

Cherlapalli railway station likely to be opened on December 28

Hyderabad: Contrary to speculations of Prime Minister, Narendra Modi inaugurating the redeveloped Charlapalli Railway Station, the union Railway Minister, Ashwini Vaishnaw is expected to inaugurate the station on December 28. It was expected that the Charlapalli station which was redeveloped at a whopping cost of Rs 430 crore would be opened in August after the road widening works in the vicinity. However, due to various reasons including the land acquisition for developing approach road connectivity led to delay.

Charlapalli station was developed with plans to operate 50 trains from the terminal, and is equipped with modern amenities including lifts, escalators, 9 platforms, huge parking spaces, etc. Initially, the South Central Railway (SCR) authorities will run about 25 services. The Railway Board has already made it clear that Krishna Express, Sabari Express, Satavahana Express and other trains will be operated. It will also have coach maintenance facilities for facilitating starting of trains from the station. The Charlapalli railway station will become the fourth major passenger terminal in the twin cities and was developed with modern facilities and technology on a par with airports. The upcoming



facility would not only reduce burden at Secunderabad, Nampally and Kacheguda

stations but also meet the growing requirements of the city's population. However, the

South Central Railway is yet to officially announce the inauguration day.

Your First Steps in the US: Navigating Support Services for International Students

Embarking on an academic journey in the United States as an international student is exciting and challenging. According to the IIE's Open Doors Report, the United States hosted over 1,126,690 international students in 2023-24, accounting for approximately 6% of the total student population. To ensure a smooth transition, it is essential to understand the pivotal tasks that await students, right from when they land in the United States until they land in the university of their choice. Here are some tips and tricks to help students thrive and make the most of the student journey in the United States. The International Student Services Office (ISSO):

This office assists students with immigration matters, including the maintenance of their student status, work authorization (like CPT/OPT), cultural adjustments, and the processing of necessary documents. It also organizes special orientation sessions to familiarize students with the campus, academic setting, and cultural expectations in the United States. The ISSO also helps students with orientations regarding banking and communications in the United States. There are ample opportunities to engage in local events that see both domestic and international students' participation, fostering a sense of community and helping students connect socially in their new

homes. Academic Support Services:

There are various services offered at U.S. campuses to help students achieve academic success through tutoring and writing centers, counseling, and free or reduced public transportation passes. Additionally, workshops on essential topics like citation and referencing, academic writing, research support, goal setting, exam preparation and time management can help students navigate the academic expectations of U.S. universities. It is also vital to seek the guidance of academic counselors, who can help students create and adhere to their education plan. Graduation requirements can differ across majors, so students must schedule regular meetings with their counselor to discuss academic goals and plans. Health Services:

Health services at U.S. universities offer comprehensive care, including medical consultations, mental health counseling, and wellness programs. Students can access vaccinations, urgent care, or therapy sessions on campus. Students must learn about their school's health insurance plan and how to access these services when needed. Counseling services are available on campus to support mental and emotional well-being on U.S. campuses. Students can book individual sessions with counselors or



attend support groups with peers facing similar issues, providing a platform and community for shared challenges. Most colleges offer low-cost or free mental health services on campuses. Housing and Accommodation Office: Between being accepted to an institution and traveling to the university, organizing housing (on or off-campus) is essential. Accommodation offices at U.S. universities assist students in finding on-campus and off-campus housing. They provide re-

sources for dorm assignments, roommate matching, and accessible housing options. Students should contact housing office well in advance upon confirming their offer of admission, as they will often have strict deadlines. Student Organizations and Cultural Clubs: Students should consider stepping outside their comfort zone and join organizations and clubs on campus that match their interests. There are a host of clubs varying from academic to cultural to professional.

What Indian PM's first visit to Kuwait in four decades means for diplomacy in Middle East

Prime Minister Narendra Modi's visit to Kuwait this weekend will close the last gap in India's expanded diplomatic engagement with the Gulf region that is so vital to the country's security and prosperity. Modi will be the first prime minister to visit Kuwait in more than four decades. His visit comes soon after the fall of the Assad dynasty in Damascus, whose consequences could involve a radical restructuring of the regional order in the Middle East. When the Iraqi leader Saddam Hussein invaded and occupied Kuwait in August 1990, the coalition government in Delhi was so paralysed by the event that it could not bring itself to unambiguously condemn the fact that Saddam Hussein had sought to wipe out Kuwait as a sovereign nation from the map of the Middle East. It is impossible to escape the parallel with the Indian reluctance to criticise the Soviet occupation of Afghanistan in 1979, and the Russian invasion of Ukraine in 2022.

Then, as now, there was little internal criticism of the government's refusal to condemn Saddam Hussein's unacceptable aggression by India's political class or the foreign policy elite. Many arguments were offered to suggest that Saddam Hussein was "provoked" or "trapped" into invading Kuwait — somewhat similar to the argument that Brezhnev had no option but to send troops to Afghanistan and Putin was provoked to attack Ukraine. To be sure, as a post-colonial nation, India is deeply committed to the inviolability of territorial sovereignty as the core principle of international relations. Delhi was reluctant to condemn these invasions because Saddam Hussein's Iraq and Brezhnev's Soviet Union were, and Vladimir Putin's Russia is a close partner of India. Many countries don't like criticising their partners. India is not alone in finessing the tension between principles and interests. All countries do it. India's problem in 1990 was not about hypocrisy that is endemic in international relations.

Part of the problem was in assessing and dealing with the geopolitical implications and consequences of Saddam Hussein's attempt to annex Kuwait. The Gulf Arabs as well as Egypt and Syria got together to support a massive American expeditionary army to force Saddam Hussein to vacate the occupied territories and restore the sovereignty of Kuwait within a year. Another element of India's problem was its well-established affinity with Ba'athist leaders like Saddam Hussein in the Middle East. Hafez al Assad and his son Bashar are part of that Arab tradition as well. In the second half of the 20th century, Delhi was comfortable with the radical nationalist Arab Republics that espoused pan-Arabism, socialism, secularism, anti-imperialism, and anti-Zionism. But the Ba'athists tragically turned out to be extremely authoritarian as well.

Despite much goodwill for India in the conservative Gulf monarchies and the growing energy imports and labour exports, Delhi tended to view them through the prism of Pakistan and struggled to develop a positive engagement strategy. The relationship with Kuwait, unsurprisingly, was a casualty from India's Iraq policy during 1990-91. It was well into the 2000s, when high level visits between Kuwait and India resumed. After Prime Min-

ister Indira Gandhi's visit to Kuwait in 1981, Vice President Hamid Ansari's visit to Kuwait in 2009 was the highest visit. Even as the Gulf's energy, economic, and security salience grew in the 21st century, the region remained low on India's diplomatic priorities. During the UPA's decade-long rule, Prime Minister Manmohan Singh visited three Gulf countries one time each — Oman, Qatar, and Saudi Arabia. The Modi years have seen a definitive change. The PM has visited the region frequently — seven times to the UAE, two times each to Qatar and Saudi Arabia, and once to Bahrain and Oman. His travels to Kuwait this weekend closes the circle on this comprehensive engagement. The past few months have seen preparations for Modi's visit with the exchange of visits by the two foreign ministers setting the stage for the PM's travel. High-level visits are only one metric of the engagement between any two nations. What we have seen in the last decade is the qualitative transformation in ties between India and the Gulf monarchies — from strong personal rapport between the PM and the Gulf rulers to the intensity of commercial engagement and from security partnerships to connectivity projects. The Arab Gulf today has emerged as one of the highest strategic priorities for Delhi. Few other relations of India have transformed as dramatically as Delhi's ties with the Arab Gulf nations over the last decade. It is entirely accidental that the PM's visit to Kuwait comes days after the swift collapse of the last Ba'athist ruler in Syria. If India's ties with Kuwait were troubled by Delhi's dalliance with the Ba'athists, the fall of the Assad dynasty marks the long overdue political booster shot for India's relations with Kuwait. The downfall of Assad also underlines the tragedy of Ba'athist republics that turned into horrible dictatorships in which the security services brutalised the populations. The monarchies,



which were once reviled by progressives around the world, have turned out to be less repressive than the Republics in the Middle East. Some of them, including Saudi Arabia and the United Arab Emirates, are now undertaking significant reform that seeks to promote religious moderation, social modernisation, and economic transition away from oil revenues. On all these counts, the Arab Gulf is a natural partner for India. Meanwhile, Pakistan has ceased to be a complicating factor in Delhi's relations with the Arab monarchies that now attach higher weight to ties with India. India's partnership with the moderate Arab states — including Egypt, the Gulf, Jordan, and Morocco — acquires a new importance amidst the scramble for post-Assad Syria and the inevitable reordering of the Middle East. Deeper engagement with the moderate Arab states demands better appreciation of their core concerns in Delhi. This in turn will involve discarding many of the old Indian premises about the region. Delhi also needs a clear

assessment of the hierarchy of contradictions between the moderate Arab states and the non-Arab powers of the region — Iran, Israel, and Turkey. The moderate Arab states have no desire to restore the Ottoman imperial hegemony over their lands or acquiesce in Persian claims for regional primacy. Nor do they want radical Islamist republicans to replace the Ba'athist Republics and sow regional chaos. They deeply resent Israel's refusal to accommodate the Palestinian concerns.

A more flexible Israel could make it easier for the moderate Arab states to build cooperation with the Jewish state in stabilising the Middle East. Having bet on hopes for positive ties between Israel and moderate Arab states in the form of the Abraham Accords, India ought to nudge Tel Aviv in the direction of accommodation. Modi's visit to Kuwait, then, must be seen as an important first step in upping India's game in a Middle East poised for deep structural change.

The ethical and security implications of genetic engineering

The rapid development of genetic engineering technologies has created multiple opportunities for treating genetic diseases and improving human health. However, genetic engineering technology poses ethical, societal, and security challenges. This brief explores these risks, focusing on those related to genetically modified organisms (GMOs) and the revival of ideologies that consider some races to be "more suitable" than others. The brief also discusses security concerns, including the potential for biological warfare and bioterrorism. It underlines the necessity for comprehensive global governance to ensure the responsible and ethical use of genetic engineering technologies to mitigate risks and maximise benefits. Biotechnology is making contributions to science, society, and security by promoting healthcare advancements and food security. The dual-use nature of biotechnology, however, has led to issues such as the development of narcotics and biological weapons. Similarly of dual use is genetic en-

gineering, most commonly referring to Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) technology that evolved from Zinc Finger Nucleases (ZFN) and Transcription Activator-Like Effector Nucleases (TALENs). In the past few years, CRISPR has led to more precise genetic engineering, including through technologies such as base editing, single nucleotide substitutions, prime editing, and 'drag-and-drop' editing for large insertions in Programmable Addition via Site-specific Targeting Elements (PASTE). As the technology is progressing, critics are calling attention to its potential social and ethical implications, including, for instance, the emergence of the notion of designer babies. The controversy surrounding CRISPR technology expanded in early 2015, both in anticipation of and in response to the first reported use of the technology to genetically modify non-viable human embryos. The debate intensified in November 2018 after Chinese researcher He Jiankui confirmed the birth of twin girls whose genomes had been

edited at the early embryo stage to confer resistance to HIV infection. In December 2019, the Nanshan District People's Court in Shenzhen, China, found He and two others guilty of violating Article 336 of the Criminal Law of the People's Republic of China, which prohibits engaging in medical activities without a licence. While this is the only reported case so far of CRISPR being used to modify humans, it underscores the potential risks of genetic engineering and the urgent need for governance to ensure the responsible and ethical use of these technologies.

There are many ethical concerns in the field of biotechnology, particularly genetic engineering. For the purposes of this brief, these concerns are categorised into two areas: the social impact of biotechnology and genetic engineering, and their implications for security and warfare. Further, the brief discusses the impact of emerging technologies, existing governing tools, and ways to address gaps.

10TH ANNUAL DAY 2024-25: "PRATIDWANI - RESONATING THE VOICES OF TIME"

Army Public School, Golconda celebrated its much-awaited 10th Annual Day, "PRATHIDHWANI - Resonating the Voices of Time", with great fervor and enthusiasm. The Chief Guests, Col Kshitij Prakash Badiye, Offg Comdt, Artillery Centre Hyderabad and Offg. Chairman Army Public School Golconda and Mrs Rupali Badiye, graced the occasion along with several distinguished guests, parents, and alumni. The celebrations began with the lighting of the ceremonial lamp, symbolizing the quest for knowledge and wisdom, followed by a melodious performance by the school band The Heart Hackers which resonated with the audience. This was followed by the Annual Report, presented by Mrs. Anitha Karunakaran, who highlighted the school's significant achievements, innovative initiatives, and milestones during the academic year. She expressed her pride in the students' accomplishments and her gratitude to the staff and parents for their unwavering support.

Prize Distribution was a significant part of the event, with students being recognized for their excellence in sports, and co-curricular activities. The Academic Trophy was bagged by Patel House, while Nehru House clinched the Sports Trophy, and Gandhi House secured the CCA Trophy. The announcement of the Overall Trophy bagged by Tilak House added an extra layer of excitement to the celebrations. The highlight of the evening was the cultural extravaganza that revolved around the theme, Prathidwani: Resonating the Voices of Time, which transported the audience on a journey through history as students depicted various civilizations and historical milestones across the world.



The stunning performances, meticulously choreographed and beautifully presented, earned thunderous applause from the audi-

ence. Each presentation reflected the students' dedication and the teachers' hard work in bringing history alive.. The Annual Day

2024-25 concluded on a high note, leaving behind unforgettable memories and a sense of pride in the school's accomplishments.

First Priority to Women's Safety



Rachakonda CP Sudheer Babu

Hyderabad: Rachakonda Commissioner Sudheer Babu, on Saturday, appreciated the swift resolution of 25 chain-snatching cases registered this year in the LB Nagar Zone under the Commissionerate.

The cases were solved with the cooperation of the Crime staff, CCS LB Nagar, and IT Cell. He honored 18 personnel involved in solving these cases with commendation certificates at the Rachakonda Commissionerate.

Speaking on the occasion, CP Sudheer Babu stated that the Commissionerate is working tirelessly to maintain law and order without compromise, giving utmost priority to women's safety.

He emphasized that the extensive use of CCTV cameras in the jurisdiction has been instrumental in solving cases effectively.

The Commissioner warned that those committing crimes against women or engaging in chain snatching will not be spared under any circumstances.

LB Nagar DCP Praveen Kumar IPS, SOT DCP Muralidhar, SOT Additional DCP Nandyala Narasimha Reddy, Vanasthalipuram ACP Kashireddy, and other officers participated in the event.

Farmer Welfare and Rural Development Were Chaudhary Om Prakash Chautala's Core Priorities" – Vice President Dhankhar



Chandigarh (JAG MOHAN THAKEN), December 21 – Five-time former Haryana Chief Minister, Om Prakash Chautala, was cremated on Saturday with full state honours in Teja Khera village in his native Sirsa district. Chautala died in Gurugram on Friday. He was 89. Vice President Jagdeep Dhankhar, Union Minister Manohar Lal Khattar, Haryana Chief Minister Nayab Singh Saini, Shiromani Akali Dal leader Sukhbir Singh Badal and other prominent leaders reached Teja Khera to attend the last rites of the departed leader. Vice-President Dhankhar on Saturday paid homage to former Haryana Chief Minister, Late Chaudhary Om Prakash Chautala at Teja Khera Sirsa, reflecting on his enduring bond with the veteran leader and his family. Shri Jagdeep Dhankhar, along with his wife Dr. Sudesh Dhankhar, visited Teja Kheda Farm in Chautala, Sirsa district, on Saturday to attend the last rites of former C M Chautala. The couple paid their respects to the late leader's mortal remains.

During the ceremony, Vice President Shri Dhankhar fondly reflected on his personal relationship with Chaudhary Om Prakash Chautala. "I had spoken to Chaudhary Sahab only five days ago. He expressed concern about my health, which deeply touched me," he said. He continued, "It was 29 years ago, with the blessings of Tau Devi Lal, that Chaudhary Sahab took

me under his wing, helped me get elected to the 9th Lok Sabha, and appointed me as a Minister. I will never forget his support. I always sought his blessings, especially when I became Governor." Recalling a personal memory, Shri Dhankhar shared how Chaudhary Om Prakash Chautala, despite his prominent political career, always remained dedicated to the welfare of farmers and rural development. "Chaudhary Sahab's legacy is not defined by his political titles, but by his unwavering commitment to farmers and villages. He believed that the country's progress and peace are inherently tied to rural development and agriculture," Shri Dhankhar said.

The Vice President further reflected on Chaudhary Om Prakash Chautala's kindness, remembering how, during a visit after his appointment as Governor, the late leader insisted on providing special laddus to soothe his sore throat. "His concern for others was extraordinary," Dhankhar recalled. Praising the late leader's unwavering dedication to rural welfare, Dhankhar highlighted his fearless, strong character and steadfast commitment to his ideals. "Chaudhary Sahab was a man of strong convictions, always focused on rural development. The challenges he faced and the philosophical approach he adopted remain highly relevant even today," said the Vice President. Concluding his tribute, Shri Dhankhar said, "Chaudhary Om

Prakash Chautala taught us that the road to progress is not without obstacles, and often, our achievements may not be fully recognized. But the goal is clear—uplifting farmers and rural communities. The dream of a developed India will emerge from the fields of farmers and rural development. His tireless service to farmers, especially his fight for loan waivers, is a testament to his unwavering dedication. He showed us that the interests of farmers are the interests of the nation, and their progress is key to the country's prosperity. Union Minister for Power, Housing, and Urban Affairs and

former Chief Minister of Haryana, Manohar Lal Khattar also attended the last rites of Chaudhary Om Prakash Chautala at Teja Khera Farm in Sirsa district on Saturday, and paid respects on behalf of Prime Minister, Narendra Modi. He offered a floral wreath before paying last respects to the departed soul. While paying his respects, Union Minister Khattar said that Chaudhary Om Prakash Chautala's political career was devoted to serving the people. He particularly raised his voice for the welfare of the farmers. His demise is an irreparable loss to the politics of both the nation and the state.

Quick complaint and swift action by cops save Rs 4.6 lakh of cybercrime victim

Hyderabad: An immediate complaint by a cybercrime victim and swift action by a woman Cyber Warrior of SR Nagar police station, helped in saving Rs 4.6 lakh falling into the hands of cyber fraudsters. A 45-year-old businessman from the city attracted by an advertisement regarding solar panels posted by cyber fraudsters on social media, contacted for details.

Police said the complainant who was interested in buying the solar panels had

transferred Rs 5 lakh into two bank accounts shared by the cyber fraudsters. However, after receiving the money, the fraudsters stopped responding to the complainant. Realising that he was cheated, the victim approached the SR Nagar police station and lodged a complaint. At the police station, Woman Head Constable Dheena promptly made an NCRP entry and contacted the beneficiary banks, as well as their nodal officers and bank managers, to block the funds.



State Bank of India, Hyderabad Circle in association with SBI Commercial Clients Group (CCG) has conducted an Exporters' Meet for high value clients on 20th December 2024 at ITC Kakatiya, Begumpet, Hyderabad.

The event was graced by Shri Surender Rana, Deputy Managing Director (Retail-ASF); Shri Ravi Ranjan, Deputy Managing Director, Global Markets and top executives

from Corporate Office of SBI. Chief General Manager, Hyderabad Circle Shri Rajesh Kumar welcomed the Customers, dignitaries & top executives. In his welcome address, he stressed on the importance of exports for growth of our economy and highlighted the contribution of Telangana State to economy particularly in export sector in key areas like Pharmaceuticals, IT & ITES, Food processing. He also emphasized that this Meet is

synergy between high value corporates and MSME clients and provides a unique platform for collaboration.

About 120 high value exporters of Telangana attended the event. The top officials from major organizations such as FIEO, ECGC, STPI also participated in the event. The major highlights of the event include address by Shri Surender Rana, Deputy Managing Director, Shri Ravi Ranjan, Deputy

Managing Director, Global Markets and a presentation on Forex products by Global Markets team.

Shri Surender Rana, Deputy Managing Director, (Retail-ASF) in his address to customers emphasized the need for growth of manufacturing sector to achieve ambitious target set by Govt. of India of USD 2 trillion exports by 2030 and requested the contribution from all stakeholders to achieve this ambitious target. He also stressed that the exporters have a big role to play in growth of manufacturing sector for sustainable growth in the country's GDP. Further, he mentioned that Govt. of India is making huge investments in infrastructure and is also focusing on increasing the exports in emerging sectors like defense and semiconductors which would create the ecosystem for achieving the targeted growth in exports. He welcomed any feedback and suggestions from the customers for strengthening partnership and growth in exports.

Shri Ravi Ranjan, Deputy Managing Director, Global Markets, explained the role played by Global Markets in providing various banking solutions to exporters. He was appreciative of the role of the State of Telangana in its contribution to country's exports and also highlighted that the growth of Telangana State had outpaced the national GDP growth. This was followed by interactive session wherein the exporters sought various clarifications on the bank's products and processes. The exporters appreciated Bank's efforts in organizing such a meet and also in addressing their queries & concerns. The event concluded with a vote of thanks by Smt Vidhya Raja, General Manager, CCGRO who thanked all the customers & dignitaries for their continued patronage to the Bank and also for utilizing this platform for collaboration.

AIIMS devises new breast cancer detection tool: How AI and ASHA workers work together to map risk factors, help in early diagnosis

ASHA workers, the backbone of India's primary healthcare system, will soon add another crucial task to their house calls. As the first point of contact for healthcare in remote villages and towns, these workers already handle tasks like vaccination and health reviews. Now, they will also conduct detailed conversations with families about their personal health status and family history of diseases, guided by a formatted questionnaire. The goal is to collect vital data that can help AI tools identify breast cancer risk factors and patterns specific to Indian women. This initiative is part of an ambitious project by AIIMS Delhi aimed at improving early breast cancer detection and reducing mortality, which remains among the highest globally.

The project is one of the first under the government's flagship scheme to establish three Centres of Excellence (CoE) in AI, focusing on healthcare, agriculture, and sustainable cities. AIIMS has secured ₹300 crore in funding to lead the healthcare CoE in partnership with IIT Delhi, working on various national programs to address non-communicable diseases. "Unfortunately, the majority of breast cancer cases that we're picking up in India are still stage three or stage four, which are difficult to treat. AI will help us on two fronts. First, it can interpret the data pool and identify which women may need mammograms — specialised X-rays to check for signs of breast cancer — while reassuring others with low-risk profiles. This can facilitate early screening," says Dr Krithika Rangarajan, associate professor of radiology, Institute-Rotary Cancer Hospital (IRCH), AIIMS, Delhi. Second, the AI tool can read mammograms correctly, picking up even the smallest signs of cancer. "This allows advanced breast cancer screening in remote areas where there is a shortage of trained radiologists. Otherwise, a lot of time is lost in diagnosis," she adds.

How will the AI model work?

The AI model will first scan a five-year database of women tested for breast cancer at AIIMS, NCI Jhajjar and PGI Chandigarh regardless of whether they were found clean or had developed cancer. Analysing them, it will predict the risk of developing breast cancer by combining a patient's general test results with their lifestyle and family history data. This would then allow doctors to sift those at higher risk and recommend interventions. The first part of the study involves identifying Indian risk factors for breast cancer. "For this, we will be using ASHA workers to collect the data, which will be fed into the AI tool. It will extract common risk factors and then recommend mammograms for women it thinks are cancer-prone. It will also help codify what constitutes a no-risk category," says Dr Rangarajan. The second part will include AI's analysis of mammography based on the risk factors found in participants. "The AI-trained systems can learn to recognise complex features in mammograms that indicate cancer. So no radiologist will be required on-site. AI can, therefore, help reduce the amount of manual work involved in screening, which can lower costs," says Dr Rangarajan. Mammography is a very complex modality and a radiologist requires many years of experience to be able to read it correctly. "Can we now, with the AI assistance,

allow a relatively less trained person to read the mammography? That's what we are working on as it would enable a larger number of women to get mammograms," she says. According to Globocan, breast cancer comprises 10.6 per cent of all cancer deaths in the country and this facility could certainly reduce those numbers.

When will a large-scale rollout be possible?

The pilot study has a certain set of questions, which will get updated and refined over time. "Eventually the goal is to bring such a screening tool to the national health programme and integrate it in the workflow of all ASHA workers," says Dr Rangarajan. In studies and trials globally, AI has been able to analyse genetic and molecular data to create even personalised treatment strategies for individual patients. "There will be several components of developing these tools, clinical studies and implementation research over the next four years," says Dr Rangarajan. If the AI tool is found to be effective, then an economic assessment will be conducted on the cost required to scale this up pan-India and take it up for licensing. They can then be brought to the market through a company or NGO. Data



protection What about data protection, considering they cover a huge swathe of the population? "Data security will be our top priority and we will be building a mechanism so that our data is secured and encrypted.

We will also begin the study without disrupting the way the patient is treated. So you are using AI for your analysis. There will be guardrails as well as both human and expert oversight," assures Dr Rangarajan.

Improving PPP strategies for municipal infrastructure

Public-private partnerships (PPPs) have had a long history globally and in India. While the Indian government supports this partnership model, PPPs have experienced little success in delivering municipal infrastructure and services. This is despite the demands of a rapidly growing urban population for local services, which the municipal bodies are often unequipped to deliver. Indeed, in many cities across the world, there is an emerging push for 're-municipalisation', or the return of vital services to local authorities. The experience of these cities could provide valuable lessons to India.

The World Bank defines PPPs as a "mechanism for government to procure and implement public infrastructure and/or services using resources and expertise of the private sector." The PPP model rests on the acknowledgement of the specific strengths of the two parties—the public and the private sectors—and recognises that the two must share the risks and responsibilities in implementing and providing the intended infrastructure or service. These risks and responsibilities are typically clearly established in a PPP agreement and are backed by a legal and institutional framework and robust governance and monitoring mechanisms. Attracting private investment and involvement in such projects, however, is not an easy task. For the Indian government, the key prerequisite "is to lay down a policy framework that assures a fair return for investors provided they attain reasonable levels of efficiency, and protects the interests of users, especially the poor."

For decades now, PPPs have been a recommended model for providing public infrastructure and services in many countries,



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including India. This is primarily because the PPP model has introduced innovation, greater investment and efficiency, and lower costs. Examples are PPPs for the water sector in Chengdu, Chongqing, and Yunnan in China, for municipal solid waste management in Sunyani, Ghana, and for road development in India's northeast. In recent years, certain negative aspects of the model have surfaced in many countries, particularly in municipal services. These include cost and

time overruns, deficits in service delivery, and tariff hikes. This brief assesses the evolution and advantages of the PPP model globally and in India, as well as the current criticisms and consequent calls for re-municipalisation. This concept is also known as 'in-sourcing' or 'de-privatisation', and is understood as the return of vital municipal services to the municipality and the provision of such services by the local governance body rather than the private sector.

On last call with families, some of 11 who died in Georgia spoke of blackout

A 26-year-old whose last contact with his family was at the stroke of midnight on December 13-14, when his mother made a video call to wish him on his birthday. A couple who were days away from celebrating their first wedding anniversary. A 45-year-old who left home seven years ago and died without ever meeting the youngest of his three children. The 11 Indians – three of them women – who died in a restaurant in the Georgian ski resort of Gudauri shared an all-too-familiar Punjab story: of hardscrabble lives in a foreign land, of families yearning to meet them. Police in Georgia said bodies of the 11 were found on the second floor 'sleeping area' of a building housing Haveli, an Indian restaurant in Gudauri, 120 km from Georgia's capital of Tbilisi and a popular tourist destination for skiing and snowboarding enthusiasts. Reports indicate that a generator, placed in the closed room occupied by the 11 Indians, was turned on when the power went out, causing a buildup of carbon monoxide.

On Monday, December 16, the Indian Embassy in Tbilisi issued a statement confirming the deaths and said it was "working closely with local authorities to facilitate the prompt repatriation of the mortal remains to India". At Khanna town in Ludhiana district, Sameer Kumar's father Rajesh Kumar, 54, says his 26-year-old son left for Georgia around five months ago to work at the restaurant. "It was Sameer's birthday on December 14 and his mother spoke to him at midnight on December 13 and wished him. He told her there was a heavy snowstorm and a power outage in Gudauri, so they had to arrange gensets. All of them were sleeping in a hall and had shut the door due to the storm," he says. Sameer Kumar, Indian express Sameer Kumar, 26, was a resident of Khanna, a town in Punjab's Ludhiana district. Sameer's brother Gurdeep Kumar, who works at a private firm, said that all of December 14, they kept waiting for his reply to their messages wishing him on his birthday, but it never came. "Calls, messages.. we did everything but all the messages remained unread. The entire day and the night passed, so on December 15, we searched online for the restaurant owner's number – that's how we got to know about the tragedy," he says, adding that the family has contacted the district administration and the embassy officials for help to bring back Sameer's body. "The situation at our home is extremely bad. My mother is in shock. We urge the Government of India to help us so that we can perform my brother's last rites." Sameer Kumar, Georgia restaurant death, Indian express Sameer Kumar's grieving mother at their home in Khanna town. Over 150 km away, at Mehma village in Punjab's Patiala district, Amrinder Kaur's family is mourning a double loss. Amrinder Kaur, 32, and her sister-in-law Maninder Kaur both died in the tragedy. Amrinder's cousin Sukhwinder Singh told The Indian Express that she would call her father on phone almost every day. "She last called on December 12. She told her father that there was a snowstorm in the area and a power outage," he says. Amrinder, who dropped out after Class 12, went to

Georgia in 2015 to support her father, a small farmer who sold his land to arrange for money to send her abroad. Gagandeep Singh, Georgia restaurant death, Indian express Victims Ravinder Singh and his wife Gurwinder Kaur, pictured during their marriage ceremony. After reaching Georgia, Amrinder got her brother Jatinder to follow her to the country. But in 2018, Jatinder moved to South Korea, leaving behind his wife Maninder, who worked with Amrinder, in Georgia. "Maninder and Jatinder married around two years ago. They were all planning to come to India next year," Sukhwinder says, adding that the family is trying to contact the Indian Embassy in Tbilisi for help to bring the bodies of Amrinder and Maninder back. Georgia restaurant death, Indian express Victims Amrinder Kaur (left) and Maninder Kaur were found dead in a restaurant in Georgia. (A couple from Punjab's Sunam district, Ravinder Singh, 32, and Gurwinder Kaur, in her early thirties, also died at the restaurant. Speaking to The Indian Express, Ravinder's elder brother Pardeep Singh said his brother moved to Georgia last year and the couple were to celebrate their first marriage anniversary on December 18. "Ravinder first went to Tbilisi in March and then moved to Gudauri. He was the youngest of us three brothers. He did his graduation and worked as a carpenter before moving to Georgia," Pardeep Singh said. At his one-room house in Ghal Kalan village of Moga in Punjab, Gurmukh Singh, 50, recalls that his 24-year-old son Gagandeep Singh would often show him the snow-clad Georgian peaks on video calls. On December 12, too, Gagandeep spoke of "baraf (snow)". Gagandeep Singh, Georgia restaurant death, Indian express Gagandeep Singh, 24, was a resident of Ghal Kalan village in Moga, Punjab. (Special Arrangement)

"Oh bas kehenda si, daddy ethe baraf hi baraf hai (He used to keep saying that it's all snow here). I tried to call him again after that but his phone was switched off. I have no idea what happened there," says Gurmukh, a labourer who had taken a loan of Rs 5 lakh to send Gagandeep to Georgia four months ago. "He was my only support. We used to speak every 3-4 days as he knew I was all alone. God has been unfair to me." Gagandeep's father, Georgia restaurant death, Punjab news, Indian express Gagandeep's father, Gurmukh Singh, 50, is now the sole survivor in the family. (Special Arrangement) Gurmukh's wife and a younger son died a few years ago. "My eldest son lives separately. I am now left all alone in this house to grieve for my son," says Gurmukh, sitting in his one-room house. It was only three months ago that Harwinder Singh, 26, left for Georgia, leaving behind his father Bhagwan Singh and sister in their village Khokhar Khurd in Mansa district. Georgia restaurant deaths, Punjab news, Indian express Harwinder Singh, 26, was a resident of Khokhar Khurd village in Punjab's Mansa district. (Special Arrangement) With the family drowning under debts, Harwinder hoped to repay some of those, says Bhagwan. "We own nine acres of land. But the land is barren and the crop yields are poor. Besides a loan of Rs 22 lakh for the land, we took an-



other Rs 3 lakh from the commission agent. I sent my son to Georgia, spending Rs 4 lakh, hoping he would earn and I can get my daughter married off. He had a lot of plans. After some time in Georgia, he hoped to pay the agents to go to the US," he says, adding that he does not have enough money to bring his son's body back to India. Sandeep Singh, Georgia restaurant death, Indian express Victim Sandeep Singh. Sandeep Singh of Tarn Taran leaves behind his father, wife and daughter. "What do we do now? My daughter is only five years old. We were dependent on my husband. We have no other source of income. He left home to earn for us; we didn't think he would die and never come back," says Sandeep's wife Baljit Kaur. His father Balwant Singh says, "We mortgaged our house to send Sandeep, first to Dubai and then, six months ago, to Georgia. We have a debt of Rs 6 lakh." Sandeep Singh, Georgia restaurant death, Indian express Sandeep Singh's father, wife and daughter. (Special Arrangement) It was in 2017 that Ravinder Kumar, 45, left his home in Abadi Kot Ram Das in Jalandhar, Punjab, and his family – mother, wife and three children, who he hasn't seen in over seven years. During this long period of separation,

Kumar worked tirelessly abroad, driven by the dream of securing a better future for his family back in India. Initially, he moved to Dubai, where he spent five years, but after falling victim to a fraudulent travel agent and burdened by debt, he moved to Georgia, where he worked as a chef. Ravinder Kumar, Georgia restaurant deaths, Punjab news, Indian express The solo photo of Ravinder Kumar in the snow was taken on the Friday before the tragedy. (The family's last video call with Kumar was on December 13, when he told them about a snowstorm raging outside. He promised to call again the next morning, a call that would never come. "Papa had two phones, and he was sitting on a sofa while talking to us on Friday night. On the other phone, he was telling someone that a very strong snowstorm had hit the area, uprooting all the poles and causing a blackout," said Harshita Pal, 11, Kumar's eldest daughter who was three when her father left home. "Papa always said he would come to take us along some day," says Harshita, who was three years old when her father left. Georgia restaurant death, Punjab news, Indian express Ravinder Kumar, 45, had not met his family in over seven years. Seen here are his wife and children at their house in Abadi Kot Ram Das, in Punjab's Jalandhar.

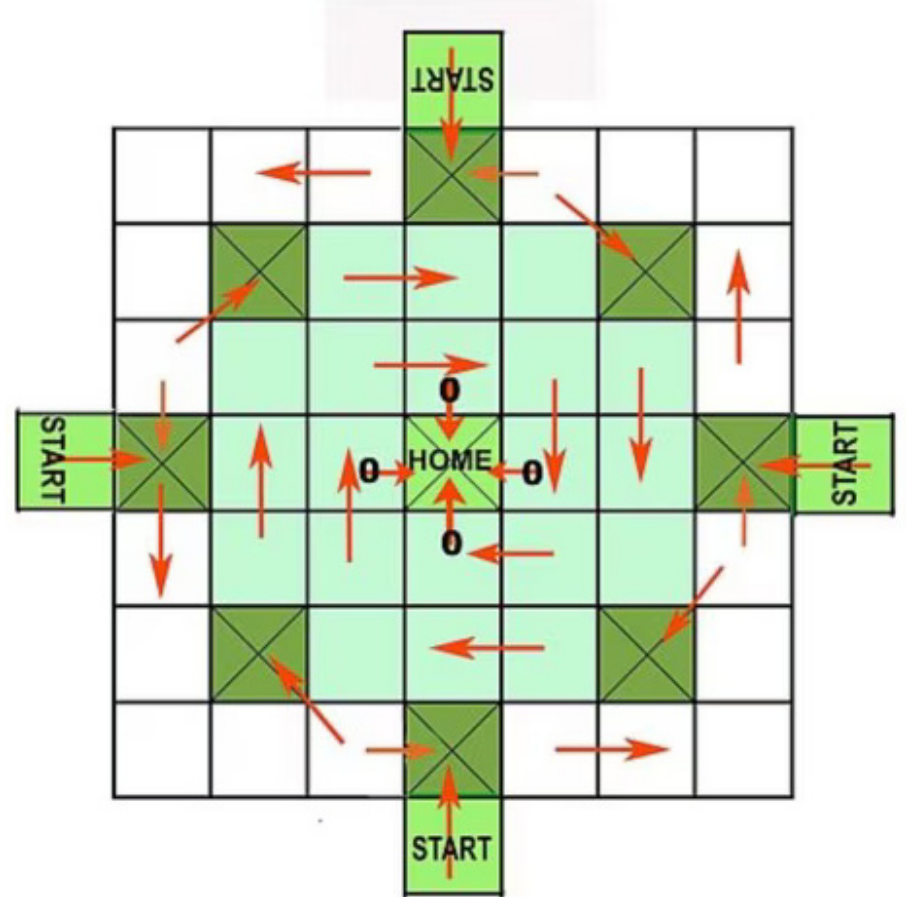
Chaturanga to checkmate: How chess spread from India to the world

On December 12, India witnessed a moment that will be etched in history. Grandmaster Gukesh Dommaraju became the youngest-ever Chess champion. His triumph came after an intense 14th-round battle, where he defeated reigning champion Ding Liren. As social media erupted with celebrations and congratulatory messages, one comment reverberated across platforms: the crown was returning to the birthplace of chess. This narrative is far from new. A 1929 report in the British Chess Magazine, cited in Daniel King's book Sultan Khan, called India "the traditional birthplace of chess." Indian chessmaster Pravin Thipsay, reflects upon his youth as he says, "When I played in the second National Junior in Calcutta, chess was everywhere — on the streets, in the bustling nukkads. You didn't need an invitation to join; you simply sat down and played. If you lost, you got up and walked away. Chess was always a game for everyone." As Thipsay put it, "In the words of one of the greatest chessmasters of all time, Siegbert Tarrasch, 'Chess, like love, like music, has the power to make men happy.'" Archaeological excavations have revealed that among the many achievements of the urban civilisations of Mohenjodaro and Harappa, flourishing around 5,000 years ago in the fertile Indus Valley (now in modern-day Pakistan), were game pieces used in activities akin to what we now call board games. Interestingly, these pieces could be played on various surfaces, including directly on the ground.

The earliest known mention of a board game in Indian literature appears in Harshacharita, a biography of King Harsha written by Ba?a around 625 CE. The text states, "Only ashtapadas teach the positions of the chaturanga," linking chaturanga, the Sanskrit term for "four limbs" (chatur for four and anga for limb) to ashtapada, an ancient game which was played on an 8x8 board. According to Averbakh, the evolution of chess likely followed a series of stages. It began with ashtapada. Over time, simple game pieces were replaced by miniature chariots, and the game shifted to a military-themed format centered on battles involving these chariots. This eventually led to Chaturanga, which introduced the four arms of an army — chariots, cavalry, elephants, and infantry — and transformed into a formalised strategy game. The game further evolved into a two-player contest with a crucial rule: capturing the opponent's ruler was necessary to win. Finally, the use of dice was eliminated, making the game entirely skill-based. The game of Ashtapada (Source: Wikimedia Commons) The game of Ashtapada Other texts, like the epic Mahabharata, describe dice games where characters such as Nala and Yudhishtira gamble away their kingdoms. "One of the biggest misconceptions about chess," says Thipsay, "was its association with gambling, which led to its prohibition in parts of North India. In reality, it was a strategic warfare game, designed to teach military tactics to princes and kings." By the 10th century, Arabic historian al-Mas'udi documented chess in India, describing elaborate pieces and the high stakes of wagering wealth — or even limbs — during games.

British chess historian HJR Murray, in

his pioneering work A History of Chess, explains that the game was first adopted by the Persians, passed on to the Muslim world, and eventually introduced to Christian Europe. Chatrang, or Shatrang as it was called in Persia, was thus a modified version of the chaturanga. Persian and Arabic traditions also credit India as the birthplace of chess. An illustration from a Persian manuscript "A treatise on chess" (Source: Wikimedia Commons) An illustration from a Persian manuscript "A treatise on chess" (Source: Wikipedia) Interestingly, American writer David Shenk, in The Immortal Game: A History of Chess, suggests that chess may have even originated as an older import from China. He argues that the game likely evolved along the Silk Road, which facilitated not only the exchange of goods such as cinnamon, pepper, and silk but also cultural practices and pastimes. However, chaturanga and chatrang marked a departure from previous board games in the region, as "these games contained no dice or other instruments of chance," Shenk notes. Similar games continue to be played across Asia, including the Burmese sittnyin, the Malay chator, the Tibetan chandaraki, the Chinese siang k'i, the Korean tjang keui, and the Japanese sho-gi. The renaissance of Chess The second half of the 15th century was a transformative period, marked by the invention of printing and the dawn of the age of geographical discoveries. This era sparked a surge of interest in history, science, and art, paving the way for the Renaissance in Western Europe. It was also the time when chess underwent a significant reform, notably enhancing the movement of the bishop and, more importantly, the queen. The rule changes transformed chess into a much more dynamic and complex game, making it more engaging. Murray observes, "It is quite possible that the reform of chess saved the game." Shenk adds, "Whether by accident or design, the Renaissance itself was reflected in the new, more engaging format of the game, which quickly became the universal standard. Modern chess was born." Scholars such as Averbakh concur that the new rules were likely invented in Spain. Spanish historian Ricardo Calvo identified a group of young poets from Valencia who wrote the Scachs d'Amor (Chess of Love), the first known description of the revamped game. In Spain, the game became known as "ajedrez de la dama." In the Indian context, too, the folk game of chess underwent a rapid transformation. After the 1857 uprising, the British government took direct control replacing the East India Company. By the mid-1880s, thousands of Indians had earned degrees, all taught in English and influenced by British political ideals. "A by-product of this development was that Western chess became more widespread — at least among this educated class of Indians," observes Daniel King. From around 1850, chess books began to be published in various Indian languages such as Marathi, Bengali, Urdu, and Hindi. Meanwhile, the first Indian newspapers, starting in 1833, regularly featured chess columns, helping to further cement European chess rules. The contrasting tempos of Eastern and Western chess are symbolised in the 1977 film Shatranj Ke Khilari by Satyajit Ray. Set in 1856, the film uses chess to rep-



resent the clash between India's contemplative old ways and the British colonial rule's faster, pragmatic approach. In one scene, the chess players Meer and Mirza are interrupted by a visitor, Nandlal. In 1878, Calcutta hosted the first recorded round-robin chess tournament in India, where British and Indian players competed. "There is also the legend of Moheschunder Bannerjee, a Bengali chess master, renowned for his exceptional skill," added Thipsay. By the early 20th century, tournaments following Western chess rules were becoming more common.

As national consciousness grew, Indians began organising their own tournaments, with the first 'All-India' event held at the Beaman Chess Club in Bombay in 1909. A key milestone came in 1924 when Vinayak Kashinath Khadiikar became the first Indian to compete in the British Chess Championship. Despite losing his first four games, Khadiikar went on to defeat notable opponents, including RHV Scott, the 1920 British champion. His performance, despite early setbacks, was a major achievement for Indian chess on the global stage. Born in 1905 into a poor Muslim family in the village of Mitha Tiwana (now in Pakistan), Sultan Khan's chess journey began at age nine. He learned the game from his father. The version he played was distinct from the Western variant, featuring Indian rules and local variations. In 1925, the Maharaja of Patiala, Sir Bhupinder Singh, hosted an annual chess tournament at his palace in Chail, near Shimla. This event was pivotal for Indian chess. Borislav Kostic, a well-known Yugoslav master, participated, and the performance of Indian players like N.R. Joshi and Kishan Lal Sarada against him indicated that Indian players were ready for international competition. This led Sultan Khan's patron, Sir Umar Hayat Khan, to hire Lal as

a coach. Colonel Nawab Malik Sir Umar Hayat Khan, an avid chess player and the landowner of Mitha Tiwana, recognised Sultan Khan's talent when Sultan approached him seeking work. Khan welcomed him into his household, trained him in Western chess, supported him financially, and facilitated his journey to Europe. As Daniel King asserts, "Sultan Khan would be unknown in the West, or even outside the Punjab, if it weren't for his patron — and master." Sultan Khan's first recorded tournament result came in 1926 at the YMCA Championship in Shimla, where he triumphed. In 1929, Khan arrived in London, marking the start of his international journey. At the time, José Raúl Capablanca, one of the greatest Cuban-born chess players, was in the midst of his reign. Under Sir Umar's patronage, Khan faced Capablanca in a high-profile match. Although Khan faltered in the opening, he emerged victorious.

Khan's victory in the London Gambit Tournament, held later in June of that year, further solidified his reputation. Due to his limited English, a certain Mr Bosworth Smith spoke on his behalf, stating, "This victory is a great gain for India, and it opens the door for all members of the Empire." By 1932, Sultan Khan was not the only member of Sir Umar's household making waves in the chess world. 18-year-old Miss Fatima, the youngest player of the tournament, created a stir. Raised in strict purdah, Fatima moved to England with Sir Umar and began playing chess. While Sultan Khan had already made his mark, Fatima added an intriguing element to the British chess scene. However, with the death of Sir Umar, Sultan Khan's engagement with competitive chess in Europe became impossible. He lacked the means to support himself or make the journey back abroad. Moreover, after World War II, Europe lay in economic ruins. "