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Indian students safe in Kyrgyzstan, asserts Telugu student coordinator

Hyderabad: Amidst reports of escalating tension and attacks on foreigners in Kyrgyzstan's capital city Bishkek, scores of Indian students living in private accommodations were shifted to hostels run by Indian consultancies. "All the Indian students are safe and none of them is harmed. Parents of students need not worry about the safety of their children" Ramakrishna, coordinator of Indian students at Kyrgyz State Medical Academy told Telangana Today over phone from Bishkek on Saturday.

Students whom this reporter contacted maintained that after a brawl between local students and Bangladeshis and Egptians, the local students began targetting the foreign students. "Initially, they attacked all foreign students as they believed that Kyrgyz authorities were lenient towards foreigners", they said on the condition of anonymity. However, later the local students began enquiring about the nationality of the students and by and large

did not target the Indians. There are over 2000 students from Telangana and Andhra Pradesh purusing their medical courses. With tension escalating after the videos of the clashes going viral on social media, law enforcement authorities moved in and began guarding the places where Indian students were living, Ramakrishna said. He pointed out that those who were unable to move to these hostels, were being provided with groceries and essential items to ensure that they don't need to get out of the buildings till the situation was brought under control. While the management of medical universities maintained that no Indians were harmed, some students claimed that their peers were attacked but only sustained minor injuries."The fight was between the locals and some Pakistanis and Egyptians. We are doing everything to ensure the safety of our students. We have police protection near our hostels and the locals are also supporting us," said Ramakrishna. He had



also released a video statement assuring the parents about the safety of the students from Telangana and Andhra

Pradesh.Currently, around 15,000 Indian students are pursuing MBBS degrees in Kyrgyzstan including 2,000 from Telugu states

Railways and RTC make good revenue during Lok Sabha election period



Hyderabad: The recently concluded Lok Sabha elections seem to have yielded good revenue to the public transport sector. In view of the heavy passenger traffic during the elections, South Central Railway (SCR) operated 60 special trains between the two Telugu states from May 9 and May 15. These special trains recorded more than 100 per cent occupancy. Special trains were run from the twin cities to Kakinada, Visakhapatnam, Narsapur, Nagarsol, Machilipatnam and other places. In addition to special trains, addi-

tional coaches were arranged for regular trains during the election. As per reports, from May 9 to 12, about 4.3 lakh passengers travelled in general compartments from railway stations like Secunderabad, Hyderabad, Kacheguda, Lingampalli etc., within the twin cities. An average of 1.05 lakh people travelled in general coaches from the twin cities every day. This is about 52 per cent more than the daily average of 68,800 unreserved passengers, railway officials said.

Special trains were also operated from

twin cities to Khurda Road, Berhampur, Bengaluru, Sambalpur, Danapur, Gorakhpur, Agartala, Raxal, Udaipur, Cuttack, Santragachi, Kollam, Jaipur, Rajkot etc. About 41 additional coaches with AC-3 tier, sleeper class, general second class coaches and 40 daily trains have been attached to meet the additional traffic of passengers put on the waiting list. The TSRTC operated around 3,500 buses during the election period. Of this, 1,000 buses were operted to the neighbouring Andhra

Pradesh state. Apart from main bus stands like JBS, MGBS, special buses were operated from LB Nagar, Uppal, Kukatpally, Miyapur, Aramghar etc. According to RTC officials, about 54 lakh people traveled in buses on May 13, fetching a revenue of Rs 24.2 crore to the corporation. Of this, while Rs 15 crore was earned from direct sale of tickets from general public, nearly Rs 9 crore worth 'Zero Tickets' were issued under the 'Mahalakshmi' free travel for women scheme. Government has to reimburse this

Rachakonda police arrest two for providing fake certificates to job aspirants

Hyderabad: The Rachakonda Special Operations Team on Saturday nabbed two persons who were allegedly providing fake educational certificates to job aspirants after collecting huge money from them.

On a tip off, the SOT team apprehended Mohammed Abrar Hussain (45) and Syed Insnain Mohammed (28), both from Mehdipatnam. They were getting the certificates from one Ram Singh, native of Uttar Pradesh.

"Hussain and Syed were selling the certificates to job aspirants who were planning to go abroad and collected between Rs.30,000 and Rs.40,000 from the buyers," said DCP – SOT, K Muralidhar. Hussain was previously arrested in a similar case. The police seized a laptop, mobile phones and fake certificates from them.

Development has bigger say than religion on number of children a mother has

Once again, the Muslim population has become a point of discussion. Last month, Prime Minister Narendra Modi referred to Muslims in India as "those who have a large number of children". A Data Point published on April 23 showed that the fertility rate of Muslims was 2.36 in 2019-21, much closer to the replacement level. The fertility rate is the average number of children a woman is expected to have in her lifetime. A rate of 2.1 (the 'replacement level') means that the population is stable. This month, the Economic Advisory Council to the Prime Minister concluded that while the share of Muslims in the total population increased by 43.15% between 1950 and 2015, the share of Hindus decreased by 7.82%. Data show that the number of children one chooses to have has more to do with socio-economic parameters than religion. Government data show that educating girls and not marrying them off early, creating more awareness about family planning, and ensuring access to family planning measures help re-

The fertility rate of Muslim women varies according to region. For instance, the fertility rate of Muslim women in Bihar was 3.6 in 2019-21, much higher than the 2.0 in Maharashtra. Similarly, the fertility rate of Muslim women was 1.9 in Tamil Nadu and 2.0 in Karnataka, much lower than the 2.7 in Jharkhand and 2.4 in Rajasthan. The answer for why fertility levels drastically vary among Muslim women across different regions lies in how developed a State is both economically and socially. Chart 1 The chart plots the percentage share of women aged 20-24 years who got married before becoming adults against the Muslim fertility rate, as of 2019-21. Chart appears incomplete? Click to remove AMP modeThe trend line shows a strong positive correlation, which means that fertility rates were higher in States where a higher share of women were married off early.Chart 2 | The chart plots the percentage share of the female population aged 6 years and above who are literate against the Muslim fertility rate, as of 2019-21. The trend line shows a strong negative correlation, which means that the fertility rates were lower in States where the share of literate women was higher.A major concern is also lack of awareness about family planning. In 2019-21, close to 25% of Hindu women said they had never heard or seen a message about family planning via radio, TV, newspapers, wall paintings or the Internet. Among Muslim women, the share was higher at 30% (Chart 3).

sEven among women who were aware and wanted to limit the number of children they planned to have, or wanted more space between children, a significant share was unable to do so due to lack of access to family planning measures. Chart 4 | The chart shows the share of unmet demand for family planning among Hindu and Muslim women across select States in 2019-21. Unmet demand refers to the share of women who want to limit or space out children, but are unable to do so. In most States, the unmet demand among Muslim women was higher than Hindu women. In States such as Haryana, Bihar, and



Jharkhand where the fertility rate of Muslim women was high, the unmet demand was also high. In these States, the gap between the unmet demand between Muslim 1981.

lim and Hindu women was much wider too. Increasing awareness about contraceptive measures and enhancing access to them, educating girl children, and stopping child

marriage — all functions of the government — will reduce the fertility rates among all the religious groups at a much faster rate.

'Maidaan' actor Chaitnya Sharma on playing football legend PK Banerjee: 'I quit sugar; reached 8% body fat'

Chaitnya Sharma aka SlowCheeta is reveling in the appreciation he got for his portrayal of football icon PK Banerjee in Maidaan. Despite calling it a "difficult" role, the rapper — who just released the song 'Kar De Kaa' as part of an EP called Scene Mein Bawal — said that it is the most "special part" he has ever played. But behind what you saw on screen went a lot of hard work, from shooting for 12 hours straight, giving up sugar, to having an identity crisis for almost three years, about which he opened up in an exclusive interaction with indianexpress.com. Read the edited excerpts below:

You did not bag the role you wanted in Gully Boy, but it was while shooting for the movie that you were spotted for Maidaan. Would it be right to say that this film is, perhaps, your debut in its true sense?

Chaitnya Sharma: Yes, and no. While choosing characters, my benchmark is how much my character affects the story. In Maidaan, PK Banerjee is key to the story. In that sense, it feels like a debut. But, to get here, I needed to do the work I'd done before, whether it's Gully Boy, Brahmastra, web series, TV shows, or theatre. In that sense, it would be unfair to call this my debut. But it does feel like the most special

part I have played in my life, hands down.Playing PK Banerjee is no mean feat. Did you ever feel intimidated you had big shoes to fill? Are you a follower/fan of the sport and the sportsman?

Chaitnya Sharma: PK Banerjee is one of the most decorated Indian football players in Indian history. I knew exactly what he meant to the Indian football team and the Asia Cup at the time. As someone who loves and plays sports, especially football, filling in his shoes—literally and figuratively—was very difficult.

I met him when we visited our set once in Calcutta. It made me push myself harder. I quit sugar and any other unhealthy substance that entered my body. I was on a clean diet, and reached 8 per cent body fat. I maintained it for three years since the shoot lasted that long. I put every ounce of energy I had into the character. Your first love – music or acting?

Chaitnya Sharma: Chai Biscuit, my recently released song, has a line answering this question – people keep asking me, bro, are you a rapper or an actor? I said I'm a tractor.I am an artiste, I like to express myself. These two forms (of art) attract me a lot – music, which involves rhythm, and acting, which involves breath. For me,

breath and rhythm are probably the most essential things we need to learn in our lives. However, despite it being a tough choice, I will give you an answer. There is nothing that compares to performing my songs live on stage in front of a massive audience, screaming, clapping, and cheering for me; the most incredible experience available to a human being, the best high. I think there are very few privileged, lucky people who get to experience it. I'm one of them and I think that is my favorite thing to

You are married to actor Shweta Tripathi. Did you take tips from her to ace your part in Maidaan?

Chaitnya Sharma: Yes, I did, but not only for Maidaan. She is a crucial part of every song I write, every role I play. It's incredible to be married to someone who inspires you because you don't have even a day to slack.

When I got really thin for this part, people around me were appalled. It was annoying to keep explaining it's all for a part I am playing. Shweta was the one person who gave me confidence. She told me I am an actor in character, and not looking like myself because of it was fine. I needed that because identity crisis can be very unnerving at times.

SAD releases manifesto, seeks land swap with Pak to include Kartarpur in east Punjab on Hussainiwala pattern



Chandigarh (JAG MOHAN THAKEN), May 18: On Saturday, Shiromani Akali Dal (SAD) president Sardar Sukhbir Singh Badal, while releasing its manifesto, which has been named as 'Ailaan-Nama', claimed that the SAD will seek land swap with Pak to include Kartarpur in east Punjab on Hussainiwala pattern. The Ailaan-Nama says that the party will use its mandate to seek transfer of Kartarpur Sahib from Pakistan to India through mutual land exchange between the two countries as was done in Hussainiwala as well as on the Bangladesh border. "The party also promises to work through the Government of India seeking that the requirement for passport for pilgrims to Kartarpur Sahib be dropped and be replaced with a simple permit system".

The Ailaan-Nama vehemently opposes attempts and conspiracies of governments to usurp control of sacred shrines and religious institutions of the Khalsa Panth. The party will seek to put an end to the dangerous interference into Sikh religious affairs by non-Sikh forces who have been using some disgruntled Sikh elements as "cosmetic front for their nefarious designs to weaken the Panth from within." The manifesto demanded the opening of Attari and Hussaininwala borders with Pakistan for trade and tourism to usher in economic prosperity. It also promised to secure Special Economic Zones (SEZ) status for the entire border." We will engage with the centre to bring small, medium and MSME industrial units in the border districts". It also emphasized the need industry-focused skill education institutes in this belt. The party manifesto also declared that, with people's mandate, it will move to cancel all decisions and settlements on river waters that have been made without Puniab's concurrence and in violation of the nationally accepted Riparian Principle. Mr Badal also declared that party will seek royalty on its river water given to non-Riparian states and will take all political or legal steps necessary for this. The manifesto makes a commitment to renew the fight for the inclusion of Chandigarh and other Punjabis speaking areas left out of the state. "Chandigarh was categorically declared to belong to Punjab and was to remain a UT only for five years. We will fight the centre's betrayal of Punjab on this with renewed force."Warning the people of Punjab against a deep rooted conspiracy to push Punjab back into the dark era of fratricidal bloodshed and state repression through the use of sponsored political rowdy-ism, the Shiromani Akali Dal (SAD) Saturday claimed to have made a strongly positive Panthic and pro-Punjab pitch with emphasis on a genuinely democratic and federal structure with genuine political and fiscal autonomy for the state and preserving the religio-cultural identity of the state. The manifesto is steeped in the traditional Akali, Panthic and Punjabi idiom and recalls the party's glorious heritage of struggle and sacrifices by selfless warriors and generals who repeatedly spurned offers of power and quit cabinet berths to stand by the people on issues of high principle.In its manifesto, which the party described as its "Ailaan-Nama" for the Lok Sabha poll scheduled for June 1, the party said that a vicious conspiracy was at work to destroy peace and communal harmony in the state to justify a return to police repression, midnight knocks and killing of Sikh youth in fake encounters. "An atmosphere is being created with the help of provocative slogans through some stooges and paid pipers," said the SAD president Sardar Sukhbir Singh Badal, while releasing the Ailan-Nama, and emphasized that there is a desperately need to preserve peace and communal harmony in the state to ensure the glory of Panth and Punjab." Giving a twin call for "Panthic Principles above Politics" and "Punjab for Punjabis, the SAD Ailaan-Nama declared that on getting people's mandate, it will introduce a law to ensure that jobs in Punjab would be reserved for Punjabi youth only. "At present, not only jobs but even our Rajya Sabha seats are

being gifted to outsiders and known Punjab haters. Punjab at the moment is being treated as a slave colony for resource exploitation. It is being governed from Delhi and for Delhi." Mr Badal pointed out that some other states already have such provisions. The party manifesto talks strongly about the need to safeguard the secular, democratic and federal character of the Constitution, with emphasis on preserving the guarantees given to the poor, the backward and other exploited segments, including the scheduled castes and tribes and the minorities. "Secular and democratic values have come under a stress in recent years. Minorities and other exploited sections are being systematically targeted on communal grounds. This needs to stop and SAD will treat this as a priority."The manifesto says that apart from discriminating and playing games against the Sikhs, the Centre is "discriminating against and terrorizing other minorities too, including the Muslims, Christian, Bodhis, Jainis. SAD will champion their cause in every sphere." It also announced to oppose any move at enforcing Uniform Civil Code. The manifesto sought Special SC Status for Punjab as the state had the highest percentage of SC population in the country. "SAD will seek Special Allocation for the welfare of SC sections in Punjab.The party will secure clearance of backlog in PMS for SC students. It will also ensure immediate restoration of Guru Ravidas ji Mandir in Tughlakabad, New Delhi."The manifesto also seeks Constitutional Status for the National Commission for Minorities, with fixed 6-year tenure and Cabinet rank for Chairman and MoS for members. It also opposed the state specific concept of minorities, saying that the Constitution clearly about talked national minorities.SAD also announced to use the people's mandate to create three Special Economic Hubs, developing Mohali as an IT hub, Malwa belt as Textile Hub and Sri Amritsar Sahib as well Hari ke Patan and areas around Pathankot, Ranjit Sagar Dam as major Tourism Hub of global scale. Simultaneously, the party will strive to get Kandi and Bet areas recognised as Special Zones with a development package as well as industrial concessions at par with those given to Punjab's neighbouring states. It will also focus on setting up of micro, small and medium scale FOOD PROCESSING UNITS in Punjab as ours is predominantly an agrarian state. The manifesto further said that as "the largest democratic voice of the farmers and the farm labour", the SAD "fully backs their struggle for justice". The party will use its mandate to bring legal "guarantee for Assured Marketing of farmers' produce at Minimum Support Price.""The SAD will strive to get a ONE TIME LOAN WAIVER for farmers. "While the govt has waived debt of rich Corporate Houses worth Rs 16 lakhs, there is no reason why the much smaller debt of farmers cannot be waived." It also promised a 20% SUBSIDY ON DIESEL FOR SMALL AND MARGINAL FARMERSThe party will seek "skilled worker status" for farmers and farm workers and also bring farm labour under MNREGA. The party said it will seek compensation Rs 50 lakhs to the family of every martyr of the farmers struggle and a government job to one dependent. The party will also demand fulfilment of all promises made by the Government to farmers and farm labour. The party favours the same treatment for growers of vegetables and fruits. The manifesto says that SAD will seek an upward revision of Personal Income Tax Limit by at least FOUR LAKHS - above the present limit. The party promises to pursue the One Rank One Pension scheme in the Services. The manifesto opposed the Agniveer scheme and favours regular recruitment on comparable pay scales. SAD also announced to work for economic security and dignity to ASHA AND MID DAY MEAL WORKERS AS WELL AS ANGANVADIS. "The party will seek to ensure that their services be regularised with decent pay. Party will also seek a minimum of 150 days for MNREGA workers".

Hyderabad-based Entrepreneur Jagannadha Shastry Somanchi Honored as "Global Ambassador for Water Ionizer"



Mr. Jagannadha Shastry Somanchi, a renowned entrepreneur from Hyderabad, has been awarded the prestigious "Global Ambassador for Water Ionizer" title at the "Direct Selling Growth Conclave – 2024" organized by Network Express in Mumbai. The award was presented by Mr. Deepak Bajaj, a renowned Business Coach, Author, and Motivational Trainer with millions of followers.

The event, held at the Shanmukhananda Auditorium, was attended by 36 companies across India and more than 3,000 participants. Mr. Jagannadha Shastry, with over 20 years of experience in the Direct Selling industry, has influenced more than 30,000 families in his Enagic journey over the past 8 years, achieving the coveted 6A2-5 Global Rank.Jagannadha Shastry, along with his two brothers, are considered the "Pioneers of India" by Mr. Oshiro, the Founder of Enagic, as they introduced the Enagic Kangen Water Device to India in 2015, even before Enagic India was launched in 2016. The Sastry brothers, known as the "SBT Global" team, have been instrumental in driving the growth of the water ionizer industry in the country.

In addition to this latest accolade, Mr. Jagannadha Shastry was also awarded the "Global Leader in Direct Selling" title by Network Express in 2023. He continues to inspire and guide aspiring Direct Selling enthusiasts through his mentorship, train-

ing, and influential speeches at national and international platforms."It is a true honor to receive this award from the esteemed Mr. Deepak Bajaj in front of such a large and engaged audience," said Mr. Jagannadha Shastry. "Over the past eight

years, our team has worked tirelessly to provide this water ionizer to 30,000 families, and we are now aiming to reach at least one lakh families in the next three to four years, empowering them with the benefits of this transformative technology."

Not just Tesla, existing automakers to get duty benefit under new EV policy too

Tesla, Tesla Motors, Electric Vehicle policy, electric vehicles, EV policy, Indian express business, business news, business articles, business news storiesUnder the new EV policy, EV passenger cars (e-4W) can initially be imported with a minimum CIF value of \$35,000, at a duty rate of 15 per cent for a period of 5 years from the date of issuance of approval letter by Ministry of Heavy Industries (MHI). Amid concerns raised by automakers already operating in India that the new electric vehicle (EV) policy favours new entrants such as

Tesla, a senior government official on Friday clarified that the union government will allow existing automakers to make greenfield investment commitments under the new policy.

The details will be part of the guidelines that are in the process of being finalised by the Ministry of Heavy Industries (MHI), the official said, adding that the second round of consultations to roll out the guidelines is set to start soon. The first round of consultations saw Tesla representatives join the process for the first time. "The government plans to allow all companies including existing automakers to make greenfield investments under the EV policy. The second round of industry consultations will start," the official said. The clarification that addresses the level playing field concerns raised by a number of automobile companies comes a month after Tesla CEO Elon Musk postponed plans to visit India to meet Prime Minister Narendra Modi but was seen in China barely a week later to push for the approval of full self-driving (FSD) cars.

Telangana NCC cadets training camp. 629 cadets from across the state attended



A ten day training camp was conducted at Ramanthapur Polytechnic College for NCC cadets from various districts of Telangana. 629 cadets were present across the state. 25 training personnel participated in this training camp. Military training on map reading, 22 rifle, obstacle course, tent pitching, field craft, PT. The

camp focuses on community living, camaraderie, team spirit, healthy lifestyle especially in extreme hot weather. To maintain the energy level of the young cadets, outdoor games like volleyball & tug of war competition (for boys) and throw ball competition (for girls) were organized. Indoor games like chess Two minute lecture/pub-



lic speaking competitions Waste recycling competition was organized as "Best of Waste" on Love You Are Earth (Save Environment). Presentation (Self Defense by SN Zubair, Yoga Class by Shoba Devi, conducted by Sahayoga. Insight team on Defense Forces and Entry Types from Army Recruiting Office, Tirumalagiri. Cadets

made new friends, took away memorable experiences with them.

This camp will benefit the young cadets, in future, whatever they may do. Camp Commandant Col. Vibhas Gupta explained about the training camp that he wanted to choose a profession/career.

Sunscreen won't stop you making vitamin D — here's what you should know

It's all kicking off on social media, again. This time it's about wearing sunscreen. The argument began when Tim Spector, a professor of genetic epidemiology at King's College London, raised concerns that daily sunscreen use could lead to vitamin D deficiency. While Spector's post gained a lot of attention, it isn't the first time an argument against using sunscreen has been brought to social media - with countless posts discussing the matter. Most of these concerns stem from the fact that sunscreen blocks ultraviolet (UV) radiation which our body needs to synthesise vitamin D in the skin. Fortunately, research shows us that this is probably not an issue for most people. Vitamin D is an essential nutrient. It helps regulate calcium absorption, which is important for bone health. A growing body of research also suggests vitamin D may be important for other aspects of health, too, including boosting immunity, reducing inflammation and keeping the heart healthy. However, more research is needed to confirm these findings. While we can get vitamin D from certain foods - such as oily fish, egg yolks and fortified dairy products - our bodies mainly rely on sunlight to produce it in our skin. When we're exposed to the sun's ultraviolet B radiation (UVB), a series of processes in our skin cells transform a cholesterol-like molecule into vitamin D3.Since vitamin D production requires exposure to UVB radiation, it could be expected that sunscreen use inhibits vitamin D synthe-

Sunscreen acts as a filter, absorbing

or reflecting solar UV radiation. The higher a product's sun protection factor (SPF), the better it is at preventing sunburn (which is mainly caused by UVB radiation). By preventing this radiation from reaching and mutating DNA in skin cells, sunscreens can lower skin cancer risk. Sunscreens have also been show to reduce UV-radiationinduced skin ageing. However, sunscreens are not 100% effective - mainly because most people don't use them as directed. People typically only apply around onequarter to one-third of the required amount of sunscreen - and most don't reapply as instructed. This means some UVB is still able to reach the skin's surface.

Sunscreen and vitamin DMany studies have investigated the effect of sunscreen use on vitamin D levels. Overall, findings indicate that with typical use, sunscreen still allows sufficient vitamin D production to happen. In a study conducted by our research team, we performed a oneweek experiment on 40 holidaymakers in Tenerife, Spain. Participants were taught to correctly apply an SPF 15 sunscreen to protect their skin. Not only did the sunscreen protect participants from sunburn, their vitamin D levels improved. This showed us that even when sunscreen was used, a sufficient amount of UVB radiation still reached the skin, allowing vitamin D to be produced. These findings align with two reviews that also examined real-world sunscreen use and vitamin D levels. Most of the studies included in these reviews either reported that sunscreen use had no effect on vitamin D levels or that sunscreen



use led to higher vitamin D levels. This was particularly true with field studies, which would have provided the best reflection of real-world sunscreen use and sun exposure. However, these reviews also found several experimental studies (with more controlled conditions) that showed sunscreen use can prevent vitamin D synthesis. However, these studies used UV sources that were not representative of solar UV radiation, which may limit their for relevance real-world conclusionsAnother limitation of the studies evaluated in these reviews were that

most used low SPF sunscreens (around SPF 15 or lower). Public health advice recommends the use of at least SPF 30 sunscreen, which potentially could have a greater inhibitory effect on vitamin D production. And most of these studies only used white participants. White skin has less melanin pigment, which acts as natural sunscreens – protecting against UV damage (including sunburn). Sunscreen Sunscreens have also been show to reduce UV-radiation-induced skin ageing. Melanin may also have a potentially small, inhibitory effect on vitamin D production.

How Al is helping communities restore Madagascar's ancient baobab forests

Six of the world's eight baobab species are indigenous to Madagascar, where the distinctive trees with giant trunks have historically grown in huge forests. But these forests are threatened by slash-and-burn agriculture - 4.000 hectares of baobab forest in Madagascar are destroyed every year. Baobab trees can live for 1,000 years and one hectare of land can support eight fully grown baobab trees. But many have been left orphaned - standing alone in barren areas with no contact with the wild animals that spread their seeds, helping the baobabs to reproduce. Tropical ecologist Seheno Andriantsaralaza has been researching the seed dispersal of baobab trees in Madagascar since 2009. She is the president of the Group of Specialists Passionate about Baobabs of Madagascar and a founder and principal investigator of the Assessment-Research-Outreach Baobab Project. She explains how the project works with women to replant baobab seedlings and harvest the fruit of existing trees sustainably.

Why are baobab trees so important in Madagascar?

Baobab trees are symbols of our landscape, profoundly significant to our ecosystem and cultural heritage. They are valuable to rural women who pick their fruit and sell it to companies for use in food and cosmetic products. Baobab trees can save impoverished communities in periods they most need money. Madagascar is also the home of the world's rarest baobab. Adansonia perrieri. Unfortunately, our baobab populations are under severe threat. The most pressing issue is deforestation, driven by slash-andburn agriculture. Some communities live in such extreme poverty that they need to clear land with fire so that they can plant crops. They cannot be blamed for that. Another significant problem for the baobab forests is the loss of large-bodied animals such as giant lemurs or giant tortoises. These animals played a crucial role in spreading the seeds of baobab trees in their dung. But they became extinct about 500 years ago. Without these animals, baobab seeds are not spread as effectively.Climate change has made the situation worse. Increased dryness and irregular weather patterns negatively affect the growth and survival of baobab trees. As a result, it is now very rare to find a 20year-old baobab seedling in the wild in Madagascar. It takes about 50 years for a baobab seedling to grow into a fruit-bearing tree.

How does your research aim to save the baobab forests?

In 2019, I co-founded the Group of Specialists Passionate about Baobabs of Madagascar — dedicated Malagasy baobab experts and researchers who combine scientific research with practical conservation actions. In 2020, a researcher from Berkeley University and I initiated the ARO Baobab Project, funded by the PEER USAID programme. This aimed to restore and conserve baobab forests through a combination of scientific research and community engagement. To bring local community

nities into baobab conservation, we set up a trade contract for them with a company. We agreed on ways that communities would sustainably harvest enough fruit to sell, while leaving behind enough fruit to generate baobab tree seeds. We then spent two and a half years trying to see if any animals would disperse baobab seeds in their dung, helping seedlings to grow. Micro lemurs, Microcebus cannot break the baobab fruit open to release the seeds as their teeth are not strong enough. The larger lemurs, Eulemur rufifrons, can disperse baobab seeds but we found that they were no longer living in former baobab forest areas. Giant tortoises, Aldabrachelys gigantea, loved the fruit. We found baobab seeds in their faeces about 15 days after they'd eaten the fruit, and these seeds later germinated well, growing into healthy seedlings. We also discovered that a small rodent, Eliurus myoxinus, carried fallen baobab fruit over long distances. In transporting the fruit, this rodent dispersed and scattered the seeds. However, we concluded these animals would not be able to do enough to restore the baobab forests alone. People would have to help, by growing baobab seedlings and physically planting them.In 2021, we set up two nurseries to grow seedlings to revive baobab populations and their habitats in Andranopasy, western Madagascar. About 40% of the plants we grew were baobab seedlings and 60% were indigenous trees that used to be found in the baobab habitat, which provide fruit for a number of animals. Our aim was to restore the whole habitat of baobabs - all the animals and plants that make their reproduction possible.



Did the replanting work well?

Yes. We set up two nurseries made of low wooden greenhouses in partnership with communities. Together we transplanted more than 50,000 baobab and other seedlings in February 2023. Our data showed a seedling survival rate of 70% after replanting, which is incredibly high considering the dryness in forests. We were able to partner with EOS Data Analytics, a company that specialises in using artificial intelligence to monitor the health of forests. They used satellite footage, algorithms and remote sensing to see how the seedlings were doing. Comparing the same area with footage from 2020 revealed that since February 2023, plant and tree health has been significantly higher than in previous years.

The positive effects of seedling transplantation appeared within months.

What role do women play in baobab reforesting?

Women play critical roles in our nurseries, the physical planting and also in leadership positions in the project. Before the project, it was sad to see that women – the main people collecting and selling baobab fruit to feed their children – were sidelined and had no voice in the future of the baobab trees. We have started another project for local women to lead conservation action. We aim to start a women's association that will maintain the tree nurseries and grow indigenous plants as a way of generating an income. This article is republished from The Conversation under a Creative Commons license. Read the original article.

Understanding the delicate balance between mindfulness and detachment

mindfulness"To cultivate mindfulness, individuals can practice mindfulness meditation, which teaches them to focus on their breath or a particular object while observing any thoughts or sensations without judgment," Sharath Arora ,chief instructor, lyengar Yoga, says. Observing our life experiences without being consumed by them is a delicate balance of mindfulness and detachment. It requires a conscious effort to cultivate a sense of awareness that transcends mere participation in our experiences.

Digital creator and writer Cory Muscara, who is a former monk and well known for his motivational content, explains this concept in an Instagram reel. "Your awareness of your anger is not angry; your awareness of your fear is not fearful; your awareness of your boredom is not bored. There's a part of you that is able to observe your experience without becoming it. And it's that part of you that is the key to your inner freedom," he says.

Sharath Arora ,chief instructor, Iyengar Yoga and founder of Himalayan Iyengar Yoga Center, Dharamkot, Himachal Pradesh, talks about this practice. Cultivating mindfulness to observe experiencesArora tells indianexpress.com that mindfulness involves maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment. "To cultivate mindfulness, individuals can practice mindfulness meditation, which teaches them to focus on their breath or a particular object while observing any thoughts or sensations without judgment," he says. This helps in recognising that thoughts and feelings are transient and don't define one's self, thus maintaining a clear space between one's identity and the experiences they undergo. One effective technique, Arora elaborates, is the practice of 'non-attachment,' which involves engaging in experiences with full presence but without forming attachments to outcomes or letting those experiences define personal happiness. Techniques such as deep breathing exercises, guided imagery, and body scans can aid in achieving this state of mind. These practices help maintain calm and centeredness, allowing individuals to experience life fully without unnecessary

emotional entanglement.mindfulness Techniques such as deep breathing exercises, guided imagery, and body scans can aid in achieving a detached state of mind. (Source: Freepik)Mental exercises for observing thoughts and emotions

"Mental exercises like the 'threeminute breathing space' can be very effective. This involves spending a minute to take note of one's experience, a minute to focus closely on the breath, and a final minute to expand awareness to the body as a whole," Arora elucidates. This exercise teaches the separation of observation from reaction, helping to understand and manage reactions to thoughts and feelings more effectively. Role of 'witness consciousness' in detachmentWitness consciousness, or observing oneself as a detached witness, is a profound concept in mindfulness where one observes their thoughts, emotions, and experiences without judging them or reacting to them emotionally, according to Arora. This can be cultivated through regular meditation, where the focus is on stepping back and observing one's mind.

The many types of parents in the animal kingdom

In the animal world, as in ours, there are cosy nuclear families, with two doting parents taking care of the brood, there are single moms, single dads, foster moms, and joint families, as also gloriously irresponsible parents. Among insects, the mom often just lays her eggs at a location ensuring a suitable food supply for her brood (which could be single or numerous) and disappears. Thus butterflies lay their eggs on a plant they know their fussy caterpillars will accept and off they go. Solitary wasps famously, sting other insects and spiders, anaesthetising them, and lay their egg/s on the feebly conscious victim, ensuring their young have fresh meat when they hatch out. Ants, termites and bees live in enormous joint families where big mama (the queen) enlists her sisters to do all the work while at the same time, ensuring by way of pheromones that they will not be interested in boys (drones). Baby care is of paramount importance, as can be seen when an ant nest is disturbed, and all the workers scurry forth carrying precious eggs to safer places.

Some spider moms are doting parents (dads are usually eaten by moms) and will carry and guard their babies — up to a point. If they don't scatter soon enough and she is hungry, she will happily dine off them. (As the siblings will do each other!) Dragonfly to-be-dads will considerately escort their partners to the underwater plants where she will lay her eggs — to ensure no other macho dragonfly tries hanky-panky with her — and the eggs she lays are his and his alone.

There are several species of fish where daddy-day care is the order of the day! Lady seahorses impregnate their gentlemen by laying their eggs in a special tummy pouch he has and he takes care of the developing babies and eventually has contractions and gives birth (to sometimes hundreds of tiny-tot seahorses). Apparently, the mom does hang around to see that all is well. In some species of fish like the cichlid, doting parents will 'brood' the eggs in their mouths and even after the babies emerge, will call them back in and let them out again once the coast is clear. (And you can imagine them yelling, 'Come home, or the bogey fish will get you!')Among birds, the larger species, like the raptors, and storks and cranes, whose young take longer to mature, both parents feed and bring up the young in a cosy nuclear family. Not too cosy because sometimes, when times are hard, the eldest chick will happily kill and consume a younger weaker sibling with full parental approval. (Sometimes, even the parents will do this, to ensure that at least one ladla beta or beti survives!) But such couples usually stick together for good though sometimes divorces do occur — usually when no babies are around. Many species of birds believe in philandering and will happily make out with strangers of their species just to ensure that their genes do get passed on, whether in their own home or someone else's. The bava weaver is a serial bigamist, building magnificent edifices for



as many ladies as he can — settling each down in her lovely home, before starting work on the next. (Of course, it's the ladies that have the final say.) The lovely grumpy burrowing owl of the plains of North and South America have a wonderfully hippie lifestyle — with partners being exchanged freely and baby owlets happily making the whole colony their home.

Koels and cuckoos make wicked parents — they have their reckless flings — and then deposit the result of their wantonness in the homes of other (usually smaller) birds when they are not looking. Even the sab-janta crows fall for this ruse and you can imagine the trauma caused to tiny-tot warbler parents who suddenly find their 'baby' is actually a monster into whose open mouth they will easily fit (forget about

the caterpillar they have brought for dinner!) and who has a dinosaur's appetite!Among mammals, some members of the Canidae (wolves and wild dogs) are famous for having both parents and other family members collectively look after and feed their cubs. When painted wolves set out on a hunt, they'll leave a puppy-sitter-cum-guard back at the den, and when they return, the kill will be shared by all. With big cats and bears, it's usually a single-mom family situation. The father of the cubs has very little to do with cub care though in lion pride, the father does protect the family. Also, a lion mom will, along with her sisters, have and bring up their families together, with the babies helping themselves to the most convenient milk bar at hand, making it a happy joint family. Happily, some macho tiger dudes have been emancipated enough to bring up their cubs in the unfortunate occurrence of their partner's deaths. But even doting big cat moms will ruthlessly turn out their daughters and sons from their territories, once they become independent after two years or so. Herbivores are famous harem keepers - with a single (overworked, oversexed) male having to ensure that his harem of females remain loyal to him and don't sneak off with any roadside Romeo! Elephants (among the wisest of all mammals) live in matriarchal societies, with a grandma in charge, and her sisters and daughters looking after the babies. Adolescent hooligan males are shown the door once they get too big for their boots. As for us, it's best we don't get between the parents and offspring of all the above crea-

Your car's cabin air might be giving you cancer

A new study published in Environmental Science & Technology raises concerns about the air quality inside our cars. Researchers from a Washington-based science journal found alarmingly high levels of potentially cancer-causing chemicals (carcinogens) in the cabin air of personal vehicles.

The study focused on a group of chemicals called organophosphate esters (OPEs), commonly used as flame retardants in vehicle seat cushions and padding. These chemicals, including one called TCIPP, were detected in a staggering 99% of the vehicles tested. What's even more concerning is that TCIPP is currently under investigation by the U.S. National Toxicology Program due to its potential to cause cancer. The researchers also found significant levels of two additional flame

retardants, TDCIPP and TCEP, both classified as known carcinogens.

Dr Pakhee Aggarwal, Senior Consultant, Gynaecological Oncology and Robotic Surgeon, Indraprastha Apollo Hospitals, explained that long-term exposure to these pollutants, especially in heavily trafficked areas or enclosed spaces like garages, has been linked to an increased risk of lung cancer and other respiratory diseases. She noted that asbestos, a known carcinogen, was also historically used in brake linings and clutch facings, and posed a risk to mechanics and others who worked on older vehicles.

"While the cancer risk from occasional exposure is relatively low, it's crucial to maintain proper ventilation, minimise exposure to vehicle emissions, and follow safety guidelines when working with automotive components," Dr Aggarwal noted. Expert answers FAQs about Head and Neck Cancer patients "These pollutants can also exacerbate respiratory conditions (file)

What are the health problems that can arise from exposure to carcinogens?

Prolonged exposure to vehicle emissions and hazardous materials like asbestos, benzene, and formaldehyde can significantly increase the risk of various types of cancer, particularly lung cancer, bladder cancer, and mesothelioma, said Dr Aggarwal.

"These pollutants can also exacerbate respiratory conditions, cardiovascular diseases, and pose heightened risks for vulnerable populations like children and the elderly," she explained in an interaction with indianexpress.com.

Illness took away her voice. But AI created a replica she carries in her phone

PROVIDENCE, R.I. The voice Alexis "Lexi" Bogan had before last summer was exuberant. She loved to belt out Taylor Swift and Zach Bryan ballads in the car. She laughed all the time - even while corralling misbehaving preschoolers or debating politics with friends over a backyard fire pit.In high school, she was a soprano in the chorus. Then that voice was gone. Doctors in August removed a life-threatening tumor lodged near the back of her brain. When the breathing tube came out a month later, Bogan had trouble swallowing and strained to say "hi" to her parents. Months of rehabilitation aided her recovery, but her speech is still impaired. Friends, strangers and her own family members struggle to understand what she is trying to tell them.In April, the 21-year-old got her old voice back.

Not the real one, but a voice clone generated by artificial intelligence that she can summon from a phone app. Trained on a 15-second time capsule of her teenage voice - sourced from a cooking demonstration video she recorded for a high school project — her synthetic but remarkably real-sounding Al voice can now say almost anything she wants. She types a few words or sentences into her phone and the app instantly reads it aloud. "Hi, can I please get a grande iced brown sugar oat milk shaken espresso," said Bogan's Al voice as she held the phone out her car's window at a Starbucks drive-thru. Experts have warned that rapidly improving AI voice-cloning technology can amplify phone scams, disrupt democratic elections and violate the dignity of people - living or dead — who never consented to having their voice recreated to say things they never spoke. It's been used to produce deepfake robocalls to New Hampshire voters mimicking President Joe Biden. In Maryland, authorities recently charged a high school athletic director with using AI to generate a fake audio clip of the school's principal making racist remarks.But Bogan and a team of doctors at Rhode Island's Lifespan hospital group believe they've found a use that justifies the risks.

Bogan is one of the first people — the only one with her condition - who have been able to recreate a lost voice with OpenAl's new Voice Engine. Some other Al providers, such as the startup ElevenLabs, have tested similar technology for people with speech impediments and loss - including a lawyer who now uses her voice clone in the courtroom. "We're hoping Lexi's a trailblazer as the technology develops," said Dr. Rohaid Ali, a neurosurgery resident at Brown University's medical school and Rhode Island Hospital. Millions of people with debilitating strokes, throat cancer or neurogenerative diseases could benefit, he said."We should be conscious of the risks, but we can't forget about the patient and the social good," said Dr. Fatima Mirza, another resident working on the pilot. "We're able to help give Lexi back her true voice and she's able to speak in terms that are the most true to herself."Mirza and Ali, who are married, caught the attention of ChatGPT-maker OpenAl because of their previous research project at Lifespan using the AI chatbot to simplify medical consent forms for patients. The San Francisco company reached out while on the hunt earlier this year for promising medical applications for its new AI voice generator. Bogan was still slowly recovering from surgery.

The illness started last summer with headaches, blurry vision and a droopy face, alarming doctors at Hasbro Children's Hospital in Providence. They discovered a vascular tumor the size of a golf ball pressing on her brain stem and entangled in blood vessels and cranial nerves."It was a battle to get control of the bleeding and get the tumor out," said pediatric neurosurgeon Dr. Konstantina Svokos. The 10-hour length of the surgery coupled with the tumor's location and severity damaged Bogan's tongue muscles and vocal cords, impeding her ability to eat and talk, Svokos said. "It's almost like a part of my identity was taken when I lost my voice," Bogan said. The feeding tube came out this year. Speech therapy continues, enabling her to speak intelligibly in a quiet room but with no sign she will recover the full lucidity of her natural voice. "At some point, I was starting to forget what I sounded like," Bogan said. "I've been getting so used to how I sound now."Whenever the phone rang at the family's home in the Providence suburb of North Smithfield, she would push it over to her mother to take her calls. She felt she was burdening her friends whenever they went to a noisy restaurant. Her dad, who has hearing loss, struggled to understand her. Back at the hospital, doctors were looking for a pilot patient to experiment with OpenAl's technology. "The first person that came to Dr. Svokos' mind was Lexi," Ali said. "We reached out to Lexi to see if she would be interested, not knowing what her response would be. She was game to try it out and see how it would work."Bogan had to go back a few years to find a suitable recording of her voice to "train" the AI system on how she spoke. It was a video in which she explained how to make a pasta salad. Her doctors intentionally fed the AI system just a 15-second clip. Cooking sounds make other parts of the video imperfect. It was also all that OpenAI needed — an improvement over previous technology requiring much lengthier samples

They also knew that getting something useful out of 15 seconds could be vital for any future patients who have no trace of their voice on the internet. A brief voicemail left for a relative might have to suffice. When they tested it for the first time, everyone was stunned by the quality of the voice clone. Occasional glitches - a mispronounced word, a missing intonation were mostly imperceptible. In April, doctors equipped Bogan with a custom-built phone app that only she can use."I get so emotional every time I hear her voice," said her mother, Pamela Bogan, tears in her eyes. "I think it's awesome that I can have that sound again," added Lexi Bogan, saying it helped "boost my confidence to somewhat where it was before all this happened."She now uses the app about 40 times a day and sends feedback she



They also knew that getting something useful out of 15 seconds could be vital for any future patients who have no trace of their voice on the internet. A brief voicemail left for a relative might have to suffice

hopes will help future patients. One of her first experiments was to speak to the kids at the preschool where she works as a teaching assistant. She typed in "ha ha ha ha" expecting a robotic response. To her surprise, it sounded like her old laugh. She's used it at Target and Marshall's to ask where to find items. It's helped her reconnect with her dad. And it's made it easier for her to order fast food.Bogan's doctors have started cloning the voices of other willing Rhode Island patients and hope to bring the technology to hospitals around the world. OpenAl said it is treading cautiously in expanding the use of Voice Engine, which is not yet publicly available. A number of smaller Al startups already sell voice-cloning services to entertainment studios or make them more widely available. Most voice-generation vendors say they prohibit impersonation or abuse, but they vary in how they enforce their terms of use. "We want to make sure that everyone whose voice is used in the service is consenting on an ongoing basis," said Jeff Harris, OpenAI's lead on the product. "We want to make sure that it's not used in political contexts. So we've taken an approach of being very limited in who we're giving the technology to."Harris said OpenAl's next step involves developing a secure "voice authentication" tool so that users can replicate only their own voice. That might be "limiting for a patient like Lexi, who had sudden loss of her speech capabilities," he said. "So we do think that we'll need to have high-trust relationships, especially with medical providers, to give a little bit more unfettered access to the technology."Bogan has impressed her doctors with her focus on thinking about how the technology could help others with similar or more severe speech impediments. "Part of what she has done throughout this entire process is think about ways to tweak and change this," Mirza said. "She's been a great inspiration for us.

"While for now she must fiddle with her phone to get the voice engine to talk, Bogan imagines an AI voice engine that improves upon older remedies for speech recovery — such as the robotic-sounding electrolarynx or a voice prosthesis — in melding with the human body or translating words in real time. She's less sure about what will happen as she grows older and her AI voice continues to sound like she did as a teenager. Maybe the technology could "age" her AI voice, she said. For now, "even though I don't have my voice fully back, I have something that helps me find my voice again," she said.