification events, a poleward migration of the latitude of maximum intensity, and a slowing of the forward motion of tropical cyclones.

The post-monsoon season of 2024 (October-December) was notably active, with as many as eight low-pressure systems forming over the North Indian Ocean. Among these, four intensified into depressions, and two further developed into cyclonic storms: Dana in October and Fengal in November. This heightened activity was attributed to above-normal sea surface temperatures and favourable atmospheric circulation including low vertical wind shear. Cyclone Dana significantly impacted Odisha and West Bengal, causing extensive damage. However, precise forecasts and effective disaster mitigation measures minimised the loss of human lives.Cyclone Fengal created its place in history with its unusual trajectory and devastating impact on Tamil Nadu's coastline. Emerging as a low-pressure area over the southeast Bay of Bengal on November 23, it

The India Meteorological Department (IMD) has established an impressive track record for accurately predicting the track and landfall of tropical cyclones over the last decade. Despite this, Fengal presented significant forecasting challenges due to its unconventional track, variable speed, and intense rainfall during landfall. While IMD successfully predicted the landfall near Puducherry nearly three days in advance, certain aspects of the cyclone's behaviour were difficult to forecast. For instance, its north-eastward movement on November 27 was not accurately predicted, and the slow progression or stalling near the coast also posed challenges.More broadly, weather prediction models often struggle with forecasting the heavy rainfall associated with tropical cyclone landfalls, a limitation that was particularly evident in Fengal's case. None of the prediction models accurately predicted the exceptional 24-hour rainfall totals exceeding 40 cm recorded in some areas. Limitations in observational data over oceans, and the complex cloud dynamics within the cyclone contribute to forecasting difficulties, necessitating continuous advancements in modeling techniques and real-time data assimilation. Two critical areas requiring further research are the prediction of tropical cyclone intensity, especially rapid intensification and forecasting of heavy rainfall associated with landfall. These challenges are becoming increasingly urgent as IPCC climate models project more intense cyclones, accompanied by heavier precipitation and slower translation speeds.The post-monsoon cyclone activity of 2024 highlights the critical need for sustained investments in advanced forecasting technologies and research to address existing knowledge gaps.

Understanding the physics behind cooking a tadka

Cooking is often called an art, and just like art can be incomprehensible at times, so can exotic cooking be inedible. But that just says more about the audience (or the designated eater) than the painter (or the cook).At least, this is what I told myself when, a few years ago, I had invited a few friends over and made a vegetable curry that they simply refused to eat.They said a curry couldn't really be a curry if its tadka had been cooked in water rather than in oil. In my defence, I had realised quite late that I'd run out of oil in my kitchen. There was nothing other than water around and I'd chopped the vegetables as well.I was vociferous that water was healthier than oil for the body but eventually I had to concede: my curry wasn't the curry. But I remain curious, too. Why does one have to use oil to cook the tadka?Oil and waterIn most Indian curry preparations, the tadka is the first step: in a bit of heated oil, the cook puts either cumin (jeera) or mustard seeds. A series of sharp chirps sound, the cook proceeds to add the vegetables and launch into the preparation. In these first few seconds, the flavours of the aromatic seeds seep into the food.

Now, oil and ghee are funny liquids. When you spill some oil, it moves quite slowly, unlike water, which instead moves faster. Place a few drops of oil in a cup of water and it floats. This is unusual: honey or even dishwasher liquid move slowly on a surface but they are also denser than water. How can oil be both sluggish and lighter? The answer lies with oil's molecules. Oil is made of long chains of large molecules that spiral and stick to each other — not unlike a bunch of noodles or earphone wires. That makes oil a sluggish mover and also hard to separate. These noodle-like molecules of oil render it another important property: a high boiling point.

The boiling point of oilThe boiling point of any liquid is the temperature at which the liquid becomes gas. It's a common sight when we heat water on the stove: even on a high flame, a pot of water takes some time to turn to vapour. Water (at room temperature and pressure) has a boiling point of around 100º C.So you need to supply enough heat to the water to increase its temperature to 100º C. Once you do, any extra heat will convert the liquid to gas.Alcohol-based liquids like nail-polish removers have lower boiling points and quickly vaporise. If you rub some hand-sanitiser on your palm, for example, it will dry up in less time than it takes for you to read this sentence. Room-temperature gases such as nitrogen and oxygen have very low boiling points — much lower than 0º C — so we (fortunately) always have them as a gas, even during a harsh winter.The reason different things have different boiling points is because they have different molecular structures. Liquids whose molecules are easy to separate from each other have lower boiling points while those whose molecules are tightly bound to each other have higher boiling points.Oils have large, complicated molecules that wind around each other and thus they have high boiling points. For example, mustard oil boils at about 150º C and ghee at about 250º C. So even as you heat a bit of oil in your pan, it hangs around for longer than water does before starting to disappear.Which brings us to the more important question: why do we want to cook seeds with such heat?Aroma blastsAn equally important question is why we like to have cumin seeds in our foods. Cumin as well as mustard seeds have aromatic compounds.

Think of them as tiny, hollow spheres with some powder inside. The way to get these powders out efficiently is to blow them up. Thus, you toss the seeds into hot oil. The air inside the seed is heated and expands. When the pressure is too much, the seeds' shells burst open, ejecting their contents. It's like when you pump a balloon too much and it rips apart in a bang. In the process, the seed bursts shoot sound waves through the air that you hear as the crisp chirps.The same thing happens when you fry a puri. As soon as you put an uncooked puri into the oil, the water and air inside expand, turning it into a ball filled with vapour. Sometimes the vapour can crack the wheat open and escape.Back to the tadka: the seeds can be blown open only if the tiny air inside expands quickly. If it expands slowly, it will also just leak from a pore and the seed won't pop. So you need a liquid that can get hot enough as well as remain hot. Oils are better to cook tadka than water for this reason. They can get hot enough and sustain the heat for longer.If you use water like I did, the seeds won't pop. Perhaps you can try it at home under careful supervision. Boil a cup of water and toss in some cumin or mustard seeds. Try as you will, you won't hear any popping sounds. The seeds will just float on the water.The real taste of your daily dal tadka has to do with the physics of oil molecules and seed explosions.Tadka as artSince my friends refused to imbibe my curry, I have made sure my kitchen is always well-stocked with oil, but even then getting the tadka just right is hard.If you're wondering why molecules of oil behave the way they do or what decides whether the surface of a seed will crack open, you should consider taking a physics course here at IIT Kanpur where some of us teach.But if you want to learn the actual physics of tadka, carefully observe the artist, the cook, as they perform the tadka next.

The real beauty of science is hidden in this art.Adhip Agarwala is an assistant professor of physics at IIT Kanpur.

The lessons from a spectrum of areas

First, the importance of mangroves in providing natural protection to coastal areas — they serve as vital buffers against waves. Unfortunately, the significant destruction of mangroves in India and other countries — to promote shrimp farming, meet basic wood and fuel needs, and for tourism — has disrupted the natural ecosystem. In many cases, the construction of artificial barriers (brick and mortar walls), may actually increase people's susceptibility to the damaging effects of waves.Social changes

Second, keeping common resources such as beaches in the public domain is crucial. In Thailand, the privatisation of coastlines during the 1980s and 1990s allowed private interests to develop hotels and leisure activities, displacing local communities. This led to significant changes in labour, including the rise of the sex industry. Additionally, a large section of the population transitioned to informal sector jobs. Thailand's economy became highly vulnerable to global fluctuations, and is a lesson for India.

Third, the tsunami created winners and losers in the market. Rents, the price of land, goods, and services all rose, benefiting only asset owners and service providers. The disruption of local markets led to the replacement of local products with externally sourced goods, disrupting interdependent local economies. A number of people transitioned from traditional livelihoods to casual, low-paid labour. The push for mechanised fishing became particularly noticeable, displacing traditional artisanal fishing practices using catamarans. The degradation of natural resources intensified, leading to over-fishing, waste accumulation, loss of fish breeding areas, and further erosion of beaches and soil. Addressing these economic processes of production, consumption, and exchange — aggravated by privatisation and liberalisation — is a challenge. Unfortunately, no studies exist to measure these patterns.A worsening of inequalities

Fourth, there are lessons to be learned about relief efforts and long-term rehabilitation. It is not surprising that the social structures that create and sustain discrimination, injustice, and exclusion in society continue doing so during and after disasters. In a highly stratified society such as India, relief and rehabilitation efforts can often reinforce and even exacerbate pre-existing inequalities, discrimination, and marginalisation.Evidence from tsunami-affected countries suggests that social divisions significantly affected access to relief and rehabilitation services. There was a notable tendency to overlook the needs of vulnerable groups, including labourers, Dalits, tribes, immigrants, ethnic minorities, widows, and single women, in the distribution of relief and rehabilitation unless some vocal groups advocated their cause.

Rahul — the perennial giver primed to be the guiding light of India's GenNext

It was at the hallowed Melbourne Cricket Ground that, exactly 10 years back, K.L. Rahul took his first steps in international cricket. Tentative, stuttering steps, admittedly, but crucial, formative ones that would lead to better things.Rahul made his Test debut as a fresh-faced 22-year-old, full of ability and promise, in what turned out to be Mahendra Singh Dhoni's last outing in the five-day game. He lasted just 13 deliveries across two innings, caught behind square top-edging a Nathan Lyon sweep in the first and top-edging an attempted pull off Mitchell Johnson that lobbed up for first slip to jog back and pouch it in the second. His scores – 3 and 1. His batting positions — No. 6 and No. 3 respectively. We should have seen it coming, shouldn't we? After all, he was Rahul from Bengaluru.Commonplace

Like his great predecessor and illustrious namesake, batting out of position became commonplace for Rahul. Rahul Dravid started his Test career at No. 7, rapidly moved up to No. 3 and while that's where he made the bulk of his 13,288 Test runs, he was pushed up the order to open the batting — something he was not a great fan of — when the situation demanded. As late as in 2007-08, nearly 12 years after his excellent debut at Lord's in 1996, Dravid was still asked to open the Test batting. When India needed him to keep wickets for team balance in One-Day Internationals, he did so, with aplomb, including at the 2003 World Cup. Wait, doesn't that sound familiar? Ah yes, the new Rahul, didn't he do the same thing at the home World Cup 20 years later?Staying with the new Rahul. If he does reflect on how the last decade has gone by, and you suspect he won't right now because he has more pressing issues to consider, he will admit to himself that it hasn't been a career entirely fulfilled, or fulfilling.

After 58 Tests, he averages only 34.58, at least 10 runs less than what he should be. He has played himself out of the T20 setup, one suspects permanently. The 50-over format, where he keeps wickets and generally bats at No. 5, is where he has truly excelled, marrying an average of 49.15 with a strike-rate of 87.56. But that alone is not how Rahul will want to be remembered because for all his tattoos, he belongs to the old school of batsmanship that still regards Test cricket as the most primary of all formats.As we said, No. 6 and No. 3 in his first Test, No. 2 in his second, at the SCG when Virat Kohli took over as the skipper in his own right. It's as an opener Rahul had cut his teeth in schools' cricket, and for Karnataka in the Ranji Trophy. That's where he announced himself on the world stage. The brain-fades at the MCG were an aberration, this was the real Rahul that we had all come to know and admire – that's what those who had seen him light up grounds lush and dusty in Bengaluru felt. A flowing, six-hour 110, beautiful to watch, poetry in motion. It was Rahul at his subliminal best. It is what he is capable of, on a regular basis. He should watch that innings on loop. Maybe he does, actually.It took the soft-spoken lad another year and a half to break into the limited-overs formats, on the tour of Zimbabwe in June 2016. He celebrated his ODI call-up with a hundred in his first appearance and brought up his first T20I century two months later in Lauderhill against West Indies, in his fourth game in that format. Within 20 innings, he had an international century in each of the three versions, the quickest by a distance. The sky appeared the limit for the sinewy right-hander.

Untimely injuriesBut Rahul hasn't quite managed to relive those dizzy heights. He has been struck down by untimely injuries, of course, but he has also been his worst enemy, seemingly often retreating into a mental shell that reflected in his batting. When he bats with freedom, he looks a million dollars; a couple of days later, as if seized by the world's most vexing problems, he potters around, almost out of place on a cricket field. When he embraces the former garb, he enthrals and enchants; conversely, he can also frustrate and exasperate.Having captained the country in all three formats and now into his 11th year as an international cricketer, Rahul is as much of a leader as those above and around him in the seniority stakes — Rohit Sharma and Virat Kohli, of course, but also Ravindra Jadeja, Jasprit Bumrah and Rishabh Pant. Despite a decade of international cricket, he is only 32, and a fit-looking one at that, though even he has shown that there is a vast difference between looking fit and being fit. He is perhaps hitting his peak as a batter and there is at least a good half-dozen years ahead of him if he can keep the fire burning, the motivation going. Steeped in strong basics and not a 100% hand-eye player who can quickly go downhill when time catches up with them, Rahul is entering a new, exciting phase of his career.SeniorAt some stage in 2025, he will perhaps become the senior-most batter in the Test team, when he will have to look after not just himself but a youngish core unit of Pant, Yashasvi Jaiswal, Shubman Gill, and potentially Sarfaraz Khan, his Karnataka mate Devdutt Padikkal and Dhruv Jurel, among others. Rahul has shown himself to be a capable leader and this is a role that will excite and challenge him, which is exactly what he needs if he is to rid his mind of any residual gremlins that might be still populating it.It's been a topsy-turvy last 12 months for Rahul, who went to South Africa last December for a two-Test series as a wicketkeeper/middle-order batter. A wonderful century from No. 6 (the first time he was batting at that position after Melbourne 2014) in Centurion reiterated his class and earned him a move up to No. 4 in the first of five home Tests against England in Hyderabad, with Kohli absent on paternity leave. He made his maiden outing at two-drop count with 86 and 22 before a hamstring injury cut short his series, and when he came back against Bangladesh in Chennai in September, he was sent scurrying down to No. 6

Scores of 16, 22 not out, 68, 0 and 12, coupled with Sarfaraz's 150 in the second innings of the Bengaluru loss to New Zealand, kept Rahul on the bench for the last two Tests against the Kiwis, though it was always on the cards that for the Australia Tests, he would return to No. 6. Again, where have we heard that before – a Rahul for a crisis? When Rohit withdrew from the first Test, Rahul – who else? – was asked to open even though Abhimanyu Easwaran was in the squad as the reserve opener. He made the most of what must certainly be his preferred position – at press conferences, he is

officially correct, 'Happy to bat at any number, so long as I am in the XI' – with a solid 26 in the first dig and a patient 77 in the second, when he helped Jaiswal add 201 for the first wicket.

Big callIndia, and Rohit, needed to make a big call when the skipper returned for the second game in Adelaide. Sticking with Rahul as opener meant the captain would bat at No. 6 for the first time in six years. Hardly ideal, given that his muscle memory had been totally overhauled, but Rohit put team ahead of self and desisted from splitting the Jaiswal-Rahul combine even though he and Jaiswal had had a great run in 14 consecutive outings as opening partners. Rahul hasn't let his captain down, backing up 37 in the first innings of the pink-ball Test with 84 at a stop-start Gabba, a knock that was only ended by a spectacular Steve Smith catch at slip.It's safe to presume that if not for the rest of the series, Rahul will open in the longer term. India have five Tests in England next summer and that's where his famous 'leaving' skills will be tested all over again. Rahul and Rohit were primarily responsible for India's excellent displays in England in 2021 when they delivered one terrific opening salvo after another to blunt James Anderson and Stuart Broad and opened the door for the middle order to cash in. It was in that series that Rahul scored a hundred at Lord's, Rohit brought up his first overseas century at The Oval.Huge roleFour years on and with potentially a new opening partner, Rahul will have a huge role to play in taking Jaiswal along with him. In his brief career so far, Jaiswal hasn't filled his boots overseas, except in his debut series in the West Indies last year. He is still young and will occasionally allow the impetuosity of youth to get the better of him. Rahul was young once – cricket-young, that is, before one takes offence – and is therefore well positioned to guide the relative newcomer through choppy waters. He did that in the Perth second innings, transferring the lessons passed on to him by M. Vijay on the tour of 2014-15. There is no reason why he can't again. After all, he has proved himself already to be the perennial giver, hasn't he?

Bypass charging: Boost your Smartphone's battery life

Hyderabad: Smartphone bypass charging refers to a technology that allows a smartphone to bypass its battery while charging. Instead of charging the battery directly, the power is sent directly to the phone's circuitry, ensuring the device operates without drawing from the battery.You should consider using smartphone bypass charging in these situations:

When the battery is old or degraded: Over time, a smartphone's battery can lose its ability to hold a charge. In this case, bypass charging allows the phone to operate without relying on the battery, reducing strain on it and preventing further deterioration.For heavy usage: If you're using your phone for power-intensive activities like gaming, video streaming, bypass charging ensures the phone can stay on without draining the battery, helping avoid overheating and unnecessary battery wear.When using the phone while charging: If you need to use your phone for extended periods while it's plugged in, bypass charging ensures that the phone uses power directly from the charger, not the battery, helping prevent excessive heat and battery strain during prolonged usage.To preserve battery life: When charging your phone for long periods, such as overnight, bypass charging can help by preventing the battery from staying in a constantly charged state, which can lead to quicker battery degradation over time.Why you should use it?

By bypassing the battery during heavy usage or prolonged charging, you reduce the number of charge cycles, which helps keep the battery healthier for a longer period.Charging while using the phone can generate heat, which can damage the battery and reduce performance.

2 decades after tsunami, survivors still counting cost of great wave

Anjamma saw her neighbour's daughter's hands dangling near the rubble and she pulled her out ; the girl was alive. Next, she limped toward the remains of her home. Only one of her four children was there. The rest of them had been washed away with her mother in the tsunami. "I only found my daughter Sowjanya lying there, unconscious, without clothes," says Anjamma. She found the body of her four-year-old daughter, Sandhya, on the street and those of her remaining two children, Sharmili and Akhilan, in the hospital.The three children were buried in a mass burial ground in Tharangambadi in erstwhile Nagapattinam district, the worst hit region in Tamil Nadu. A 9.1 magnitude submarine earthquake in the Indian Ocean zone triggered a massive tsunami that wrecked India's East coast.It was December 26, 2004.

At least 10,749 people in India were killed, leaving several families homeless and some victims without a trace. According to the then Thanjavur district collector K Radhakrishnan, Tamil Nadu alone accounted for around 7,900 of the dead. And Anjamma's district was the worst hit: "6,065 were from Nagapattinam which accounted for 75% of the deaths in the state," says Radhakrishnan.Family torn apartAnjamma, along with her husband Ayyadurai and daughter Sowjanya, was relocated to a house allotted for tsunami survivors in Tharangambadi. "Sowjanya swallowed too much water in the tsunami but she somehow survived. But, her entire body has been bloated and swollen since then and she could never be healthy," says Anjamma. The girl died in 2023. Anjamma has her photograph but doesn't have a photo of any of her other children.She does have two more children — post -tsunami babies, Kesavan, 19 and Sandhya, 16, named after their youngest daughter who died. Hundreds of families like Anjamma's lost their children in the tsunami. Several mothers went through reverse sterilisation to have children – a government scheme to help women after the tsunami – since they had earlier gone through Tamil Nadu's population control programme. Anjamma hadn't, which made it easier for her. But life was better before the tsunami, she says.

"I tell my children now, that we used to have a very happy life. We had very little money but we were a joyful family before the wave destroyed us," says Anjamma. Her husband is still a fisherman but they can barely make ends meet. "We struggle to have two meals a day. The house is almost falling apart and every time it rains, it gets flooded."The National Disaster Management Authority (NDMA), India's apex body for disaster management headed by the Prime Minister was set up in 2005, after the tsunami. Many of its guidelines were framed from the experience of relief and rehabilitation in Nagapattinam, says Annie George who worked for 15 years in Nagapattinam's tsunami affected community as the CEO of the NGO Coordination and Resource Centre (NCRC).

Functioning out of the Nagapattinam district collectorate, NCRC comprised two NGOs (Sneha and the South Indian Federation of Fishermen Societies), the district administration and the United National Development Project (UNDP). "After the tsunami, every step was trial and error but we have learnt from that to have a disaster management protocol now," says George. "There were a lot of discussions that happened in Chennai and Delhi on the experience in Nagapattinam over what the final policy should look like. For instance, NDMA has directives on coordination mechanisms (between government and community) based on learnings from Nagapattinam and the 1994 cyclone in Orissa." Nagapattinam had village information centres where people could directly speak to government agencies.After the tsunami, there was no shortage of help; 400 NGOs worked on relief and 200 on rehabilitation.The challenge was to reach out to the last person in the line. "We had to ensure that the most visible didn't get the lion's share of help and the least visible didn't lose out," says George. "There was a challenge in trying to understand the nuances of rehabilitation. When agriculture was affected, it affected those practising agriculture in different ways."A little over 300km away, in Chennai, tsunami affected families were relocated to areas in the suburbs of the city. Tamil Nadu constructed 11,000 tenements in Chennai of which 7,000 were built with funding from the World Bank under the Emergency Tsunami Reconstruction project.One such area is Kannagi Nagar, on the outskirts of southern Chennai, where more than 15,000 families now live . Each of these families here is crammed inside a 150 sq foot house. Some have rented adjacent homes by paying a fee to the government.

Ravi Kumar, an auto driver, was playing cards on the beach in Santhome in Chennai with his friends, when the tsunami struck. Part of the 1,000-odd families in Thideer Nagar, he and everyone else rushed towards the St Thomas Cathedral Basilica for shelter. A wooden pole on these footsteps is believed to have been erected by Thomas the Apostle. No one died on account of the monster wave.Now, 20 years later,Kumar and others have been moved to Kannagi Nagar. "From the time we came here until now, for the last 20 years, we have to struggle for everything," says Kumar."We were brought in a lorry like garbage and dumped here," says K Sheela, another resident who was relocated to Kannagi Nagar. "We were better off there where everyone had jobs, a good house and a healthy life."When they moved in, back in February 2005, there was no water or electricity. Hundreds protested. They did eventually get these facilities, but the state is now demanding maintenance arrears, failing which, they have threatened to not transfer the houses in the names of the beneficiaries.The maintenance fee has gone up from ?50 a month in 2005 to ?250 from 2015. "This is a uniform maintenance charge considering the escalation in cost of materials and other charges. It was after much deliberation that this was decided," said a state government official who asked not to be named.This increase has only added to the burden of families that are already vulnerable without consulting them, says Vanessa Peter, founder, Information and Resource Centre for Deprived Urban Communities. "The government has to issue these families a sale deed on priority and address infrastructure issues in various housing programmes," Peter adds. It is such apathy that is believed to have

driven people living in displacement homes in Tsunami Quarters in Tondiarpet, in the northern part of Chennai, to sell their kidneys for survival — an issue that came to light in 2007 resulting in hospitals being blacklisted and facilitators being arrested.It was the community that saved her from similar desperate measures stemming from poverty, says A Anitha, in Kannagi Nagar. She was a middle-schooler when the tsunami struck. She and her disabled mother survived. Now with two children of her own (her mother having passed away a decade ago), Anitha credits her neighbours and NGOs for her well-being. She works with the civic body to go door-to-door collecting data on families.

Survivors have formed tightly knit communities that look out for each other, and created community leaders. In Nagapattinam, at the Annai Sathya Government Children's Home,where around 100 children who lost either one or both their parents in the tsunami were housed, a reunion on December 22 brought together survivors and rescue workers including Radhakrishnan .."In general, all disasters help us in re-calibrating, and the tsunami specifically institutionalised the NDMA and state and district level disaster management agencies. If a tsunami were to happen now, there is sufficient time to warn people through early warning systems, and better infrastructure for people to escape from the coast to the inland, Radhakrishnan says. "In 2004, in Nagapattinam and Myladudurai, there were just not enough connecting roads for people to escape."

Nature's 900-year-old ocean architects with a brainy twist

Hyderabad: Brain corals, often mistaken for large underwater brains, are fascinating creatures essential to the health of coral reefs. These intricate, grooved organisms, part of the hard coral family, aren't individual animals but collections of polyps—tiny, jellyfish-like beings—that live together to build sturdy calcium carbonate skeletons, providing the framework for reefs.With around 50 species, brain corals are vital for reef ecosystems, offering habitats for various marine species. Their distinctive brain-like appearance comes from the way the polyps intertwine, forming a communal structure that can survive for up to 900 years, growing just a few millimeters each year. The grooved brain coral (Diploria labyrinthiformis), particularly common in the Caribbean, can grow to nearly six feet wide, making it hard to miss.One of the reasons brain corals are so colourful is their symbiotic relationship with algae called zooxanthellae, which gives them vibrant shades. However, when stressed—often due to rising ocean temperatures—they can expel this algae, resulting in coral bleaching. While this doesn't necessarily kill the coral, it leaves it vulnerable to further damage.

Old mosque, new temple: Sambhal latest UP battleground, where BJP hopes for a boost

A hurriedly executed survey of an ancient masjid, protests leading to the death of five, the finding of several "closed" temples since, and an intensified anti-power theft drive around the contested mosque, which resulted in a notice among others to the local Samajwadi Party MP – Sambhal, a town in western Uttar Pradesh, has not been out of the news for the past month.All this has, in turn, coincided with the ruling BJP's focus on the town as the site where Kalki, the 10th and final incarnation of Lord Vishnu, is supposed to appear.Western UP has long remained out of BJP reach, and the party has been keen to change that, reflected in its tie-up with the RLD and the push that helped it wrest the SP bastion of Kundarki, located next door to Sambhal, in the recent bypolls.

BJP sources said, as part of this push, Sambhal is set to join Ayodhya, Mathura and Kashi (Varanasi) as pre-eminent religious sites in UP for the party.On February 19 this year, a month after inaugurating the Ram Temple in Ayodhya, Prime Minister Narendra Modi laid the foundation stone for a grand temple for Kalki in Sambhal. Like Kalki, Ram is considered an incarnation of Vishnu.In his speech at the ceremony, Modi said: "When Lord Ram ruled, its impact was felt for thousands of years. Like Lord Ram, Kalki will impact a thousand years." He also said that the ceremony had come to pass after "18 years of waiting".During the recent Winter Session of the UP Assembly, Chief Minister Yogi Adityanath defended the survey of an ancient mosque in Sambhal in November that had triggered violence, saying the Baburnama talked of a temple at the site. He also invoked the town's Kalki "connection", saying that as per the Puranas, the 10th incarnation of Vishnu would be born in Sambhal.Acharya Pramod Krishnam, the chairman of the Shri Kalki Dham Nirman Trust chairman, who was part of the foundation stone ceremony of the temple along with Modi, told The Indian Express: "Modi jabse Kalki dham aaye hain, tabse Sambhal mein chamatkar pe chamatkar ho rahe hain. Nayi-Nayi khoj ho rahin hain. Aisa lagta hai Bhagwan ka avatar jaldi hoga (Since Modi came to Kalki dham, Sambhal has been witnessing miracle after miracle. New discoveries are being made. It seems God will be reincarnated here soon)."

Echoing Adityanath's statement in the Assembly, Krishnam said Babur had "demolished" three temples – "one in Ayodhya, which has been re-constructed; another in Panipat; and the third in Sambhal, which was meant for the future incarnation of Shri Hari Vishnu".It was the turn of Sambhal to get its due, Krishnam said, adding that work on the Kalki temple will start after Makar Sankranti, i.e. January 14, 2025. A former Congress leader, Krishnam was expelled by the party following his open association with the BJP over the temple.sambhal, chandausi , excavation work, uttar pradesh, indian express Excavation work continues after a stepwell and tunnel-like passage were discovered at a Muslim-dominated locality of Chandausi, near Sambhal,

Krishnam's remarks regarding "new things being discovered in Sambhal" were a reference to all that had happened since the survey of the Babur-era Shahi Jama Masjid was initiated in Sambhal last month, the same day as a plea was filed in court that a temple used to exist at the site. The survey has been halted for now, following a Supreme Court order directing a stay till January 6.Claims have now been made of "discovery" of another old, disused temple in a minority- dominated area in Sambhal, apart from ancient idols reportedly found discarded.The Archaeological Survey of India recently found remains of a tunnel in Sambhal that, it said, may have been used during the 1857 Mutiny against the British.

Apart from religious significance, Sambhal and its adjoining regions also hold political importance for the BJP, which has not been able to make political inroads in the area, with the 2014 win of Satyapal Singh Saini from the Sambhal Lok Sabha seat an exception.The constituency has voted for either the Samajwadi Party or BSP in the past, including twice (1998, 1999) for SP founder Mulayam Singh Yadav and once for Mulayam's cousin and SP leader Ramgopal Yadav in 2004. While veteran SP leader Shafiqur Rehman Barq won the Sambhal Lok Sabha seat in 2019, his grandson Zia ur Rehman Barq was elected as MP this year.Zia ur Rehman incidentally is among those booked for last month's violence over the Sambhal mosque, and was recently slapped with a fine of Rs 1.9 crore over alleged power theft and warned of property attachment if he did not pay up within a fortnight.At the Assembly level too, the BJP has failed to make an impact in Sambhal. In the 2022 Assembly polls, of the five Assembly segments falling under the Sambhal Lok Sabha seat, four were won by the SP. The

BJP's Gulab Devi won the fifth segment, Chandausi (an SC-reserved seat).Adityanath inducted her as a minister, indicating the importance of Gulab Devi's win for the party.The BJP has got a fresh momentum since the recent bypolls for nine Assembly seats in UP, where the party posted impressive wins, particularly in Kundarki, a Muslim-dominated constituency. Kundarki lies near Sambhal, and the bypoll was held a day after the mosque violence at Sambhal.A BJP leader said that if their campaign works, the party gains would not be restricted to Sambhal alone. "Linking Sambhal to a significant religious place considered the birthplace of the 10thand last incarnation of Lord Vishnu would have an impact on the neighbouring regions as well in the 2027 Assembly elections," the leader said.Former SP Sambhal district president Firoz Khan, who is now a state committee member of the party, said the BJP's plans will not succeed. "Despite their best attempts, they failed to make a mark in the Sambhal Lok Sabha constituency, which the SP won with a good margin. The Kundarki win makes the BJP think that they can change the thinking of the people of Sambhal. But that won't happen… Here public can see through their plans."

Memories of the tsunami

It was a close shave with death for Gagandeep Singh Bedi on December 26, 2004, when the Indian Ocean tsunami struck Tamil Nadu. The Cuddalore District Collector was at Hotel Tamil Nadu on the sea front of Mamallapuram to attend an AIDS workshop when he got a call at around 9 a.m. A fisherman at Cuddalore told him that the sea had "flooded" and destroyed his village. When Mr. Bedi was about to end the call, he saw a huge wave in front of his hotel and ran out of the room. It was only then that he realised the magnitude of the disaster.

Mr. Bedi rushed to Cuddalore. He travelled through Tindivanam, as it was not safe to travel on Chennai's East Coast Road. "I first visited the government hospital, where I saw a large number of bodies," recalls Mr. Bedi, who is now Additional Chief Secretary, Rural Development and Panchayat Raj. Thanks to his team of officers in the district which included Rajendra Ratnoo, who is now Executive Director of the National Institute of Disaster Management, D. Jagannathan, who is Commissioner of Commercial Taxes in the Tamil Nadu government, and Anu George, who is one of the Secretaries to Tamil Nadu Chief Minister M.K. Stalin, he initiated the process of emergency relief. "Within [a] few hours after the tsunami, the district administration had swung into action to rescue the affected people and taken up rehabilitation measures to bring [back] the normalcy of life," states the Cuddalore District Disaster Management Plan, 2024.

One of the key decisions Mr. Bedi had to take pertained to the disposal of bodies. Considering the gravity of the situation, the State government acceded to the proposal of the Cuddalore administration for relaxing the stipulation of post mortem before disposing the bodies. "The then Commissioner of Revenue Administration and State Relief Commissioner, R. Santhanam, got the clearance for my request in no time," recalls Mr. Bedi. After discussions with senior members of the fishing community, mass burials were arranged on the evening of December 26.

The scale of destruction was unprecedented. Mr. Bedi says the loss of lives and cattle was "quite significant": 610 people died in Cuddalore and 38 people went missing. Public infrastructure was affected. Thirty-one coastal villages were affected and some 5,000 fishing vessels were damaged.

Cuddalore got a lot of attention nationally and internationally. Film actors such as Vivek Oberoi, Smriti Irani, and Poonam Dhillon, Swiss tennis player Roger Federer, and former U.S. President Bill Clinton either came down to Tamil Nadu or were involved in relief work. Mr. Oberoi was criticised though — the then Chief Minister, Jayalalithaa, later blamed him for doing nothing and trying to get publicity. "But celebrities have the potential of generating goodwill. We, the authorities, sought to tap that and succeeded to a large extent. At the same time, we maintained a respectable distance from them," Mr. Bedi says.

The southernmost district of Kanniyakumari suffered the largest death toll (799) after Nagapattinam (6,065). "There were 72 people who could never be traced. As many as 44,000 families in 33 coastal villages were affected," says Sunil Paliwal, who is Chairman of the Chennai Port Trust. He was transferred from Theni to Kanniyakumari as Collector nearly two weeks after the tsunami.Given its location, the district was not in the limelight the way Nagapattinam and Cuddalore were. However, that was not a problem for Mr. Paliwal and his team. "The district administration took up several measures on its own. Mr. Santhanam was extremely responsive and supported us."

What he remembers the most is that the delicately balanced religious mix of people in the district (Hindus constitute around 48%, Christians 46% and Muslims 4%, as per the 2011 Census) was no barrier to the district administration for undertaking relief and rehabilitation measures. "