

## Congress Playing Conspiracy Politics, Alleges BRS MLC Dr. D. Sravan Kumar



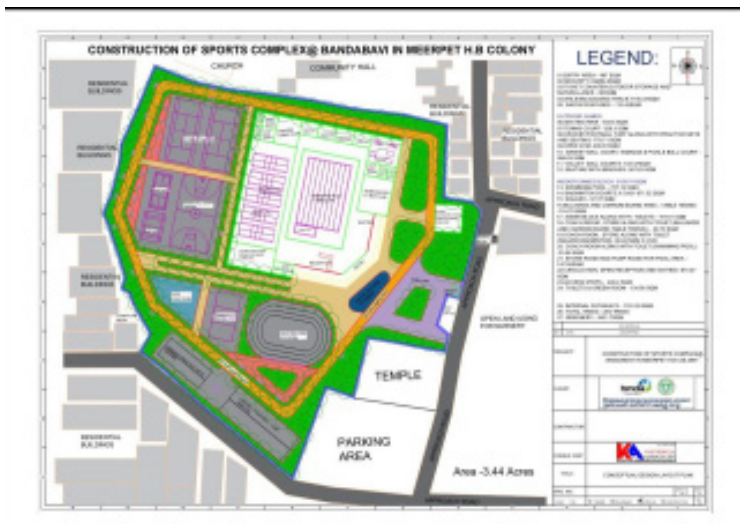
“Taj Khan, Kaghaznagar, January 28 (Indian Chronicle)“The Congress Party government is indulging in conspiratorial politics, and the issuance of SIT notices to BRS supremo and former Chief Minister K. Chandrashekar Rao (KCR) stands as clear evidence of this, alleged Dr. Dasoju Sravan Kumar, MLC of the Bharat Rashtra Samithi (BRS).“Addressing a press conference

here on Thursday after arriving as a municipal election observer for Kagaznagar, Sravan Kumar described the day as a “black day in political history.” He said it was KCR’s leadership and the achievement of a separate Telangana state that enabled Revanth Reddy to become the Chief Minister today.“He alleged that the Congress party was resorting to such tactics only

because it lacks the moral courage to face the BRS politically. The people of Telangana, he said, are closely watching the anti-people policies being pursued by the Congress government, and the time is not far when they will teach an appropriate lesson in the forthcoming municipal elections.“Claiming that people are aspiring for the restoration of the BRS to its former glory, Dr. Sravan

Kumar alleged that Congress leaders, unable to tolerate this, have resorted to cheap political tactics.“Later, BRS State General Secretary R.S. Praveen Kumar and former Sirpur MLA. Koneru Konappa, said the public would soon respond decisively to the Congress government’s approach towards the BRS in the upcoming municipal as well as MPTC and ZPTC elections.

## Approval of Multi-Sports Complex Project in Bandabavi, Meerpet HB Colony Division



“Nacharam, Indian Chronicle, January 29: “Meerpet HB Colony Division Corporator Jeripotula Prabhudas has warmly expressed his gratitude to City Mayor Gadwal Vijayalakshmi, GHMC Commissioner R.V. Karnan, and the other supporting officials for their cooperation in approving the proposals for the first and second phases of the prestigious Multi-Sports Complex project at Bandabavi.“

The project, undertaken under the special initiative of Uppal MLA Bandari Lakshmareddy, is designed to provide state-of-the-art sports facilities for local residents, promoting physical fitness, youth engagement, and community development. The total estimated cost for both phases of the project is approximately ₹9.8 crore.

“Corporator Prabhudas highlighted that the approval marks a significant milestone for the area, as the multi-sports complex will include facilities for multiple games, recreational zones, and training areas aimed at nurturing young talent in various sports disciplines. He further emphasized that the project reflects the government’s commitment to improving urban infrastructure and providing high-quality amenities for citizens.“He concluded by thanking all officials and departments involved in facilitating the swift approval, expressing confidence that the project will soon transform the Bandabavi area into a hub of sports and community activities, benefiting people of all ages.



## AIMIM Announces Candidates for Tandur Municipal Elections



“Indian Chronicle, Tandur, (Jan,29) “The AIMIM party has announced its candidates for the upcoming Tandur municipal elections, aiming to capture the municipal seat. Party district president Abdul Hadi Shaheri finalized the list of candidates.” AIMIM MLA from Bahadurpura, Mohammad Mubin, distributed B-forms to the candidates. The party has fielded candidates in 10 wards: Ward 4: Amina Begum“- Ward 7: Azharuddin“- Ward 14: Praveen“- Ward 17: Amina Begum“- Ward 18: Mohiz Hamid Khan“- Ward 19: Vijayalakshmi“- Ward 20: Shaheen Begum“- Ward 21: Mohammad Mukhtar Ahmed“- Ward 22: M A Hafiz Shahari“- Ward 35: Asifa B”The party is gearing up for a strong contest in the elections.



## Fake cybercrime officer ran extortion scam, arrested

Hyderabad: The SR Nagar police on Wednesday arrested a habitual cybercrime offender who allegedly cheated several people by posing as a cybercrime police officer and extorted money through fear and intimidation.

The suspect, J Sai Ram Reddy (27), a bike-taxi rider from Karimnagar, was involved in at least 44 cyber fraud cases across Telangana, Andhra Pradesh and Tamil Nadu.

According to the police, Sai Ram created fake female profiles on social



media platforms to befriend victims, mostly men. After gaining their trust, he allegedly called them posing as a cybercrime official, threatened them with false cases related to obscene online activity and extorted money as fine through digital payment modes. Victims were also asked to reset their mobile phones to erase evidence

In the latest case, a student was cheated of nearly Rs 97,000 through multiple digital transactions. Based on a complaint lodged via the National Cyber Crime Reporting Portal, he was traced and nabbed.

During interrogation, the suspect confessed to committing similar offences using multiple SIM cards, mobile phones and bank accounts, including accounts of unsuspecting shopkeepers.

## Indian Railways and Maharashtra enter quarterfinals of women's kabaddi championship

Hyderabad: Indian Railways and Maharashtra moved into the quarterfinals of the Senior National Women's Kabaddi Championship at the GMC Balayogi Stadium here on Thursday.

In the pre-quarterfinals, Indian Railways advanced with a 46-27 win over Karnataka, while Maharashtra edged past Goa 42-36.

Madhya Pradesh registered a 41-36 victory against Delhi, and Haryana produced a strong performance to defeat Vidarbha 50-19.

Chandigarh secured its quarterfinal spot with a 45-39 win over Uttar Pradesh, and Tamil Nadu completed the list of confirmed qualifiers with a 34-30 victory against Rajasthan.

Punjab and Himachal Pradesh completed the quarterfinal line-up, with Punjab defeating hosts Telangana 42-25 in Pre-quarterfinal 7 and Himachal Pradesh registering a 67-22 win over Gujarat in Pre-quarterfinal 8. Telangana tourism guide

Tamil Nadu's R Karthika continued her strong run with consistent raiding returns through the league phase, while Uttarakhand's Bhumika and Chhattisgarh's Chhaya were among the most active attackers across matches. On the defensive side, Chandigarh's Monika stood out with a high tackle success rate, while Gujarat's Gadhavi Sabhai and Madhya Pradesh's Muskan Sharma made key contributions.





# Global Media and Leaders Hail India-EU FTA

The conclusion of the India-EU Free Trade Agreement has drawn strong and positive reactions globally, cutting across international media, foreign political leadership, global business heads and respected policy experts. The deal is widely being described as historic, strategic and timely, both economically and geopolitically.

## International Media

Leading global media outlets have highlighted the scale, ambition and strategic timing of the India-EU FTA.

The Telegraph, in an article by James Crisp titled 'Modi is real winner

historic deal with its headline saying 'India and EU clinch the 'mother of all deals' in a historic free trade agreement'.

The Guardian referred to it as 'Mother of all deals': EU and India sign free trade agreement'.

A similar headline was also reported by BBC - India and EU announce 'mother of all trade deals'.

Bloomberg discussed the possibilities of deeper supply-chain integration, noting that duties on cars will fall as low as 10%, compared to earlier levels of over 100%, and that duties on auto components will be eliminated.

prosperity.

Alexander Stubb, President of Finland, described the India-EU FTA as historic and the largest trade deal ever concluded by either side, saying it would significantly intensify economic and political ties.

Ulf Kristersson, Prime Minister of Sweden, said the agreement marks the launch of a new era of cooperation, strengthening prosperity, competitiveness and security through trade and partnership.

Christian Stocker, Chancellor of Austria, said the deal creates a free

noting that from a geopolitical and diplomatic perspective, the deal opens up significant opportunities for both Europeans and Indians.

## Business Leaders and Experts

European and global business leaders operating in India responded with strong optimism, calling the agreement a long-awaited breakthrough.

Jürgen Westermeier, President and Managing Director for India and South Asia at Airbus and President of the Federation of European Business in India, described the FTA as a "big moment" after 20 years of discussions and said it would act as an accelerator of opportunities for both sides.

Wouter van Wersch, President of Airbus International, called it a "fantastic day," reiterating Airbus' long-term commitment to Make in India, technology transfer, defence, space and advanced manufacturing.

Jan Noether, Director General of the Indo-German Chamber of Commerce, said the agreement brings together two billion people and nearly a quarter of global GDP, describing it as the "mother of all free trade agreements."

Other senior business voices including Frank Schlöder (Managing Director, Häfele South Asia), Thomas Wolter (Managing Director, Krones Machinery India), Lars Eric Johansson (Executive Vice President, Oxea GmbH), Jan-Olof Jacke (CEO, Confederation of Swedish Enterprise) and Fredrik Persson (President, BusinessEurope) welcomed the deal as a strong signal for rules-based trade, supply-chain resilience, SME growth and long-term competitiveness.

Global policy experts and commentators described the agreement as substantively strong and strategically well-timed.

Richard Rossow, Senior Advisor at the Center for Strategic and International Studies (CSIS), said the deal brings together a quarter of the world's population and a massive share of global trade, adding that the positive optics reflect strong substance. He also noted that India's recent FTAs show a clear shift toward deeper and more ambitious trade commitments.

Michael Kugelman, Senior Fellow at the Atlantic Council, called the India-EU FTA the "right deal at the right time," stressing that it goes beyond cushioning U.S. tariffs and instead consolidates a broader, fast-growing strategic partnership.



in 'mother of all trade deals' with EU', described the agreement as the "mother of all trade deals", arguing that India has emerged as the real strategic winner. The paper noted that the deal eliminates or reduces tariffs on 96.6% of EU exports to India, while the EU will cut tariffs on 99.5% of Indian goods over seven years.

The Wall Street Journal framed the agreement as a response by middle powers to global tariff disruptions, highlighting how India and the EU are expanding alliances amid uncertainty created by U.S. trade policies.

The New York Times stressed that the deal brings together the world's largest economic bloc and the fastest-growing major economy after nearly two decades of negotiations.

The Washington Post called it a

Associated Press highlighted the scale of the deal with its headline saying that 'India and the European Union reach a free trade deal representing a third of global trade'.

The scale was also highlighted by Al Jazeera, which said "Mother of all deals': How India-EU trade deal creates \$27 trillion market'.

Reuters called it a landmark deal saying 'India, EU reach landmark trade deal, tariffs to be slashed on most goods'.

## Foreign Leaders

Several senior political leaders across Europe publicly welcomed the agreement.

Friedrich Merz, Chancellor of Germany, called the conclusion of negotiations a "very positive sign" and urged swift implementation to boost growth and

trade zone benefiting two billion people, calling it a major step for Europe's resilience in a rapidly changing global order.

Lars Løkke Rasmussen, Foreign Minister of Denmark, extended full support to the agreement, calling it geopolitically crucial and highlighting the first-mover advantage in a combined market of two billion people.

Nicolas Forissier, France's Minister Delegate for Foreign Trade and Economic Attractiveness, termed the EU-India accord a major political step, stressing that "this is not an agreement like the others."

Sandro Gozi, Member of the European Parliament, said the agreement clearly reflects the EU's need to diversify partnerships and increase its autonomy and independence. He highlighted India as a major global actor,



# Kingfisher Premium Packaged Drinking Water Bring Bold, High-Impact Fan Integrations to Life at TATA WPL 2026



Hyderabad Globally ranked No. 2 in viewership, the fourth season of the TATA Women's Premier League (WPL) witnessed a fresh wave of fan engagement, with Kingfisher Premium Packaged Drinking Water coming on board as the Official Good Times Partner for the tournament.

Kingfisher Premium Packaged Drinking Water in Partnership with DNA Entertainment Networks Pvt Ltd brought to life a series of immersive, high-impact integrations for stadium audiences. The partnership focused on enhancing the matchday experience by blending high-energy fan engagement, music and broadcast innovation.

This season, Kingfisher Premium Packaged Drinking Water also unveiled a vibrant brand film that reimagined its iconic sonic identity, 'O la la leo'. The playful, high-energy film Chhori Aayi. Hutt le bro! Ooh la la la, ooh leo! captures the excitement, confidence and evolving narrative of cricket fandom as women's cricket takes centre stage. Extending the sonic experience beyond the screen, the evergreen track was seamlessly woven into stadium entertainment, energising crowds and driving interactive moments across key match intervals.

Adding a distinctive dimension to the broadcast experience, the iconic Spidey Camera was rebranded as the Kingfisher Bird Cam. Designed to capture on-field action from spectacular aerial angles. All footage captured through the camera was presented as a bird's-eye view, with commentators calling out the integration and sharing insights on the action brought alive through this unique perspective.

Further strengthening its association with high-impact moments in the game, Kingfisher Premium Packaged Drinking Water also instituted a special on-field recognition. The batter with the highest number of sixes in the tournament was awarded by Kingfisher with a trophy featuring the KF Bird., celebrating power-hitting and match-defining performances.

Vikram Bahl, Chief Marketing Officer, United Breweries Limited said: "We believe great sporting moments are best experienced when fans feel truly connected to the action. Our association with the TATA Women's Premier League reflects our focus on

creating high-energy, immersive fan experiences that bring audiences closer to the game- both inside the stadium and on screen."



# Why are PwDs worried about DPDP rules? | Explained

With the Ministry of Electronics and Information Technology (MeitY) looking to wrap up public consultations on the draft Rules for the Digital Personal Data Protection Act, 2023 by March 5, disability rights activists are trying to get a key provision of the Act amended or dropped, pointing out that it infantilises Persons with Disabilities (PwDs), negates their decision-making capabilities, and comes from a misunderstood notion of how guardianship works for PwDs.

What does this provision state?

Section 9(1), in clubbing children with PwDs, has mandated that even in cases of adult PwDs who have legal guardians, consent for use of any personal data must be obtained from the guardian concerned. While government officials have said that the draft Rules have tried to address the issue by limiting the number of disabilities the provision would apply to, activists and experts maintain that there remain significant challenges in its implementation.

What do the draft Rules say?

The Union government has said that it brought the DPDP Act, 2023 to govern the processing of digital personal data in a way that “recognises both the right of individuals to protect their personal data and the need to process such personal data for lawful purposes and for matters connected therewith or incidental thereto”. Section 9(1) of the Act says, “The Data Fiduciary shall, before processing any personal data of a child or a person with disability who has a lawful guardian obtain verifiable consent of the parent of such child or the lawful guardian, as the case may be, in such manner as may be prescribed.” The Act’s language defines data fiduciaries as those parties processing the personal data and data principals as the users whose data is being collected. But in Section 2(j)(ii), for PwDs, the Act has included “lawful guardian” within the meaning of data principal. In the draft Rules notified by the MeitY on January 3 this year, the government has proceeded to set out the rules that will govern the Act. In these Rules, Rule 10 deals with the governing of Section 9(1) of the Act. Rule 10(2) says, “A Data Fiduciary, while obtaining verifiable consent from an individual identifying herself as the lawful guardian of a person with disability, shall observe due diligence to verify that such guardian is appointed by a court of law, a designated authority or a local level committee, under the law applicable to guardianship.” In the next sub-section, the Rules provide for considering guardianship under the Rights of Persons with Disabilities Act, 2016 (RPWD Act) and the National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999 (NT Act). It also goes on to define PwDs, for whom the consent clause of Section 9(1) would apply to, as: “(i) an individual who has long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders her full and effective participation in society equally with others and who, despite being provided

adequate and appropriate support, is unable to take legally binding decisions; And (ii) an individual who is suffering from any of the conditions relating to autism, cerebral palsy, mental retardation or a combination of any two or more of such conditions and includes an individual suffering from severe multiple disability.” But while the Rule on how to take the consent of the parents of children contains detailed explanations in the form of illustrations that highlight different scenarios and how the consent procedure would work in each, there is no similar illustrations presented for the sub-section that deals with taking consent of the guardian of a person with disability. This has led disability rights activists and experts alike to question how the consent clause would apply to PwDs, details of procedures for different disabilities and degrees of severity, and whether it would apply uniformly to guardians appointed under different laws.

How do guardianships for PwDs work?

The legal guardianship for PwDs, while not mandatory, is governed by two laws in India — the RPWD Act, 2016 and the NT Act, 1999 — both of which mandate different roles for the guardians appointed under it for adult PwDs. The NT Act’s guardianship clauses apply to people who are “diagnosed with conditions related to autism, cerebral palsy, intellectual disability (previously categorised as mental retardation), or any combined occurrence of two or more of these conditions”. It provides for full guardianship of the PwD. In contrast, the RPWD Act’s guardianship clauses apply to people “experiencing long-term physical, mental, intellectual, or sensory impairments which, when interacting with various barriers, hinder their full and effective participation in society on an equal basis with others”. This provides for a “limited guardianship”, which allows for support in making specific legal decisions when the individual’s capacity is deemed

insufficient. While the NT Act goes against the principles of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) by making “decision-making capacity” a metric for guardianship without adequately defining it, the RPWD Act, drafted to keep up with the UNCRPD, frames guardianship as support to PwDs in exercising their own decision-making rights.

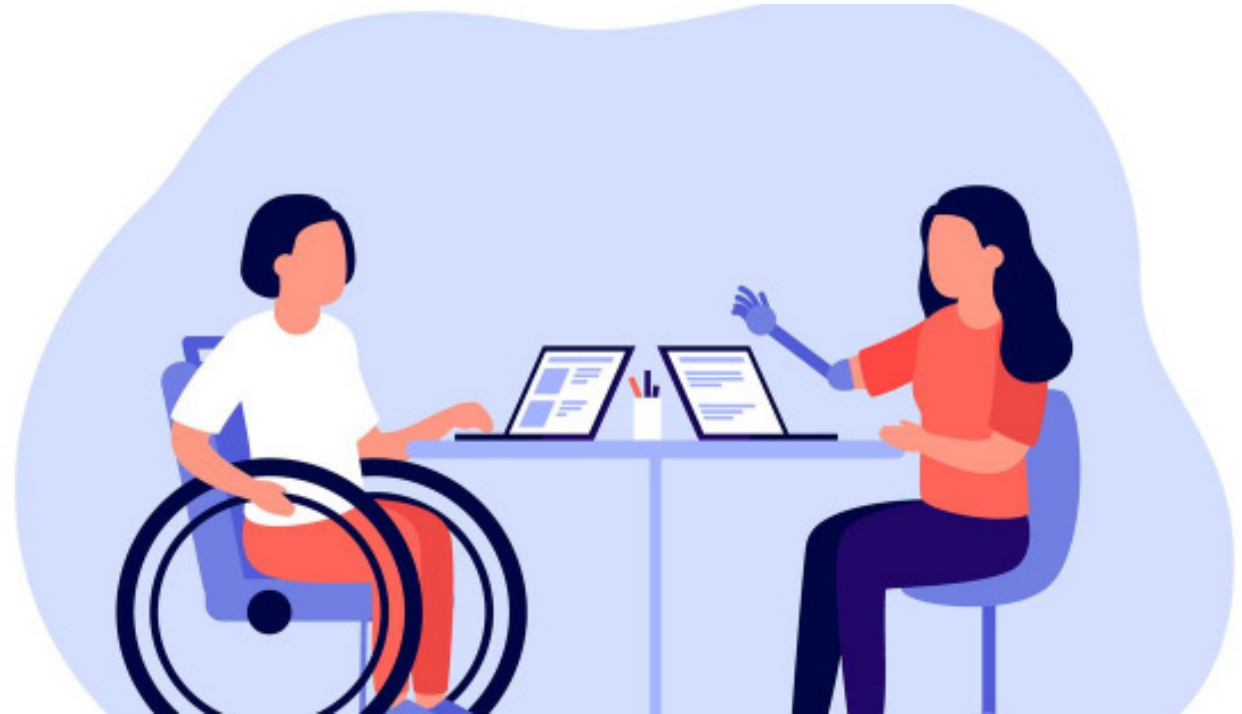
Where does the conflict arise?

A small survey among 91 PwDs by policy thinktank PACTA and Saksham Disability has shown that about 27.4% of them had legal guardians. Amongst those respondents who knew which law their guardianship was governed by, most said theirs were under the RPWD Act’s provision for “limited guardianship”. But despite this, the practicalities of guardianship are different, a report by Saksham and PACTA noted, adding that most of the PwDs with guardians maintained that their legal guardian ends up managing all their affairs. This report, released last month, noted that while the Act and the draft Rules are sound “in theory” if the guardianship is under the RPWD Act, the realities of how this guardianship works would mean that “a guardian is likely to deprive the autonomy and personhood of the individual”. On the other hand, in cases of guardians appointed under the NT Act, this would be in “direct conflict” with the autonomy of persons with disabilities under the UNCRPD, the report argued. The report noted that a plain reading of Section 9(1) of the DPDP Act “appears to presume” that just because a PwD might have a legal guardian, this in itself would be indicative of their “inability to take decisions in the digital sphere”. In addition, it said the law does not consider intersectionality of gender and disability. It cites a situation where a PwD woman may not be able to buy sanitary napkins from an online platform because it may now require their guardian’s consent for them to be able to

access the platform itself. Nipun Malhotra, of the Nipman Foundation, who is leading efforts to lobby the government on these provisions, has said that Section 9(1) of the DPDP Act, 2023 itself has caused enough chaos on how it would apply, to whom, and under what circumstances. As for the government’s attempts to address the issue with the law by limiting the definition of PwDs in the draft Rules, Mr. Malhotra told The Hindu, “Instead of simplifying how it would apply, the definitions have further complicated the issue.” Citing one example of the definition, he explained that “physical impairment” has been included. “But there is no provision for people with just physical disability to have legal guardians. This will only confuse people more.”

What are the concerns being raised?

Given the way the consent clause has been structured for PwDs in the DPDP Act, 2023 and the draft Rules, some of the principal concerns that have emerged include those of what legal obligations would the guardian of a PwD face; how the consent clause can be implemented in cases where guardianship law is in dissonance with the UNCRPD; and whether the legal guardian can opt out of consenting on behalf of the user with respect to specific platforms. Another issue highlighted by Saksham in their report has been that of concerns among PwDs about what the fate of their personal data will be. For instance, the rights body has posited that to comply with Section 9(1) of the Act, any data fiduciary would have to ask at least two questions: (i) Whether the user has a disability? (ii) Whether the user had a legal guardian. In cases where the answer to the first question is yes but the second is not, the platform will still have data on the person’s disability with no purpose to process it. Further, Saksham has questioned that if the definition of data principal includes the legal guardian of a PwD, would that then mean that they must take on the full legal responsibility and face penal consequences





# Coal power is costing India up to 10% of its rice and wheat crops

According to new research led by researchers at Stanford University in the US, coal-fired power plants are quietly depleting India's rice and wheat output, destroying up to 10% of the yield in several states. The emissions from coal power plants include carbon dioxide, nitrogen oxides, sulphur oxides, fly ash, soot, suspended particulate matter, and other trace gases. These pollutants have been linked to smog, acid rain, eutrophication and various other environmental burdens. An elusive link in the new study, PhD student Kirat Singh and his colleagues turned the spotlight on the less explored consequences of nitrogen dioxide (NO<sub>2</sub>) on crop productivity. The nitrogen oxides in general are an established side effect of India's coal dependence. They are phytotoxic, meaning they stress plants, and have been known to hinder cellular function and interfere with crucial enzymatic activities. The oxides also contribute to the formation of ozone, which in turn exacerbates crop damage and produces particulate matter that limits the amount of sunlight available for photosynthesis. "We know that coal-fired power plants contribute significantly to air pollution," Singh said. "And we also know from past studies that various pollutants, including NO<sub>2</sub>, can negatively impact crop growth. But there hadn't been a study linking the two in a systematic way at the power-plant level, particularly in India." Tracking plant health To compensate for the lack of ground monitoring stations in agricultural areas, the researchers used data from satellite images to glean high-resolution insights into NO<sub>2</sub> concentration across India. Since multiple power plants contribute to NO<sub>2</sub> pollution across different distances, the researchers summed up all coal-attributable NO<sub>2</sub> emissions reaching each location instead of isolating individual sources. This approach gave them a comprehensive picture of the amount of pollution to which agricultural regions were exposed.

Then, to estimate how NO<sub>2</sub> from coal-fired power plants affected crop yield, the researchers turned to a satellite-derived vegetation index. They used a physical signal called near-infrared reflectance of vegetation (NIRv) as a proxy for plant health. NIRv measures greenness. Healthy crops are richer in chlorophyll, which can't be detected by visible light but is sensitive to near-infrared light. So a higher percentage of near-infrared light is reflected by leaves in healthy plants. Using pre-established coefficients, the researchers could link NO<sub>2</sub> levels, measured by the TROPOMI satellite, to changes in NIRv. They used India-specific coefficients of 0.0006 for monsoon rice and 0.0007 for winter wheat. For every 1 mol/m<sup>2</sup> increase in NO<sub>2</sub>, for example, the



corresponding drop in NIRv was 0.0006 and 0.0007, respectively. Prior research has already shown a linear relationship between NIRv and crop yield, allowing the researchers to directly estimate how much yield was lost due to pollution. They set a baseline NIRv of 0.007, representing zero crop growth, and calculated the percentage decrease in yield based on pollution-driven declines in greenness. This method helped them quantify the agricultural damage wrought by NO<sub>2</sub> without requiring physical field measurements. Blowing in the wind They also analysed wind patterns to differentiate between pollution from coal plants from that from other industrial and environmental sources. This step helped the team unravel major differences in the effects of coal pollution across States.

For example, Chhattisgarh, a major hub for coal-fired power, had the highest share of NO<sub>2</sub> pollution from coal plants: about 19% of NO<sub>2</sub> detected in the monsoon season and 12.5% in winter came from coal plants. Surprisingly, Uttar Pradesh had high overall NO<sub>2</sub> levels but only a small portion of that came from coal power, while Tamil Nadu had relatively low NO<sub>2</sub> pollution but the bulk of it came from coal power. Coal's contribution to air pollution thus varied by region. Not all power plants have the same impact: those located near fertile farmland with a high emissions exposure caused the most agricultural damage, Singh said.

An overlooked loss Crop damage intensity — measured as monetised loss per gigawatt-hour (GWh) of electricity generated — for wheat and rice touched

up to \$17,370/GWh (Rs 15 lakh on February 6, 2025) and \$13,420/GWh (Rs 11.7 lakh) respectively. About 20% of coal-fired electricity generation during the monsoon season accounted for half of all coal NO<sub>2</sub>-related rice losses while 12% of total winter season generation was linked to 50% of wheat losses. This suggested that targeting a relatively small subset of highly polluting power stations could still have significant benefits for agricultural productivity. To wit, as per the study, the yield of 5.7% of cropland in West Bengal near coal-fired power stations could increase 5-10% while the gains of 1.66% could exceed 10%. Similarly in Madhya Pradesh, the yield in 5.9% of cropland could increase 5-10% yield gains and another 11.9% could gain by more than 10%.

To compare, the annual yield growth for kharif rice and rabi wheat has averaged just 1.7% and 1.5% respectively between 2011 to 2020. According to the study, India's rice production could gain \$420 million a year and wheat \$400 million a year, roughly Rs 7,000 crore in total. Expected yield gains from eliminating coal-attributable nitrogen dioxide concentrations in major rice- and wheat-producing states. Large tracts of cropland in all key states are expected to see yield improvements of 1% from eliminating coal-related NO<sub>2</sub>. Data from 2019 growing seasons. Expected yield gains from eliminating coal-attributable nitrogen dioxide concentrations in major rice- and wheat-producing states. Large tracts of cropland in all key states are expected to see yield improvements of 1% from eliminating coal-related NO<sub>2</sub>.

Data from 2019 growing seasons. | Photo Credit: PNAS: 122 (6) e2421679122 India and coal As the 2025-2026 Economic Survey as well as energy experts have noted, coal power plays a crucial role in India's growth at the moment. The 2025-2026 Union Budget has allocated 255% more for the Ministry of Coal over revised estimates of FY 2024-2025. India's demand for food is soaring as well. In 2024, the Global Hunger Index ranked India 105th out of 127 countries on food security. Rice and wheat are staple crops in India and in many parts of the world to which these grains are exported. Singh said he hopes to inform policy reforms that will allow the coal and agricultural sectors to meet in the middle. "When you're crafting policy around controlling pollution from the power sector, considering crop impacts alongside health and greenhouse gas emissions can help policymakers prioritise where that pollution control equipment should be installed," he said. "If you want to optimise the money that is being invested in installing all of this pollution-control equipment, you want to focus on power plants where it would bring the most benefit. Policymakers might find information in our research that could be helpful in terms of figuring out which power stations to prioritise," he added. Singh grew up in New Delhi and said its poor air quality motivated him to study the consequences of air pollution on human as well as crop health. In future, Singh is planning to further study how coal power plants affect agriculture at large in India, including the effects of other pollutants on crop productivity.



# Why is there so much gold in west Africa?

Militaries that have taken power in Africa's Sahel region – notably Mali, Burkina Faso and Niger – have put pressure on western mining firms for a fairer distribution of revenue from the lucrative mining sector. Gold is one of the resources at the heart of these tensions. West Africa has been a renowned gold mining hub for centuries, dating back to the ancient Ghana empire, which earned its reputation as the "Land of Gold" because of its abundant reserves and thriving trade networks. The region remains a global leader in gold production. As of 2024, west Africa contributed approximately 10.8% of the world's total gold output. But why is there so much gold in this region? The Conversation Africa asked geologist Raymond Kazapoe to explain.

How is gold formed?

The simple answer here is that we are not certain. However, scientists have some ideas. Gold, like all elements, formed through high energy reactions that occurred in various cosmic and space environments some 13 billion years ago, when the universe started to form. However, gold deposits – or the concentration of gold in large volumes within rock formations – are believed to occur through various processes, explained by two theories. The first theory – described by geologist Richard J. Goldfarb – argues that large amounts of gold were deposited in certain areas when continents were expanding and changing shape, around 3 billion years ago. This happened when smaller landmasses, or islands, collided and stuck to larger continents, a process called accretionary tectonics. During these collisions, mineral-rich fluids moved through the Earth's crust, depositing gold in certain areas. A newer, complementary theory by planetary scientist Andrew Tomkins explains the formation of some much younger gold deposits during the Phanerozoic period (approximately 650 million years ago). It suggests that as the Earth's oceans became richer in oxygen during the Phanerozoic period, gold got trapped within another mineral known as pyrite (often called fool's gold) as microscopic particles. Later, geological processes – like continental growth (accretion) and heat or pressure changes (metamorphism) released this gold – forming deposits that could be mined.

Where in west Africa is gold found and what are its sources?

Most gold production and reserves in west Africa are found within the west African craton. This is one of the world's oldest geological formations, consisting of ancient, continental crust that has remained largely unchanged for billions of years. The craton underlies much of west Africa, spanning parts of Mali, Ghana, Burkina Faso, Côte d'Ivoire, Guinea, Senegal and Mauritania. In fact, most west African countries that have significant gold deposits have close to 50% of their landmass on the craton. Notably, between 35% and 45% of Ghana, Mali and Côte d'Ivoire's territory sits on it – which is why these areas receive so much attention from gold prospectors. Gold deposits were formed within west Africa's craton rocks during a major tectonic event, known as the Eburnean Orogeny, 2.2 billion to 2.08 billion years ago. This event was accompanied by the temperature, pressure and tec-



tonic conditions which promote gold mineralisation events. Most of the gold resources in the west African craton are found within ancient geological formations formed by volcanic and tectonic processes about 2.3 billion to 2.05 billion years ago. These are known as the Rhyacian Birimian granitoid-greenstone belts. These gold-bearing belts in Ghana and Mali are by far the most endowed when compared with other countries in the region. Ghana and Mali currently, cumulatively account for over 57% of the combined past production and resources of the entire west Africa sub-region. Ghana is thought to be home to 1,000 metric tonnes of gold. The country produces 90 metric tonnes each year – or 7% of global production. Gold production in Mali reached around 67.7 tonnes in 2023. Mali has an estimated 800 tons of gold deposits. By comparison, the world's two largest gold producers are China (which mined approximately 370 metric tonnes of gold in 2023) and Australia (which had an output of around 310 metric tonnes in 2023).

What are some of the modern exploration tools used to find gold?

Gold was traditionally found by panning in riverbeds, where miners swirled sediment in water to separate the heavy gold particles, or by digging shallow pits to extract gold-rich ores. Over time, methods have evolved to include geochemical exploration techniques, advanced geophysical surveys, and chemical extraction techniques, like cyanide leaching. Geological mapping techniques are always evolving, and at the moment, there is a lot of interest in combining remote sensing data with cutting-edge data analytics methods, like machine learning. By combining these two methods, geologists can get around some of the problems caused by traditional methods, like the reliance on subjective judgement to create reliable maps and the need to spend money prospecting in areas with low chances of success. In recent years, deep learning computer techniques have made significant progress. They examine various geological data-sets to reduce uncertainty and increase the chances of finding gold mineralisation through advanced artificial intelligence techniques. These methods have proved highly beneficial in

identifying specific features and discovering new mineral deposits when applied to remote sensing data. Another method, which I've researched and which could serve as a complementary gold exploration tool, is the use of stable isotopes. Stable isotopes are elements – like carbon, hydrogen and oxygen – that do not decay over time. Some are responsible for helping to carry gold, in fluids, through rocks to form the deposits. As the gold-bearing fluids interact with the rocks, they transfer the

stable isotopes to the rocks, thereby imbuing them with their unique signature. The thinking here is to identify the signature and then use it as a proxy for finding gold, since gold itself is hard to identify directly. Advancements in analytical techniques have reduced the cost, volume, and time involved. This makes it a viable alternative to geochemical approaches – the most widely used and relatively efficient method.

## Quadric IT showcases cutting-edge AI and sustainability innovations at BioAsia 2026



Hyderabad: Quadric IT, a pioneer in AI-driven and sustainable technology solutions, is making waves at BioAsia with a lineup of groundbreaking innovations. Among these, the Reusable Smart AI-Based Notebook, co-invented by Suman Balabommu, Kesari Sai Krishna Sabniveesu, and Raghu Ram Thatavarthy, is set to revolutionize the way notes are taken in meetings. This AI-powered reusable notebook functions like a traditional notebook but offers 100 reuses per page. Handwritten content can be seamlessly converted into digital format using the RenoteAI app, which also enables cloud storage and AI-generated prompts for instant knowledge retrieval. Users can sim-

ply wipe the pages with a wet cloth or tissue to erase and reuse, dramatically reducing paper consumption. "The goal is to merge sustainability with AI-powered efficiency, ensuring that businesses and individuals alike can reduce waste while enhancing productivity," said Kesari Sabniveesu, Co-Founder of Quadric IT. Quadric IT's Reusable Smart AI-Based Notebook Beyond the Reusable Smart Notebook, Quadric IT is presenting a range of AI and data-driven solutions tailored for Bio and Pharma industries. These innovations aim to streamline operations, enhance decision-making, and contribute to a greener future. With a strong focus on AI, ERP, data tools, and sustainability,



# The future of sustainability: rethinking education and career pathways in India

Recently, I participated in a panel discussion at the Azim Premji University in Bengaluru as part of the Wipro Earthian Awards. This gathering brought together participants from diverse backgrounds — students and educators from remote villages, tier-2 and tier-3 cities, and major urban centers — each with their perspectives and experiences in environmental stewardship. The panel discussion centered on a crucial yet often overlooked aspect: how sustainability can evolve from an academic subject to a viable and fulfilling career pathway. One question stood out to me: A teacher asked, “As a parent, would you advise your child to pursue a career in sustainability?” Another teacher raised concerns about why Environmental Science is not taught as a hands-on subject in schools. A third wondered how teachers can stay updated with advancements in the field. These questions revealed an underlying disconnect between sustainability as an evolving field and how it is perceived and taught in schools across India. Sustainability: an evolving field The hesitation around sustainability as a career choice is reflective of a larger issue. There is a misconception that careers in sustainability are limited or financially unviable.

India, like much of the world, is in the midst of a climate crisis. From extreme heat waves and erratic monsoons to pollution and depleting resources, environmental challenges are no longer distant threats — they are here and affecting us daily.

Yet, while sectors such as Finance, Technology, and Engineering are often seen as the primary career paths, Sustainability is an evolving field that requires expertise from multiple disciplines. Whether one comes from a background in Economics, Law, Engineering, Social Sciences, or even the Arts, there is a place for diverse skill sets in Sustainability. Industries are rapidly shifting towards green energy, sustainable manufacturing, and Environmental, Social, and Governance (ESG) reporting, creating a demand for professionals who can integrate sustainability principles into various domains. Governments, corporations, and research institutions are investing heavily in solutions for climate change adaptation, energy transition, circular economy, and nature-based solutions. If parents and educators continue to view sustainability as a secondary option, students may hesitate to explore its vast potential. India must recognise and nurture sustainability as a mainstream career choice to build the skilled workforce necessary to address the climate crisis and drive innovation for a more resilient future. Sustainability is turning into a multidisciplinary, future-ready field and so thinking about building a career in sustainability is increasingly viable. Reforms in teaching at school level A recurring theme in our discussion was the way Environmental Science is taught in schools. Currently, it is often reduced to textbook definitions, rote learning, and annual environment-themed projects. But Environmental Science is not just a subject — it is a way of engaging with the world around us.

Science should be experiential, and

Environmental Science education must move beyond the classroom. Schools must integrate some real-world applications. With the advent of cheaper IOT-based sensors, it is cost-effective to set up key instruments such as weather stations, and monitoring air and water quality instruments for students on practical teaching. Additionally, students can be engaged in project-based learning in waste management, afforestation, and biodiversity conservation. Many students in rural and semi-urban areas are already living close to environmental challenges. Making them active participants in local environmental and sustainability efforts would not only enhance learning but also empower them to be problem-solvers in their communities. Some countries leading in climate action have already incorporated such experiential learning models. For example, the nature school concept in Finland’s environmental education includes field studies and problem-solving activities based on local issues. The question is, can we take inspiration and adapt similar models and fine-tune our students and the Indian wisdom to blend into our education to revitalise environmental and sustainability education in India? Need for teachers to upskill One of the most critical gaps highlighted during our discussion was the lack of avenues for teachers to stay updated with new developments in sustainability. The strong concern highlighted was if the teachers are not updated, how can they teach their students effectively? Unlike subjects like math or history, sustainability is a dynamic field — it evolves with scientific discoveries, technological innovations, and policy changes. How do we ensure our teachers are equipped with the latest knowledge? The answer probably lies in continuous learning programs. Universities, research institutions, and governmental bodies must collaborate to create upskilling programs for educators. Regular workshops, online courses, and interactive platforms can help teachers stay informed. Additionally, partnerships with sustainability professionals — scientists, urban planners, climate policy experts — can bring fresh insights into classrooms and bridge the gap between research and teaching.

A national-level initiative to train teachers in sustainability education could have a transformative impact, ensuring that students across India receive relevant and forward-thinking education in this crucial field. Shift in perception about sustainability Beyond schools, the general perception of sustainability in India also needs a shift. Sustainability is often seen as an elite concern — something that urban policymakers, environmental NGOs, or global institutions discuss, but not an immediate priority for everyday citizens. This could not be further from the truth. In reality, the most affected by environmental degradation are those with the least resources to cope. Farmers dealing with unpredictable rainfall, urban dwellers battling rising air pollution, and coastal communities facing sea-level rise — these are real, urgent challenges. Making sustainability a household concern requires mainstreaming it in our conversations, media, and governance. Public awareness



campaigns, storytelling through films and digital media, and community-based sustainability initiatives can help change this perception. The government’s emphasis on solar energy, electric vehicles, and sustainable infrastructure is a step in the right direction, but these policies must be accompanied by grassroots awareness and education. The panel discussion reinforced one key takeaway: All of us have a

role to play in taking sustainability beyond textbooks and into our everyday lives. Schools, teachers, parents, policymakers, and industry leaders must work together to reshape sustainability education in India. A well-informed young generation that sees sustainability not just as an academic subject but as a way of thinking and problem-solving will be crucial in building a resilient future

## NRI couple donate Rs 10 crore to Indo-American Cancer Hospital



Hyderabad: An NRI couple from the United States, Dr Raghavendra Rao and Kalyani, have donated Rs 10 crore to establish Indo-American Cancer Research Organisation (IACRO) under Basavatarakam Indo-American Cancer Hospital and Research Institute (BIACH&RI).

As a part of the initiative, on the occasion of Shivaratri on Wednesday, Dr Rao and Kalyani donated the first instalment of Rs 5 crore by handing over a cheque to the senior management of BIACH&RI, in the presence of its chairman and actor

Balakrishna. In addition to providing state-of-the-art cancer treatment facilities at subsidised rates for poor families, the BIACH&RI had recently decided to increase its focus on advanced cancer research. As a part of this initiative, the hospital has decided to establish an ultra-modern research facility IACRO to allow scientists and researchers to take up advanced cutting-edge research on cancer. Speaking on the occasion, Dr Raghavendra Rao hoped that the new cancer research centre at BIACH&RI will bring new hope to lakhs of cancer patients in the country.