## INDIANCHRONICE City

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#### Chilli farmers in Khammam stare at poor harvests as pests infest crop

Khammam: Chilli farmers in Khammam district are staring at the bleak prospect of poor harvests this year in view of pest attacks. Chilli crop in a large extent of area in the district has been affected by 'nalla tamara' (black thrips). According to horticulture officials and scientists, the pest infestation would result in loss in yield due to curling of leaves, flowers falling off and malformed/ stunted fruits or premature fruit drop. Though the crop is affected by other pests the incidence of black thrips is high.

The farmers who are already affected by fall in prices offered to the produce have been worrying over the loss in yield. Several farmers are complaining that despite the spraying of pesticides repeatedly the pest infestation is not being controlled. Those owing the lands as well as tenant farmers are now in a distressed state as they fear that they might not be able to recover even the investment made in the crop. Lack of Rythu Bandhu support has made things even worse

for the farmers.A tenant farmer B Satyanarana of Wyra lamented that he pawned gold to take up chilli crop in acres of area. In the first picking about 50 percent red chilli was damaged in addition to a fall in the vield.Speaking to Telangana Today, district horticulture officer MV Madhusudhan informed that the chilli crop was in good condition until November, 2024. After the picking of cotton was over the pests started affecting the chilli crop. Usually black thrips infest the crop before the harvest season begins but this time the crop was affected a month later and it lessened overall impact on the crop, he explained. Chilli was taken up in about 60, 000 acres in Khammam district and of that the standing crop in about 40 to 50 of the total area has been affected by the pests. Scientists and the horticulture department have given advice to the farmers on how to protect the crop from pests.Scientists from Professor Jayashankar Telangana Agricultural Univer-



sity (PJTAU) Hyderabad, Raja Goud and Nagaraju have recently visited Madhira, Chintakani and Tirumalayapalem area in the

district to take stock of the situation and to submit a report to the department, he in-

#### Telangana faces power demand equal to Summer this January



Hyderabad: It is February and summer is yet to set in, but the power demand is already increasing steadily in the State. This season, officials are expecting the demand to reach 17,000 MW.In January last year, Telangana's peak power demand was 13,810 MW but on January 31 this year, it touched 15,205 MW. In the past, the peak demand of 15,000 MW was recorded in March and this year it has reached this demand much earlier. Compared to last year, the demand in Southern Discom's jurisdiction increased from 8,679 MW to 9,589 MW this year. Similarly, in the Greater Hyderabad region, the demand shot up from 3,018 MW to 3,334 MW. Compared to last January, there has been a 10 percent increase in peak demand this year.

Till date, Telangana's highest-ever power demand of 15,623 MW was recorded on March 8, 2024. This year, the peak demand is expected to reach 17,000 MW, with Southern Discom accounting for 10,000 MW and Greater Hyderabad for 5,000 MW.Considering the increasing the power demand, the power utilities are taking all necessary measures with a focus on to ensure uninterrupted quality power supply during the Yasangi (Rabi season) and the upcoming summer season.

To this effect, a review meeting was held at the Southern Power Distribution Company of Telangana (TGSPDCL) Corporate office here on Saturday. Energy department Principal Secretary Sandeep Kumar Sultania, along with TGSPDCL Chairman & Managing Director Musharraf Faruqui and appointed as nodal officers for each district, other officials participated in the meeting. Despite the increasing demand, power utilities were fully prepared to meet the supply requirements, Sultania said. Already, senior engineers have been

and the electricity control room (1912) has also been strengthened. Officials have been directed to remain vigilant, ensure uninterrupted power supply and avoid any inconvenience to consumers.

#### Telugu actor Mohan Babu, son Manchu Manoj argue at Rangareddy Collectorate over property

Hyderabad: Property disputes between Telugu film actor Mohan Babu and his actor-son Manchu Manoj continued, with both indulging in heated arguments in front of revenue officials at the Rangareddy District Collectorate office on Monday. The actors were summoned to the Collectorate, following a petition submitted by Mohan Babu urging the revenue officials to ensure that Manoj be vacated from his house in Jalpally village.

Mohan Babu's argument was that the property was bought with the money earned by him and that Manoj could not stake a

Both Mohan Babu and Manoj were reported to have argued with each other in front of Rangareddy Joint Collector Pratima Singh. While Mohan Babu was reported to have argued that Manoj should vacate from his Jalpally house, the latter told officials that he would do so only after discussing the issue with family elders.

After hearing both sides, the Joint Col-



They were summoned to the Collectorate following a petition submitted by Mohan Babu, urging the revenue officials to ensure that Manoj be vacated from his house in Jalpally village

lector ordered that an inquiry to be conducted again after 10 days. Meanwhile, there was heavy bandobust by police at the Collectorate and entry to premises was highly restricted, inconveniencing visitors. In view of the heavy arguments between the duo, the police escorted Mohan Babu and Manoj through different exits.

### Bengaluru civic body steps up to build bonhomie between community and animals

Bengaluru in the year 2024 saw multiple incidents of stray dog attacks, raising public safety concerns. A disturbing case was reported earlier this month from Chamrajpet, where miscreants inflicted brutal injuries on three cows, slashing their udders and stabbing their legs, further highlighting the issue of how human-animal conflicts of a completely different variety emerge in the city space often. In response to all these issues, the Bruhat Bengaluru Mahanagara Palike (BBMP) has launched a series of initiatives aimed at addressing the root causes of conflict. Among them is a campaign to promote animal rights awareness in schools and campaigns for the wider public. As part of this effort, BBMP has also finetuned its animal grievance helpline and is setting up animal rescue centres across the city. These centres are the first of their kind in Karnataka. There are close to 500 schools in each zone and the BBMP is planning to present at least one awareness session in a quarter in each

The BBMP is set to recruit eight agencies, one for each zone, to promote awareness about animal welfare and rights, in educational institutions across Bengaluru. Speaking to The Hindu, Suralkar Vikas Kishor, BBMP's Special Commissioner for its Animal Husbandry Department, said the initiative aims to nurture a more compassionate society for animals. "Right now, the campaigns are happening in a haphazard and unplanned way, and mostly in public spaces, but not in schools. We have decided to call for agencies who will specifically focus on schools in all eight zones within the city. Each agency will handle schools in one or two zones. These agencies will be given a target on how many schools must be covered by them in a time span. The content of activities that will be presented at the schools will be moderated by the BBMP, which will be presented at a regular frequency," Kishor added. The commissioner said that there are close to 500 schools in each zone and the BBMP is planning to present at least one session in a quarter in each school.

Sessions in schoolsOnce the agencies are appointed, the zonal assistant directors of the Animal Husbandry Department will collaborate with schools and colleges in their respective zones to conduct sessions. The agencies will be provided with audience authorisation forms by the BBMP, ensuring that each educational institution allocates 15 to 20 minutes per class for these sessions. The sessions will educate students about animal behaviour, fostering respect for animals and teaching them how to interact with them safely.

"The focus will be on dispelling irrational fears about animals while emphasising the importance of maintaining a safe distance. Students will also learn that animals may react aggressively if their space is invaded or their young are threatened," Kishor explained. The BBMP has also introduced the Information, Education, and Communication (IEC) initiative to address the growing incidents of animal abuse involving stray animals in Bengaluru. Under the theme - Public Health through Animal Health -- the initiative aims to raise awareness through engaging street plays and flash mobs at 250 locations across the city. As part of the cam-



"This troubling shift in policy comes in tandem with community reports of DHS agents visiting gurdwaras in the New York and New Jersey areas just days after the directive was issued," SALDF said.

paign, the BBMP is also utilising garbage collection vans to broadcast awareness messages via microphones and display posters, with the pilot phase currently underway in the Yelahanka and Mahadevapura zones. The animal welfare events, which kicked off on January 18, and are being held at various high-footfall locations, including malls, parks, slums, lakes, and other public spaces. Along with addressing common issues such as animal birth control, anti-rabies vaccinations, and dog bite management, the helpline will also provide support for cases of harassment of animal feeders.

The BBMP has also finetuned its existing 1533 helpline to address concerns related to community animals more specifically. "Citizens can reach out by dialling 1533, using the mobile app or logging requests through the Bangalore One portal. Once a request is logged, our veterinary inspectors, who also serve as authorised anti-cruelty officers for each ward, will visit the site," said the BBMP in a release recently. Along with addressing common issues such as animal birth control, anti-rabies vaccinations, and dog bite management, the helpline will also provide support for cases of harassment of animal feeders, control of animal breeding, and licensing-related matters. officials."Through the helpline we will take action based on specific complaints. Based on the seriousness of each category, we have tweaked the timings within which the officer has to respond," said Kishor. Animal birth control and anti-rabies vaccinations are to be resolved within five days, harassment of feeders in two to three days, breeder and pet shop licenses within seven days, animal cruelty cases in two days, and rescues within one to two days, on a limited scale. The BBMP will host the animal, and do basic treatment, and if additional medical care or surgery is required, the BBMP will tie up with government or private facilities where the treatment will be provided. The BBMP will soon be opening small animal rescue centres for dogs and cats in three zones in the city to rescue and treat stray animals, making this the BBMP the first civic body in Karnataka to establish a rescue centre for animals.

The commissioner explained that animals that are injured, undergo cruelty by any entity and are terminally ill will be rescued and treated at these centres. "Currently there are private firms running animal rescue centres in the city. They do it out of compassion for animals, but it requires them to raise funds to facilitate the centres, because of which limited number of animals are rescued," said Kishor. The BBMP will host the animal, do basic treatment, and if additional medical care or surgery is required, the BBMP will tie up with government or private facilities where the treatment will be provided. The BBMP will kickstart these centres in Dasarahalli, East, and South zones. The BBMP has already issued the work order in Dasarahalli zone. Tenders have been invited for the centres in East and South zones. In three months, all the centres are expected to be operational. The BBMP will also treat abandoned pets and will coordinate with the NGOs for adoption. These are rescue centres and restricted for small animals, and not for cattle and wild animals.

Streamlining processesAnimal rights activists have welcomed these moves, but sought streamlining of processes. Anuradha Rao, a member of the South Bangalore Creative Commune, that also runs the Mini For-

est Commune that fosters the care of stray animals, said that the BBMP animal rescue centres must not just be restricted to cats and dogs and must be streamlined for all kinds of stray animals. "There are many stray cattle also on the streets of Bengaluru, which often end up injured and also creating prob-lems for the public," she said. She further said that there are many strays that suffer from cancer and other fatal diseases, due to which even after treatment the strays are not fully recovered and can not live a normal life again in their localities. "In my own experience an old stary dog in our street was treated by a rescue centre and brought back to the location, however, it could hardly walk, and was hit by a moving vehicle. It died after two days. Streets are not safe for recovering strays, or strays that are on the last leg of their lives," she added, underlining the need for special focus on such cases. She also underlined the need for more government or BBMP-run veterinary centres and ambulances. For South Bengaluru alone, there was just one BBMP-run veterinary centre on R.V. Road, which was shut for a long time. Tenders were called to run the centre, and it kickstarted soon. Pranav Sreenath, a resident of R.R. Nagar and a dog lover, hoped that the good initiative will not be caught in red tape like several other government moves. Priya Menon, a Koramangala resident and a dog feeder, said, "As someone who feeds strays in my neighbourhood every day, I really want to believe the BBMP's rescue centres will make a difference. But I have seen so many plans start with a lot of promise and fizzle out. These animals need consistent care, and a home, not just a temporary fix. I hope that real help reaches animals that need it most.'

#### Meru International School Celebrates Sustainability at Meru Antaragni Tellapur



Hyderabad: Meru International School's Meru Antaragni Tellapur Edition 2025, held on 3rd February, 2025, was an extraordinary celebration of creativity and environmental consciousness. This year's theme, "Sustainability," transformed the Tellapur campus into a vibrant hub of innovation, showcasing an impressive collection of artwork by students and teachers crafted from recycled and upcycled materials. The event was inaugurated by esteemed guests, including Dr. Jupally Rameswar Rao, Chairman of My Home Group & Meru International School; Ms. Meghana Gorukanti Jupally, Founder of Meru International School; and Dr. Gorukanti Surender Rao, Managing Director of Yashoda Hospitals. It was designed to spark dialogue about the urgent need for sustainability while celebrating the intersecof art and environmental responsibility. "Meru Antaragni exemplifies our school's dedication to fostering creativity, innovation, and environmental responsibility," said Ms. Meghana Gorukanti Jupally. "Through these installations, we aim to ignite critical conversations about sustainability and inspire action within the Meru community to safeguard our planet.

"The M-CLAP (Meru Career-Readiness, Leadership, Life Skills, and Academic Enrichment Program) initiative was at the heart of the event, highlighting the school's commitment to sustainability and creative problem-solving. Exhibits included:Water Droplets – A display illustrating the transformative power of rainwater and its impact on sustainable living. Array of Ants – Inspired by the teamwork of ants, this piece emphasized

the importance of collaboration in building a sustainable future.From Caves to Cosmos – A journey through human evolution, symbolizing adaptability and innovation. Bee-ing Sustainable – A tribute to bees, highlighting their crucial role in maintaining ecological bal-

ance. Recycling Helmets into Bug-tastic Art – Ladybug sculptures created from old helmets, promoting sustainability and upcycling.

### Historian Dr Toby Boraman announced as 2025 JD Stout FellowEducation New Zealand - Media Release

Hyderabad: Historian Dr Toby Boraman has been appointed as the 2025 JD Stout Fellow by the Stout Research Centre for New Zealand Studies at Te Herenga Waka—Victoria University of Wellington. As the JD Stout Fellow, Dr Boraman will continue his in-depth research for his upcoming book, provisionally titled Knocking Off: A History of Strikes in Aotearoa New Zealand from the late 1960s to the mid-1980s. Dr Boraman says this was the most popular and lengthy period of strike action in Aotearoa New Zealand's history, yet it has been often overlooked.

"It was a time of profound strike activity, yet it has remained largely unexplored in historical scholarship. "This project will explore the extent to which the period under study was a key transitional phase that has profoundly shaped the present. Much like today, it also demonstrates how political polarisation, and right-populism, can develop rapidly in response to major crises and conflict." A specialist in the labour history and social movements of Aotearoa New Zealand, Toby has published numerous articles and chapters on the political and social turbulence

# THINK NEW

NEW ZEALAND EDUCATION Manapou ki te Ao

of the 1970s and 1980s. He has also worked as a historian at the Waitangi Tribunal and served as a politics lecturer at Massey University. His international experience includes a fellowship at the re:work International Research Centre studying the global history of work at Humboldt University in Germany.

His research aims to uncover the hidden history of strikes, amplifying voices that have long been excluded—Maori workers, migrant Pasifika workers, women workers, and rank-and-file unionists—while offering a

comprehensive, multi-dimensional history of workplace conflict, combining critical analysis of the causes, reactions, lasting impacts, and contested legacies of these disputes.

"This research project will close a significant gap in our knowledge of the period in question. I am very much looking forward to hosting Toby at the centre," says Professor Brigitte Bönisch-Brednich, Director of the Stout Research Centre. The JD Stout Fellowship is funded from the legacy of John David Stout and stewarded by Perpetual Guardian

# Unlocking Creativity through Trailer Making Competition; Creators to get a chance to develop compelling trailers, drawing from Netflix's extensive content library

The Trailer Making Competition Delhi Roadshow took centre stage at Gurutegh Bahadur 4th Centenary Engineering College (GTB4CEC) last week, marking a key stop in a series of roadshows leading up to the grand finale of the nationwide Trailer Making Competition.

Organized by the Federation of Indian Chambers of Commerce & Industry and Reskilll, with the Ministry of Information and Broadcasting, and Netflix as the creative partner, GTB4CEC as the academic partner, this initiative provided an unparalleled platform for participants to explore the art of storytelling and video editing. A Platform for Creativity and InnovationUnlocking Creativity: Trailer Making Competition, powered by Netflix Fund for Creative Equity as part of the WAVES 2025, is a competition designed to inspire and equip aspiring filmmakers.

This unique initiative offers students the chance to create compelling trailers, drawing from Netflix's extensive content library. It featured an intensive 3-month cohort to equip participants with in-depth skills in video storytelling, and production. Participants in the Trailer Making Competition will receive various recognitions and rewards based on their performance. Every participant who submits a valid trailer will be awarded a Certificate of Participation. The top 50 entrants will receive a Certificate of Excellence along with exclusive recognition from the Federation of Indian Chambers of Commerce & Industry (FICCI) and Netflix.Furthermore, the top 20 contenders will be honoured with a trophy, exclusive merchandise, and the unique opportunity to attend the WAVES, showcasing their achievements and connecting with industry



## 'The greatness of Ramayana is in how every community, gender, and nationality finds value in it'

The Ramayana has existed in multiple forms for centuries. There is a folk version in which Surpanakha is the victim of spurned love rather than an aggressor. A Thai interpretation casts Sita as Ravana's daughter, while a Central Asian retelling depicts her marrying both Rama and Lakshman.In his latest book, Many Ramayanas, Many Lessons, published by HarperCollins, author Anand Neelakantan delves deep into Valmiki's story and explores how it evolves and changes as it moves across regions. continents, and cultures. He explains how sailors, traders, soldiers, travellers, immigrants, and royalty carried the Ramayana beyond India, allowing it to adapt to local social contexts and cultural languages. In an interview with indianexpress.com, Neelakantan spoke about the many versions of the Ramayana, where he thinks the epic first took birth, and what remains special about his favourite retelling of the epic.

Would you say that the different versions of the Ramayana story are rooted in the socio-political or historical context in which it was born? If so, could you explain with a few examples? The various versions of the Ramayana are deeply intertwined with the socio-political and historical contexts of the regions in which they were created. In many retellings, the characters' actions are interpreted through the lens of caste politics. For instance, in some versions, Ravana, traditionally viewed as a villain, might be portrayed as a more sympathetic character, highlighting his scholarly attributes and royal qualities. This reflects a socio-political context where issues concerning caste and hierarchy are critiqued, as we see in modern adaptations that seek to challenge rigid social structures. Some communities worship Ravana and observe the Dussehra day as mourning. The portraval of Sita in many of the folk Ramayanas is more feminist. In

South India, for example, some folktales portray Sita as a powerful figure with agency, who makes her own choices and stands strong against her circumstances. In Adivasi Ramayanas of Wayanad, the entire Uttara Khanda is believed to have happened in Wayanad, and the Ramayana is viewed from a woman's perspective. In Mithila folk tales, there is a greater emphasis on an empowered view of women, challenging the medieval patriarchal versions of the mainstream Ramayana. I give many such examples in my book. Certain adaptations emerged during the colonial period, where the narratives were reshaped to foster nationalistic sentiments. The Ramayana was often used to invoke a sense of pride and identity among Indians during the struggle against British colonial rule, presenting Rama as an ideal leader and unifying figure against foreign oppression. Ramayana also became a tool of syncretism and integration.

Many local beliefs and deities were absorbed within the Ramayana framework, not just in India but across Asia. In Indonesia, for example, the Wayang Kulit shadow puppet performances mix Hindu elements with indigenous belief systems, leading to a version that not only conveys the Ramayana but also resonates with local cultural and spiritual practices. In certain interpretations, especially during times of political strife, the characters and their dilemmas may serve as allegories for contemporary leaders and their governance styles. For instance, debates around Rama's decisions might reflect public sentiments about leadership and the responsibilities of rulers, thus rendering the narrative relevant to the audience's political reality. Ramayana transcends a single narrative; it adapts and moulds itself in response to the values, struggles, and identities of the societies that claim it, making each version a reflection of its historical and cultural back-

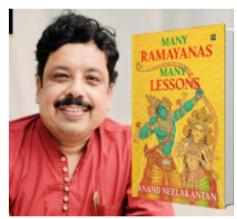
What would you say is the historical origin of the Ramayana story? Was it born in the Indian subcontinent or somewhere else?

I am not a historical scholar but a storyteller with a deep passion for Indian epics, so my opinion could be biased. But I feel Ramayana is an out-and-out Indian story that transcended the borders of India and Indian religions. It grew into a global epic, but its values, sensitivity, and roots are truly Indian.

Is there a common thread that ties together different versions of the story across South and Southeast Asia?

There are several common threads that tie together the different versions of the Ramayana across South and Southeast Asia. While the specifics may vary, the overarching storyline of the Ramayana including the key events such as Rama's exile, the kidnapping of Sita, the battle with Ravana, and the eventual return to Ayodhya remains consistent. This core narrative forms a fundamental framework that unites the various adaptations. The principal characters of the Ramayana - Rama, Sita, Ravana, Hanuman, and Lakshman — are common across most versions, though their portrayals may differ in terms of traits, motivations, or moral complexities. These characters typically embody various virtues and flaws, contributing to the universal appeal of the story. How they are interpreted may vary from culture to culture and from time to time. but the overall arc remains the same.

The concepts of duty (dharma) and righteousness are central to all versions of the Ramayana. Characters often face moral dilemmas that test their sense of duty, providing audiences with lessons about ethics, re-



sponsibility, and the consequences of one's actions. Another character who has a universal appeal is that of Hanuman. The underlying theme of devotion of Hanuman who exemplifies unwavering loyalty to Rama, is prevalent in almost all adaptations. This devotion often transcends cultural boundaries and resonates with audiences in diverse settings.

The adaptability of the Ramayana to local contexts allows for the integration of regional customs, beliefs, and values. Despite different cultural expressions, the essence of the narrative often reflects shared cultural heritage and values intertwined with local identity. Across different versions, the Ramayana serves as a source of moral teachings and guidance. The challenges faced by the characters often allow for reflections on life, ethics, and human relations, appealing to the shared human experience regardless of cultural variations. These common threads contribute to the enduring popularity and significance of the Ramayana across the vast geographical and cultural landscapes of South and Southeast Asia, illustrating its role as a timeless epic that resonates with diverse audiences.

#### Dismantling of climate talks

The COP29 climate meeting in Baku ended in disappointment last week. On the main issue of finance, developed countries agreed to mobilise only \$300 billion for the developing nations every year, a three-times increase over their current mandate of \$100 billion but way short of at least \$1 trillion that all assessments said was required. Even this nominal scale-up — the needs already run in trillions of dollars — is not supposed to happen immediately but only from 2035. This is not the first time that the annual climate conference has produced a disappointing outcome. Each one of them in the last 15 years has delivered much below expectations. As a result, the discussions and outcomes of these summits have been almost completely delinked from the requirements of meeting the temperature targets mentioned in the 2015 Paris Agreement. While science says that the world needs to cut its emissions by at least 43% by 2030 from 2019 levels, all assessments of current actions estimate that global emissions, even in the best-case scenarios, would be barely 2% down by that time. The underwhelming deal on climate finance reached in Baku might just be the beginning of the unravelling of the climate talks.

Inherently unstablelt is not a surprise that the current international arrangement on climate change has turned out to be this ineffective. It is the only major multilateral system which is completely aligned against the rich and powerful nations. Usually, the rules of any international forum reflect the prevailing power balance, and are mostly in favour of the powerful, as they are the ones who decide on the rules. The climate change architecture, as represented by the 1994 UN Framework Convention on Climate Change (UNFCCC), goes completely against this norm.In this system, the rich and the powerful — a group of about 40 including the United States and most of Europe — are the main culprits for causing climate change, and the rules are stacked heavily against them. They have been made solely responsible for cutting their greenhouse gas (GHG) emissions, and also for providing money and technologies to the developing countries to help them fight climate change.

These responsibilities were fixed largely in line with the "polluter pays" principle. Since the developed countries were mainly responsible for emitting GHGs over the last 150 years, it was only fitting that they be asked to take responsibility for cleaning it up. However, equity and fairness are rarely the main drivers of international relations. How this climate structure was allowed to be built up, with the rich and developed countries fully participating in the process, is an interesting and intriguing question that has not yet been settled definitively. It was not before the 1997 Kyoto Protocol, the precursor to the Paris Agreement, was finalised that the developed world realised that this system could hurt their interests and disrupt the prevailing global power balance. The Kyoto Protocol took forward the principles enshrined in the UNFCCC and assigned specific targets to each of the developed nations in accordance with their "guilt". The targets were to be fulfilled in a specific time frame, failing which they could be penalised. It is probably the only instance of such an inherently unstable multilateral system which is so completely at odds with the global power structure being created. Dismantling begins

The efforts to dismantle the system



began immediately after the Kyoto Protocol came into effect in 2005 after the requisite number of ratifications. Although the US played a key role in finalising the Kyoto Protocol, the country never ratified it. The idea was to tear down the structure brick by brick, not in one go. The crucial differentiation between the developed and developing countries in the assignment of climate responsibilities was repeatedly targeted. This was done to ensure that the failure to meet targets could not be blamed only on the developed nations and instead be shared with everyone. The first attempt to replace the Kyoto Protocol with a new agreement was made in Copenhagen in 2009 but it failed. Developed countries worked for another six years and succeeded in Paris. But even while it was in force, till 2020, Kyoto Protocol targets were completely ignored by all the developed countries. Many of them walked out of the Kyoto Protocol. The Paris Agreement made fundamental changes to the way climate responsibilities were structured till then. Emission cuts were not the sole responsibility of the developed countries any longer. Everyone had to "contribute" though in a "nationally-determined" manner. There were no assigned targets for developed countries, their emission cuts also had to be "nationally-determined", meaning decided by themselves. Emission cuts inadequate

As a result, emission cuts have been nowhere close to what is required. The European Union is expected to cut its emissions by around 60% from 2019 levels by 2030 but that is about it. Donald Trump is the favourite whipping boy on climate change issue, but even without him the US has been the biggest laggard. Despite the much-touted Inflation Reduction Act, brought in by Joe Biden administration, the US is only aiming for a 50-52% cut by 2030 from 2005 levels, which translates to about 45% from 2019 levels. If the world as a whole has to reduce its emissions by 43% by 2030 from 2019 levels, equity and fairness demand that the US and EU should have been aiming for about 80-90% reductions. The sharp distinction between developed and developing countries on emission cuts was broken by the Paris Agreement. But developed countries were still solely responsible for mobilising finance and transfer of clean energy technologies. These are also getting targeted. Dilution of finance responsibilityThe developed countries argue that the scale of finance requirements has increased manifold, and many other countries have grown rich in the last two decades, so they must also be asked to contribute to climate finance. The first attempt to expand the contributor base happened in Paris itself but did not succeed. In Baku this year, expansion of contributor base was one of the core issues being discussed as part of the finance negotiations, and some criteria for roping in more countries were suggested. But the developing countries managed to thwart it again. Essentially, China, which was a target of the expansion effort, put its foot down. In the bargain, the developed countries limited the quantum of climate finance to be raised by them — \$300 billion and no more. The dismantling of the

international climate structure has been a continuous process. The dilutions on emissions cuts and finance are just two examples. Erosion has been across the board, leading to a steady decline in trust of the developing countries. But it is still the only multilateral forum where tiny countries like Tuvalu or Marshall Islands have a voice, and an influential one at that. These countries also benefit from some climate money flowing to them. It is not enough but better than nothing at all. The climate talks would possibly continue to have some limited utility for some more time, but its effectiveness as a global forum to fight climate change is severely diminished.

#### An experience unworthy of the franchise

This year has been a year of experimentation within the real-time strategy genre, with game makers exploring new takes, from the unremarkable Elder Scrolls: Castles to the highly impressive Heroes of History. Joining this lineup is Age of Empires Mobile, developed by TiMi Studio, the team behind Call of Duty Mobile.

With TiMi promising a 4X experience aimed at introducing younger generations to the charm of the iconic franchise, fans had high expectations. Unfortunately, the result is a mishmash of game modes, offering little more than a glorified city builder that is weighed down by an endless stream of microtransactions. The heart and soul of Age of Empires (AoE) is unmistakably absent.

The game begins with the tale of a holy sword that must be charged, following Princess Josephine on her quest to establish an empire. Right from the opening sequence, the game abandons the classic AoE controls in favor of a dated city-builder system, reminiscent of Clash of Clans. As you summon heroes and construct buildings to raise an army, it becomes evident that the game leaves no room for strategy, tactics, variety, or even basic army formations. Across the many game modes on offer, originality is scarce—you're either engaged in auto-battles or playing as Princess Josephine in combat sequences reminiscent of the classic Demon Star.

While it's hard to justify playing a realtime strategy game that requires no actual strategy, it's equally important to acknowledge that the game does offer several game



modes. Unfortunately, none of them are enjoyable or worth your time. In this scattered approach, what remains is an over-cluttered UI/menu system that provides little to no guidance on how to navigate or play the game effectively. Even after six hours of gameplay, was still unsure what each button on the screen corresponded to in terms of in-game elements. The game's Alliance system, however, stood out as it allowed players to overcome challenges collectively. Like many of the new RTS mobile games, AoE Mobile also leans heavily on the use of legendary heroes from history. During my time with the game, I unlocked Joan of Arc, which initially sparked a sense of nostalgia from playing her campaign in AoE II.

Later, I unlocked Cleopatra and Darius the Great. When you compare AoE mobile with something like Heroes of History you realize how little has gone into making this game work. Lastly, the game is also let down by poor optimization. I found the game struggled on my Pixel Pro and at times even failed to register my inputs forcing me to wait for updates to fix the issue. However, over a month since launch the problems persist.

### In Odisha, coal dust is clogging leaves and blocking carbon uptake

The Bengal Nagpur Railway had been tasked by the British Indian government with developing rail networks in eastern and central India. In 1900, when its workers were digging in Jharsuguda, now a district in Odisha, they stumbled upon large coal deposits. Nine years later, Jharsuguda's first coal mine was established and a century later the region was producing more than 15 million tonnes of coal in a year. Coal is a fossil fuel produced by the decomposition of dead plants trapped in layers of soil. Around threefourths of India's electricity is produced by coal-fired power plants. It's also critical in the iron, steel, cement, and fertiliser industries. India is one of the largest producers and consumers of coal worldwide, second only to China.In Jharsuguda, most coal mines are open-cast. Miners here start at the surface of the soil, removing soil and rocks to expose the coal deposits. This is more costeffective than underground mining, which requires digging tunnels to access the de-

But open-cast mining pollutes the air more. The dust from blasting rocks, drilling holes in the ground, and transporting the coal and rock waste disperses through the air and can choke lungs when inhaled. The dust also settles on the leaves of plants nearby. When this happens, stomata — the small pores on leaves through which plants exchange carbon dioxide, water vapour, and oxygen are clogged, affecting photosynthesis and temperature regulation in the plants. Estimating the impact of mining dust on nearby vegetation requires researchers to collect a large number of dust-laden leaves from plants spread in the area surrounding a mine. With the dust spreading as far as 30 km away from the mining site, this is a Herculean task. In a October 2024 study published in the Journal of Geophysical Research: Biogeosciences, researchers from the University of Southampton in the UK and the National Institute of Technology (NIT), Rourkela, reported using freely available data from several satellites to investigate how plants are affected by mining dust. "Use of satellite data provides a great opportunity to efficiently monitor larger areas," study colead and University of Southampton professor of remote sensing Jadu Dash said. The data suggest the dust has significant effects on the ability of vegetation to absorb carbon dioxide. Amit Kumar Gorai, professor of mining engineering at NIT Rourkela and the other lead, added, "The study emphasises the importance of tackling dust pollution to protect vegetation and promote sustainable urban and industrial development." Eyes in the

The study was performed by Avinash Kumar Ranjan, who undertook the project as a part of his doctoral research at NIT Rourkela. He began by estimating the amount of mining dust settling on leaves in areas surrounding coal mines in Jharsuguda. To do this, he used data from two satellites, Landsat-8 and -9, and two satellite clusters, Sentinel-2 and PlanetScope. The US Geological Survey and NASA launched the Landsat satellites in 2013 and 2021 while the European Space Agency launched Sentinel-2B (which supplied data for the study) in 2017 and Planet Labs launched PlanetScope in 2016-2022. Light falling on leaves is com-

posed of different wavelengths: we can see some (blue, green, red) but not others (e.g. infrared). The leaves absorb some of these wavelengths and reflect the rest. Like a camera snaps our photographs by capturing the visible light reflected by our bodies, satellites can capture images of an area in different wavelengths using special instruments. When dust settles on leaves. it changes how much of a certain wavelength of light the leaves reflect. This changes the images of an area captured by a satellite for that particular wavelength. By comparing satellite images of areas farther from the coal mines with those that were closer, the researchers could estimate the amount of dust settling on leaves

To validate their estimates, the team also visited two sites in Jharsuguda and collected 300 leaf samples with dust on their surfaces. In their laboratory, they weighed each dusty leaf, and brushed the dust off and weighed the leaf again. The difference between the two readings yielded another estimate of the amount of dust settling on plant leaves around the coal mines. Finally, they used statistical methods to find that the actual readings were remarkably close to those calculated from satellite data, demonstrating that satellite images could be used to estimate the amount of mining dust settling on the local flora. Narayan Kayet, a scientist at the Environmental Management and Policy Research Institute, Bengaluru, said the strength of the study lay in "the use of data from multiple satellites, which ensures comprehensive coverage and cross-validation of results."Kayet has previously studied the amount of mining dust settling on plants surrounding coal mines in Jharkhand. He wasn't involved in the new study. "Incorporating measurements from the field strengthens the credibility" of estimates derived from remote-sensing data, he added.

Dusty leaf, sick plantThe researchers also used statistical models to correlate the amount of dust on leaves with vital physiological processes. For the latter, they used readings from two other space-based instruments called ECOSTRESS and MODIS. Their data can be used to compute the temperature of plants in an area and the amount of water vapour they release, both in high resolution. The team's models suggested that plants with one gram of mining dust on their leaves absorbed "approximately 2-3 grams less carbon per square meter of area," Gorai said. While the amount might seem small for an individual plant, "when you multiply it across large areas of forests or vegetation near mining sites, the loss of carbon absorption becomes significant over time," he added. Apart from being important for photosynthesis in plants, carbon absorption lowers the amount of carbon dioxide in the air. But when dust clogs the stomata, the plant absorbs less carbon and leaves more carbon dioxide in the atmosphere. This could worsen global warming over time. Another effect of clogged stomata is that plants become less able to exude water vapour in a process called transpiration. Plants that transpire well are able to maintain their temperature better: those that don't become warmer. "When leaves are too hot, they struggle to photosynthesise efficiently," Gorai explained. "Over time, this can lead to



stunted growth or even the death of plants." This then leads to long-term damage to local ecosystems. Dash and Gorai also said their study provides a quick and effective way for governments to monitor dust pollution in and around coal mines, identify hotspots, and implement timely measures to prevent long-term damage to surrounding

vegetation and local ecosystems. Such measures could include water sprays and dust barriers, Dash said. Kayet agreed: "

We need stringent measures to reduce dust emissions in mining regions to mitigate vegetation stress."Sayantan Datta is a science journalist and a faculty member at Krea University.

### US Homeland Security officials visit gurdwaras in New York, New Jersey to check for illegal immigrants

Law enforcement officials from the US Department of Homeland Security have started visiting gurdwaras in New York and New Jersey to check for the presence of illegal immigrants, drawing a sharp reaction from some Sikh organisations which see such actions as a threat to the sanctity of their faith. Some of the gurdwaras in New York and New Jersey are believed to be used as a hub by Sikh separatists along with illegal and undocumented immigrants.

Within hours of Donald Trump being sworn in as the 47th President of the United States, acting Department of Homeland Security Secretary Benjamine Huffman in a directive rescinded the Biden administration's guidelines for the Immigration and Customs Enforcement (ICE) and Customs and Border Protection (CBP) enforcement actions that thwart law enforcement in or near socalled "sensitive" areas. These "sensitive" areas included places of worship like gurdwaras and churches.

"This action empowers the brave men and women in CBP and ICE to enforce our immigration laws and catch criminal aliens—including murders and rapists—who have illegally come into our country," a spokesperson for the Department of Homeland Security said. "Criminals will no longer be able to hide in America's schools and churches to avoid arrest. The Trump administration will not tie the hands of our brave law enforcement, and instead trusts them to use common sense," the spokesperson said.

In a statement, the Sikh American Legal Defence and Education Fund (SALDF) expressed grave concern over the directive rescinding the guidelines that designated "sensitive areas", such as houses of worship, where immigration enforcement actions

were previously restricted. "This troubling shift in policy comes in tandem with community reports of DHS agents visiting gurdwaras in the New York and New Jersey areas just days after the directive was issued," SALDF said.

"We are deeply alarmed by the Department of Homeland Security's decision to eliminate protections for sensitive areas and then target places of worship like gurdwaras," said Kiran Kaur Gill, executive director of SALDEF.Ms. Gill said gurdwaras are not just places of worship; they are vital community centres that provide support, nourishment, and spiritual solace to Sikhs and the broader community.

"Targeting these spaces for enforcement actions threatens the sanctity of our faith and sends a chilling message to immigrant communities nationwide," Ms. Gill said. Sikh Coalition said the Trump administration's decision to rescind the DHS policy on "protected areas" (which also included hospitals, schools, social service providers, and more) opens the door to Immigrations and Customs Enforcement (ICE) agents conducting surveillance, investigations, arrests, and raids at gurdwaras.""The idea that our gurdwaras could be subject to government surveillance and raids by armed law enforcement with or without warrants is unacceptable to the Sikh faith tradition. It will burden religious exercise by limiting the ability of Sikhs to gather and associate with one another in accordance with our faith," Sikh Coalition said.

"It also harkens to dark periods in our collective memory when governments interfered in the ability of Sikhs to practice our faith freely—with deadly consequences," it said

### Climate is one of many factors that play a part in people's large-scale movements: Amitav Ghosh

Amitav Ghosh thinks of the West as an empire of chaos. "Look at the mess the West had made," says the award-winning writer, who was recently in Bengaluru to release his latest book, Wild Fictions, a collection of 26 essays centred around many of the themes he has explored in both his fiction and nonfiction over nearly four decades. Some of these include the long shadow of colonisation, the planetary crisis, displacement and migration, a mapping of southsouth connections, neo-imperialism, the limitations of science, and so much more."The pieces in this collection are about a wide variety of subjects, yet there is one thread that runs through most of them: of bearing witness to a rupture of time, of chronicling the passing of an era that began 300 years ago, in the eighteenth century," he writes in the book's introduction, adding that this was the period that saw the birth of modernity and industrial civilisation, in which, under the leadership of the British empire, the West tightened its grip over most of the world, culminating ultimately in the emergence of the U.S. as the planet's sole superpower.

"Starting with the collapse of the Soviet Union, the 'unipolar moment' peaked at the turn of the millennium and then ran into a series of profound shocks that began in 2001," writes Ghosh, who was awarded the Erasmus Prize 2024 "for his passionate contribution to the theme 'imagining the unthinkable', in which an unprecedented global crisis—climate change—takes shape through the written word."

In the introduction to the book, you quote a term coined by the writer and philosopher Antonio Gramsci, who refers to the time between the death of the old world and the struggle of the new world to be born as "the time of monsters", something that you thought the world again entered after 9/11. Unlike Gramsci's monsters, who are political creatures, our monsters today are an amalgamation of both the natural and the political. Could you expand a little on that today, especially given recent significant climate events, such as the California wildfires, the toxic air bubble that plagues the Indo-Gangetic plains in winter or the multiple floods occurring in South and Southeast Asia in the last year? These things are really monsters in the sense that they are overdetermined by various causes. You can't reduce them simply to climate, bad management or bad planning. All of those things are coming together. It's like all the frailties in our patterns of development have suddenly come together for a perfect storm to be exposed in a way that has never been seen before.

The California fires are a very good example. On the one hand, there is a major climate impact that dried out the soil and has been doing that for a long time. This is the longest period without rain in winter that has ever happened in Southern Californian history. That played a very important part in desiccating the soil and laying the groundwork for these devastating fires. However, settlement patterns also played a very important role in all of this; real estate interests have built ever denser housing along Malibu. for instance. And because it's sea-facing, there's a huge property premium, which creates this concentration of wealth. So wealthy people who seem to have no common sense have moved there in larger and larger numbers even though they know Malibu has been devastated by fires for over a century. There's nothing secret about these fires. They've happened repeatedly.

Climate deniers start saying that this is nothing new; it's always happened. But the intensity of it is new, determined by multiple factors. Politics plays a very large part in it because real estate interests are some of the major financiers of politicians. In California, there have been repeated initiatives to try to prevent building in locales like Malibu, (but) they've always been defeated by the real estate interests. One of the problems that arises now is that they use various kinds of fossil fuel derivatives as building materials..laminates...various kinds of siding. They're all spin-offs of fossil fuels, and they become extremely flammable under certain conditions. That is, in effect, what's happened in this region. There were politicians who introduced bills trying to force the real estate industry to use safer materials. But they [real estate interests] fought that tooth and nail and ultimately managed to defeat the bill. The real estate industry is one of the most dangerous industries in the whole world; the capitalist system under which building occurs has every incentive to move into areas that are not right for settlement. For real estate interests, this is easy money...a win-win situation because they're not committed to the long-term risk. They build, sell, and move out, and that's the end of their commitment. And the risk is borne by those stupid people who buy these things. You argued earlier that literary fiction does little justice to climate change and what it means for the Earth's future. Do you think this narrative has changed, and has there been some attempt to mainstream eco-fiction in the last few years? It has certainly become part of the mainstream discourse, especially from 2018 onwards. But it is not just climate change. We are in a planetary crisis, which includes biodiversity loss, species extinctions, new pathogens and AI. It is not like writers were not writing about these issues. They've always been writing about it. The problem is not with the writers. I think the problem ultimately lies in the wider ecosystem of culture. Even if writers wrote these books, mainstream reviews would not pick them up because they would say that these are just like a genre, you know? They're not serious. That's a very major problem, and that hasn't changed.

One of the reasons why I'm increasingly hesitant to speak of just climate, you know, is because this has been picked up and turned into a market opportunity even though we can all see that the climate crisis itself is the greatest market failure that has ever happened. Unfortunately, the world led by the United States has decided to embrace market-based solutions, where we know that market-based solutions won't workClimate change-driven human migration has historically been a key aspect of the human condition, whether it be the great migration out of Africa or how the Little Ice Age caused people to flock into towns and cities. Are there any parallels or lessons to be learnt from this past, especially given that the Institute for Economics and Peace (IEP) predicted that there would be about 1.2 billion "climate refugees" in the next two decades or so? One very important lesson that we should absorb from



this is that terms like "climate migrants" and "climate migration" are very reductive terms, and I would caution against thinking of climate migration as a singular thing. Nobody migrates for just one reason. There are always multiple reasons: Sunil Amrith, the historian who's written extensively about migration in the Bay of Bengal, for example, points this out. In fact, there are now innumerable articles, books, and essays that hotly dispute the term climate migration.

Climate is one of many factors that play a part in people's large-scale movements. The first essay in my book, for example, is about migration, for which I did a lot of research on young migrants who had crossed the Mediterranean and walked over the Balkans. And it was very interesting to talk to them. You know, this whole phenomenon of migration, when it's covered in the Western press, is almost always covered by journalists who don't speak the languages of the migrants. So they get, I think, a very false picture of what is actually operating there. Migrants are extremely intelligent, and they know what sort of story Western journalists want to hear. Because I speak the languages of the migrants, I would hear completely different stories. You also write that many of them regret having made this decision to move... that their dreams and expectations of the West, shaped by cultural colonisation, did not measure up to reality.

For the last many centuries, but especially intensifying since the Washington consensus (a term used to denote neoliberal economic policy prescriptions made for developing countries in the 1980s and 1990s, including deregulation and reduced public spending, made by Washington DC-based institutions like the World Bank and IMF) the West has very powerfully invested in propaganda about itself as the best, the most affluent, and the most free. Ultimately, this influences gullible people, and it's a really sad thing. I mean, all these young migrants I spoke to...90% of them regretted having set out on this journey. Because look at the lives they lead over there...10 to a room, discovering that there is no work for them. I mean, Italy can't provide work for its own people, how is it going to provide work for these migrants?It is entirely based on a kind of fantasy, and we should never forget that a very major aspect of this fantasy depends on social media. These technologies have been so profoundly transformative that we don't even now recognise or acknowledge how

disruptive they have really been. Think of that Gujarati couple who took their children and froze to death on the Canadian border. What kind of madness is that? They're from families that are perfectly fine in Gujarat. I looked at a lot of the cases. They were from educated middle to upper-middle-class families...school teachers, etc. What did they think they would get in America that they don't have in Gujarat?

But you can't stop people from aspiring for things...You can't. And that's why this is an unstoppable phenomenon. You've created a society that's built on creating appetite and creating discontent with your present circumstance. And that's got a long, long history of colonialism.

When colonisers first went to Nigeria, for example, they saw that people were, you know, they would cultivate enough for themselves, but they didn't want to grow anymore because they were not interested in accumulation. They wanted to spend time with their families and so on. This was very threatening to them, so sometimes they would actually give people double the land. But it didn't help because people would only cultivate half the land. There are these amazing statements by white Americans, you know, who were dealing with Native Americans in the 19th century, saying we have to make them want more because they don't want enough. And now, this is the tail end of that history. We have very deliberately created this society of demonic desire (where) everyone just wants more, more, more. Your essay, The Town by the Sea, is a very moving account of a visit to the Andaman and Nicobar Islands immediately after the 2004 tsunami, which elucidates the ecological vulnerability of the space. What are your thoughts about the recent "Great Nicobar Project" and plans to develop it in a Hong Kong-like manner? It's horrifying. I mean, it's the perfect example of disaster capitalism, you know, because they seized upon this after the 2004 tsunami, and in the aftermath of that tsunami, they just cleared the native peoples off the land. At that time, there was some promise of bringing them back, but they haven't been allowed to return. They desperately want to return but haven't been allowed and now have come to recognise that they're going to be stuck in those camps forever, like Palestine. We are now practising what you might call auto-colonialism, implementing those colonial policies on a vast scale for the benefit of a tiny group of wealthy capitalists.

# Has China achieved Albreakthrough with DeepSeek?

For over two years, San Franciscobased OpenAI has dominated artificial intelligence (AI) with its generative pre-trained language models. The startup's chatbot penned poems, wrote long-format stories, found bugs in code, and helped search the Internet (albeit with a cut off date). Its ability to generate coherent sentences flawlessly baffled users around the world. Far away, across the Pacific Ocean, in Beijing, China made its first attempt to counter America's dominance in Al. In March 2023, Baidu received the government's approval to launch its Al chatbot, Ernie bot. Ernie was touted as the China's answer to ChatGPT after the bot received over 30 million user sign-ups within a day of its launch. But the initial euphoria around Ernie gradually ebbed as the bot fumbled and dodged questions about China's President Xi Jinping, the Tiananmen Square crackdown and the human rights violation against the Uyghur Muslims. In response to questions on these topics, the bot replied: "Let's talk about something else." Late to the Al party

As the hype around Ernie met the reality of Chinese censorship, several experts pointed out that difficulty of building large language models (LLMs) in the communist country. Google's former CEO and chairman, Eric Schmidt, in talk at the Harvard Kennedy School of Government, in October 2023, said: "They [China] were late to the party. They didn't get to this [LLM] Al space early enough." Mr. Schmidt further pointed out that lack of training data on language and China's unfamiliarity with open-source ideas may make the Chinese fall behind in global Al race. As these Chinese tech giants trailed, the U.S. tech giants marched forward with their advances in LLMs. Microsoft-backed OpenAl cultivated a new crop of reasoning chatbots with its 'O' series that were better than ChatGPT. These AI models were the first to introduce inference-time scaling, which refers to how an AI model handles increasing amounts of data when it is giving an-

Al trader turned Al builderWhile the Chinese tech giants languished, a Zhenjiangbased hedge fund, High-Flyer, that used Al for trading, set up its own Al lab, DeepSeek, in April 2024. Within a year, the AI spin off developed the DeepSeek-v2 model that performed well on several benchmarks and was able to provide the service at a significantly lower cost than other Chinese LLMs. When DeepSeek-v3 was launched in December, it stunned AI companies. The Mixture-of-Expert (MoE) model was pre-trained on 14.8 trillion tokens with 671 billion total parameters of which 37 billion are activated for each token. A MoE model uses different "experts" or sub-models that specialise in different aspects of language or tasks. And each expert is activated when its relevant to a particular task. This makes the model more efficient, saves resources and speeds up processing. Training despite American sanctionsAccording to the technical paper released on December 26, DeepSeek-v3 was trained for 2.78 million GPU hours using Nvidia's H800 GPUs. When compared to Meta's Llama 3.1 training, which used Nvidia's H100 chips, DeepSeek-v3 took 30.8 million GPU hours lesser. After seeing early success in DeepSeek-v3, High-flyer built its most advanced reasoning models - DeepSeek-R1-Zero and DeepSeek-R1 - that have potentially disrupted the Al industry by becoming one of the most cost-efficient models in the market. When compared to OpenAl's o1, DeepSeek's R1 slashes costs by a staggering 93% per API call. This is a huge advantage for businesses and developers looking to integrate Al without breaking the bank.

The savings don't stop there. Unlike older models. R1 can run on high-end local computers - so, no need for costly cloud services or dealing with pesky rate limits. This gives users the freedom to run Al tasks faster and cheaper without relying on thirdparty infrastructure. Plus, R1 is designed to be memory efficient as it requires only a portion of RAM to operate, which is low for an Al of its calibre. Separately, by batching, the processing of multiple tasks at once, and leveraging the cloud, this model further lowers costs and speeds up performance, making it even more accessible for a wide range of users. A close contestWhile DeepSeek's R1 may not be quite as advanced as OpenAl's o3, it is almost on par with o1 on several metrics. According to benchmark data on both models on LiveBench, when it comes to overall performance, the o1 edges out R1 with a global average score of 75.67 compared to the Chinese model's 71.38. OpenAl's o1 continues to perform well on reasoning tasks with a nearly nine-point lead against its competitor, making it a go-to choice for complex problem-solving, critical thinking and language-related tasks. When it comes to coding, mathematics and data analysis, the competition is quite tighter. Specifically, in data analysis, R1 proves to be better in analysing large datasets. One important area where R1 fails miserably, which is reminiscent of the Ernie Bot, is on topics censored in China. For instance, to any question about the Chinese President Xi Jinping, the Tiananmen Square protest, or the Uyghur Muslims, the bot tells its users: "Let's talk about something else." Unlike Ernie, this time around, despite the reality of Chinese censorship, DeepSeek's R1 has soared in popularity globally. It has already surpassed major competitors like ChatGPT, Gemini, and Claude to become the number one downloaded app in the U.S. (In India, DeepSeek is at the third spot under productivity, followed by Gmail and ChatGPT apps.) This meteoric rise in popularity highlights just how quickly the AI community is embracing R1's promise of affordability and performance. Smaller models rise

While OpenAl's o4 continues to be the state-of-art Al model in the market, it is only a matter of time before other models could take the lead in building super intelligence. DeepSeek, through its distillation process, shows that it can effectively transfers the reasoning patterns of larger models into smaller models. This means, instead of training smaller models from scratch using reinforcement learning (RL), which can be computationally expensive, the knowledge and reasoning abilities acquired by a larger model can be transferred to smaller mod-



els, resulting in better performance. In its technical paper, DeepSeek compares the performance of distilled models with models trained using large scale RL. The results indicate that the distilled ones outperformed smaller models that were trained with large scale RL without distillation. Specifically, a 32 billion parameter base model trained with large scale RL achieved performance on par with QwQ-32B-Preview, while the distilled version, DeepSeek-R1-Distill-Qwen-32B. performed significantly better across all benchmarks. (Qwen is part of an LLM family on Alibaba Cloud.)This, in essence, would mean that inference could shift to the edge, changing the landscape of Al infrastructure companies as more efficient models could reduce reliance on centralised data centres.

The future of AI raceWhile distillation could be a powerful method for enabling smaller models to achieve high performance, it has limits. For instance, a distilled model, tied to the "teacher" model, will face

the same limitations of the larger models. Also, distilled models may not be able to replicate the full range of capabilities or nuances of the larger model. This can affect the distilled model's performance in complex or multi-faceted tasks. While distillation is an effective tool for transferring existing knowledge, it may not be the path to a major paradigm shift in Al.

That means, the need for GPUs will increase as companies build more powerful, intelligent models. DeepSeek's R1 and OpenAl' o1 are the first reasoning models that are actually working. And R1 is the first successful demo of using RL for reasoning. From here, more compute power will be needed for training, running experiments, and exploring advanced methods for creating agents. There are many ways to leverage compute to improve performance, and right now, American companies are in a better position to do this, thanks to their larger scale and access to more powerful chips.

### Verse therapy | Review of 'A Blur of a Woman' by Basudhara Roy

Kashiprasad Ghosh (1820s) to Basudhara Roy (2020s), Indian English poetry has walked a long glorious way; from uncertainty to confidence. We open Roy's A Blur of a Woman and see contemporary poetry at its best: There is no ailment. Just the weather. ('Dukha') Roy writes and expresses fiercely, tenderly, honestly and contemplatively. Over the years, the poet has evolved her own style of poetry writing which is never loud or head-on:Roy's liberal feminism works within a liberal democracy to enact socialism through poetry. It is not a manifesto or a slogan. A firm believer in the therapeutic power of verse, Roy is one of those rare poets for whom our eager ears wait, for her

Roy creates a soul space, letting us know how she walks into poetry through failures and successes gazed from other wisdoms. The title of this collection smells political. And her descriptions of domestic chores are vivid and honest:Roy's previous collections too are replete with references to

daily homemaking, home economics, relationships and the poet's personal engagement with the sensory world.

Roy's performance of non-linear over linear, intuition over materialism, makes her a poet with a difference. She has become a symbol of the strength, vitality and beauty of contemporary Indian English poetry.Poet Basudhara Roy teaches English at Karim City College, Jamshedpur. Poet Basudhara Roy teaches English at Karim City College, Jamshedpur. Emotionally intelligent, her poems take us beyond mourning for personal losses and absences. What should poetry mean to a middle-aged woman who is to play many roles every day? Roy's poems unfold her thoughts and impressions gently; the tone is balanced and she expertly underscores the sense of menace and oppression threatening to engulf the multi-layered female self. Her readers are startled by how these poems are stitched together in a language that is tender and humble, both aesthetically and functionally.