

Centre must pay heed to mineral-rich states

WITH Biju Janata Dal (BJD) president and former Odisha chief minister Naveen Patnaik himself leading the agitation against the Mines and Minerals (Development and Regulation) Amendment Act, 2026, politics is expected to heat up not just in the eastern state but also in other mineral-rich states. Patnaik has been a popular leader for quite some time, yet he has never been known for leading or participating in street-level public agitations; after all, he is no Mamata Banerjee or Arvind Kejriwal. In fact, the suave and mild-mannered Odisha leader is known for his reticence and composure, so his very visual opposition to the Act cannot be taken lightly. While the Act is not without its merits, the Narendra Modi

government's decision to clear it in Parliament by brute force of numbers doesn't sound judicious. The Centre's position is that the new law enables states to impose new levies, the caveat being that these must be compliant with the conditions set by the Central government. Making a political point, BJD and Congress MLAs claim that the Act "snatches the rights" of mineral-rich states. Earlier, mining was taxed differently in every state, whereas now there will be a single, Centre-directed tax framework. The Centre claims that earlier the maximum burden fell on small and medium miners, whereas now every miner benefits from a fair and equal framework. These measures don't sound unreasonable, which begs

the question: were adequate efforts made to persuade mineral-rich states to support the legislation that hugely impacts the economy as well as employment-generation potential? Further, the new mines law invalidates all pending retrospective dues, but this raises another question: has the Union government bid adieu to the abomination called retrospective taxation? The answer, sadly, is 'no,' it did take recourse to retrospective taxation late last year in the case of Safari Retreats, despite having pledged not to do so in the past. Now following the 2026 Act, the ball is in the Centre's court. The Modi government may have the numbers in Parliament to push through legislation, but legislative majorities cannot by themselves

create political legitimacy, particularly when a law directly affects wide economic interests, the federal structure, and fiscal autonomy of states. The Centre would therefore do well to engage with Odisha and other mineral-rich states and address their apprehensions rather than dismissing them as politically motivated opposition. A transparent dialogue over the proposed levy framework, the distribution of revenues and the safeguards against arbitrary intervention by the Centre could go a long way towards allaying fears of centralisation. It would also demonstrate that cooperative federalism is not merely a slogan invoked when convenient, but a principle that informs the making

and implementation of important economic legislation. The controversy over retrospective taxation makes such engagement even more necessary. If the government wishes to persuade industry and the states that the new framework provides certainty, predictability and fairness, then it must itself adhere consistently to those principles. The Centre cannot reasonably ask investors and states to repose faith in a 'stable' tax regime, while retaining the option of intervention whenever circumstances demand such a measure. The government has an opportunity to reassure states that the new regime will be administered fairly, predictably, and in consultation with them and not unilaterally.

LETTERS

Dogs hone true emotional bond

IT is with reference to the editorial "Why do dogs behave the way they do?" No doubt perceptions about dogs changed after the Supreme Court's intervention in a case pertaining to calls to curb dog menace in society. Your editorial threw more light on dogs regarding their language skills and their faith in their masters. First among animals to be domesticated by humans over 20000 years ago, dogs have superhuman senses. As regards emotional and psychological factors, an average dog is as smart as a two-year-old child. They have a true emotional bond and can read emotions and expressions like joy and jealousy. Pratapa Reddy Yaramala, Tiruvuru (AP)

Time humans learn from dogs

THIS refers to "Why do dogs behave the way they do?" (Sept 29). Dogs have been human's best friends for thousands of years, but their behaviour often resembles that of their owners. Being accustomed to people has changed dogs; stray dogs have become more aggressive and dangerous, developing rabies and other diseases, while pet dogs are subject to human hatred due to the attacks. Scientists have concluded that dogs understand words and intonation the same way humans do, meaning animals can comprehend the call of their owner just as well as a child would. While humans have complicated the process, often expressing feelings without empathy, animals have instinctively mastered the art of emotional expression and understanding. The similarities between the two species prove that humanity should treat the loyalty of dogs with respect and empathy; ironically, while dogs bark at other dogs, people often hurt other people much worse, so maybe it is time humanity learns from their pets. Dr O Prasada Rao, Hyderabad

Dogs not the problem, irresponsible owners are

PROPOS 'Why do dogs behave the way they do?', the editorial's exploration of how dogs process human speech is fascinating, but it sidesteps a more urgent question. Why do some dog owners behave so irresponsibly? The real issue in India is not whether dogs understand words but whether owners understand their responsibilities. Unleashed pets, uncleaned mess, and aggressive breeds in dense neighbourhoods have made daily life difficult for many. Dogs are not the problem. Irresponsible ownership is. Stricter enforcement of licensing, leash laws, and breeding regulations can boost public safety better than any study on canine cognition. Empathy for animals and accountability for humans must go together. Veda Chidanand, Bengaluru

Responsible pet ownership holds the key

THIS refers to "Why do dogs behave the way they do?". The editorial is a reminder that a dog's behaviour is often shaped by its environment and relationship with humans. Pets that enjoy regular interaction, exercise and proper training are more likely to adapt comfortably to domestic surroundings. Owners therefore have a responsibility beyond providing food and shelter. They should ensure vaccination, veterinary care, exercise and basic behavioural training. Dogs should not be abandoned when their care becomes inconvenient. Housing societies can frame reasonable guidelines covering cleanliness, noise and common area use without unfairly discriminating against pet owners. Public awareness programmes can also teach children how to approach animals in a safe way. Responsible ownership benefits both people and animals. A little patience and consistency can prevent many behavioural problems and reduce avoidable disputes in residential communities. Abbharna Barathi, Chennai-23

75-year-old woman exemplifies human resilience

THE miraculous survival of a 75-year-old woman, Kasi Dalei, floating 25 km an entire night down the raging Brahmani River in Odisha's Jaipur district, is an extraordinary testament to human resilience. Swept away in pitch darkness, she endured over 12 hours in turbulent waters notorious for deadly saltwater crocodiles. Her sheer will to hang on against such terrifying odds is nothing short of a miracle. Equally deserving the praise are two local fishermen, whose swift, selfless actions pulled her to safety the next morning. While we celebrate the septuagenarian's survival, this incident highlights a critical issue. She fell into the river while attending nature's call. This underlines an urgent need for the local administration to provide secure sanitation infrastructure and safer riverbank fencing in flood-prone, crocodile-infested belts. Meanwhile, Kasi Dalei's story is a breathtaking reminder that hope and human valour can prevail against the most merciless situations. Ranganathan Sivakumar, Chennai-603210

thehansreader@gmail.com

BENGALURU ONLINE

Three Haliyal water bodies rejuvenated under Project NANNEER

HALIYAL: Three water bodies in Haliyal taluk have undergone rejuvenation under Project NANNEER, a water stewardship initiative of the AMM Foundation, increasing their combined storage capacity and improving prospects for groundwater recharge and irrigation. The project covered Kumbarekare Lake in Thergaon village, Alloli Pond and Hanumantha Pond in Haliyal village. The work involved desilting, deepening and strengthening of the water bodies to improve water retention and recharge. Haliyal receives more than 1,500 mm of rainfall during the southwest monsoon, but much of the water is lost as runoff because of limited percolation. The restored water bodies are intended to retain more monsoon water and improve availability during the summer. Kumbarekare Lake, spread over 54.5 acres, has seen its storage capacity increase from 352,002 cubic metres to 655,452 cubic metres.

Read more at
<https://epaper.thehansindia.com>

Only the voters are saving our democracy



RAVULAPATI SEETARAMARAO

AMONG the major issues in our courts where the law is said to be no one's friend, the systems are strangely running in four different directions. Is this happening only in our country? It is odd that those involved in "Criminal Jurisprudence", instead of deeply reflecting for a solution, are moving towards a state of confusion.

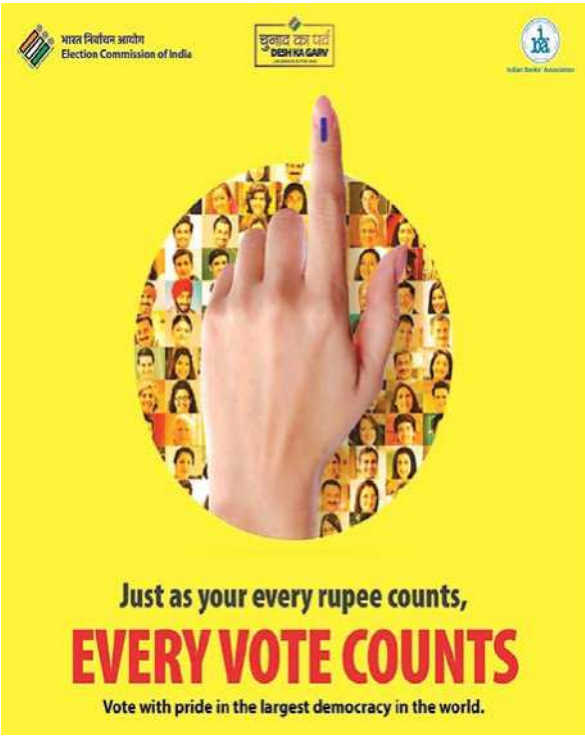
In a judgment delivered a few days back, the Supreme Court directed that the accused may be released immediately, after stating that the police cannot arrest without stating the reasons or denying a lawyer, at the time of arrest. It also declared that violating Fundamental Right (Article 22(1) of the Constitution) is illegal. This is a landmark ruling that the police must implement. We must note that the Supreme Court warned that if the courts do not act strictly in accordance with the Constitution when anyone tries to infringe fundamental rights, arrest and remand procedures are undermined. It is

imperative to follow this.

The Delhi High Court—just a few days ago—refused to accept the Special Investigation Team (like the CBI SIT) petition to register an FIR and investigate the huge amount of cash found at former Delhi High Court judge Yashwant Sharma's house. It asked, in effect, whether there isn't some other good work to do, and criticised sharply, saying that it seemed like an unnecessary witch-hunt in a forest.

Investigating agencies should register a First Information Report (FIR) the moment a cognizable offence is detected. Regardless of anything, it seems very odd if, when a crime has already come to light, the courts (including the Supreme Court) shield officials who have erred by backing them up and somehow justify another route (perhaps dictated by law, that the common person may not know of). Until the case details are fully known, we should only assume that the law does not favour anyone. That's all.

Earlier, the Delhi Court criticised the inclusion of Sonia Gandhi in the electoral roll as an Indian citizen before she could even acquire citizenship, a move that the previous magistrate court order had dismissed. The Delhi Court accepted that order, sent it back for re-examination to the magistrate court, and ordered a fresh inquiry. Sonia Gandhi is consid-



ered a major political party leader who has been voting for years. Could she be rendered stateless and deported to Italy? Well, if only the people who understand and argue the law—lawyers—are involved, the courts can issue verdicts, and the police can enforce them. Even when we translate the concept of Criminal Jurisprudence, it is hard to capture the true "spirit" of the Constitution. Even scholars who understand the Constitution and statutes struggle to interpret them.

Across many periods, the courts and judgments have

taken time, for many reasons that seem legally acceptable, police say so too! Governments, however, have occasionally set up special courts to expedite certain important cases, so that verdicts come out faster. That may be a good thing at least; perhaps it reduces some pendency to some extent.

However, some cases remain pending in court for years on end, but not even on a single day do the witnesses or accused step into court and there is inexplicable delay in the starting prosecution of such cases. These cases may be important in the eyes of

In our country, every five years a citizen's hearing senses come alive during elections! As soon as they become voters, their eyes and everything else start working in full force. On that single day, democracy stands still, and a true citizen rises to do his job. Then he retreats into his own "shell" and disappears! On that one day, he becomes a "king"!

the public, but they appear to be irrelevant to the courts and the government.

People say that the law does its own work, as spoken by a former prime minister of the country! Why P V Narasimha Rao said it that way is unclear to some, but the law's functioning can be described as "slow and steady." In fact, all classes of people are gradually becoming someone's "circle" around the laws! Externally, though, they themselves are saying that the law does not belong to anyone.

In our country, every five years a citizen's hearing senses come alive during elections! As soon as they become voters, their eyes and everything else start working in full force. On that single day, democracy stands still, and a true citizen rises to do his job. Then he retreats into his own "shell" and disappears! To fill democracy in this country, poor citizens dutifully perform their assigned tasks in the ordinary way, day after day! On that

one day, he becomes a "king"!

Somewhere on one such election day, an elderly man, aging close to a hundred, is seen worried, he says, "It will be difficult for me to live until 2029! If I depart, what will happen to democracy in our country?" None of the people around him had the courage to answer for a while. But one wise man said, "It won't go anywhere! To protect it, political parties, the legislature, the judiciary, and the executives, when they do their own jobs, instead of doing the job for their own sake, there is no room for democracy to fail in our country."

With this, he turned away from the group, leaving with a sense of resignation that his maybe a tall claim.

As someone once said, "Democracy is like a cap without a shape; it perfectly fits anyone who wears it."

(The writer is a retired IPS officer, who has served as an Additional DGP of Andhra Pradesh)

Creativity is destroying the environment

EDARA SREENIVASA REDDY

COMING up with one creation after another, today everyone is an alternate Brahma, with each person using artificial intelligence to create new videos, photos, and reels according to whatever comes to one's mind and whatever they like. Ironically, these 'Brahmas' are afflicted with a strange malady—They are enjoying seeing how they would have looked back in the 1980s. In this category are those born before 1980 and are without any old photographs in their collection.

As those born after 1980 do not have that opportunity, many of them have descended upon Gemini AI, ChatGPT and the like. Each one has started creating hundreds upon hundreds of photos. In India, 70 to 100 million are active AI users every day. Of them, around 35 million (38 per cent) use ChatGPT, Gemini AI and similar tools, while away time in the name of entertainment. The figure crosses 50 million when viral trends rule the roost. Among Gen-Z (ages 16-24) youth, 60 per cent spend hours on reels, face-swaps, and memes alone.

Is there any benefit to society from this? None. But they are unable to realize that these activities are causing considerable harm to society, especially to the environment. It is not just them; those who make reels on social media, those who make short videos, those who create avatars through animation, well just about everyone is swaying to the AI magic; it is like each person is contributing a handful of sesame seeds and causing their share of harm to the environment. Because of them, not only is carbon dioxide increasing in our surroundings, but the water resources are also evaporating.

The reason for this creation upon creation is the generative AI models powered by artificial intelligence. Like the proverbial dwarf growing ever larger, along with their form, their usage is also increasing. Not only that, they are expanding in terms of words, photos, music, and videos that they produce and users and creators. For generative AI models to create new things, they must first be trained. As the days go by, not only will these mod-



els be trained, but more models will come along. Both their training and usage involve not only financial expenses but also numerous associated costs. These models emit enormous amounts of carbon dioxide. At the same time, they consume water on a massive scale. The data centres and millions of high-end graphics processing units (GPUs) that operate on these systems must run continuously. To control the enormous heat that is generated, water is continuously circulated through cooling towers. For instance, to run data centres 24x7 hours a day, enormous amounts of water are required. Ultra-pure water is used directly to reduce the heat of servers, in power plants, and in plants that manufacture AI chips and semiconductors.

Data centres that power generative AI models generate electricity, which produces heat that can be cooled by water.

Water use by these can be broadly classified into three types—One is direct water use for on-site data centre cooling, two is off-site water for electricity generation and three is water for server manufacturing. At data centres, cooling towers evaporate water to dissipate the heat. Around 80 per cent of the non-evaporated water can be reused and that too only a few times. All of them are potable water that can prevent pipes from clogging or bacteria from growing. Another method is to use air for cooling without evaporating water in more temperate climates.

It is the training of these models (i.e., the highest level of computational processing that takes place before they are used) that creates the high energy and cooling requirements. Generative AI (Generative AI) has been ex-

Carbon emissions can be reduced by using solar energy, but unfortunately water consumption cannot be reduced. We need more efficient processes today that effectively balance the needs for both carbon and water.

tremely useful for various tasks across industries, particularly in the media sector. Training and using these models also cause environmental harm. Within this broad scope, water consumption (water footprint) has not been discussed much. As the climate crisis intensifies, clean water is becoming an increasingly limited resource. In both continuously training new models and using them, we all need to pay more attention to the impact these models have on the environment. In a world where clean water is becoming scarce commodity, it is essential to be aware of the water consumption of these models.

During the training process of GPT-3 (an outdated 2020-era model belonging to OpenAI), seven lakh litres of fresh water evaporated. In 2023, Google data centres consumed 2,900 crore litres of fresh water to cool their systems. By 2027, it is estimated that 4.2 to 6.6 trillion litres of water will be required worldwide for AI needs.

For example, the Philadelphia Water Department estimated that an average person's daily water consumption is 384 litres.

By this calculation, for GPT-3 training, the amount of water required is equivalent to what one person would consume over 1823 days. That is equal to the annual water consumption of five people. The water consumed by Google data centres in 2023 was equivalent to the annual water consumption of 2,06,906 people (75,520,833 days).

A single AI video 5 to 10 seconds long evaporates approximately 4.1 litres of water.

By 2027, according to worldwide demand, it is estimated that training these systems will equal the annual water consumption of 30–47 million people.

If everything is added together, it is no exaggeration to say that a few top companies are going to use half the water on Earth. According to United Nations reports, currently more than 220 crore people worldwide do not have access to safe drinking water. Another 350 crore people experience severe water stress for at least one month a year. Our country too is going to become one of the countries facing an extremely severe water crisis, the UN is expressing concern. According to the NITI Aayog Composite Water Management Index. Nearly 60 crore people in the country are facing severe water shortage. Approximately, 25 per cent of all groundwater extracted in the world is reported in India alone. On the other hand, our country is becoming a hub for data centres. Cities such as Mumbai, Chennai, Hyderabad, Noida, Visakhapatnam are rapidly becoming data centre hubs. Experts point out that in these metro cities, which depend on tankers for drinking water in summer, the operation of massive servers is putting severe pressure on local people's drinking water. They warn that if this excessive trend continues unchecked, humanity will inevitably face difficulties in the future.

Carbon emissions can be reduced by using solar energy, but unfortunately water consumption cannot be reduced. We need more efficient processes today that effectively balance the needs for both carbon and water.

The first step toward changing that is to highlight this issue and create awareness among people. So, if we are responsible in the way we use these models and use them only as much as we need, we will be protecting the environment. If you are someone who uses generative models repeatedly and excessively, try to balance it by reducing your other water consumption, such as taking shorter showers, there is no better way than that.

(The writer is Professor – VITAP; Artificial Intelligence Researcher)