



RISING STARS











DID YOU KNOW?

DATRANGA THETEAINDICATORPLANT

Datranga (Melastoma malabathricum), also known as lutki, is a perennial shrub plants that grow and bloom over the spring and summer, die back every autumn and winter. These plants grow up to two metres in height and are commonly found across tropical and subtropical regions of South and Southeast Asia.

In Bangladesh, datranga can be found in Sal forests and the hilly areas of the country. You might come across these beautiful purple flowers if you visit places like Madhupur and the Chittagong Hill Tracts.

The general consensus



PHOTO: ORCHID CHAKMA

is that tea plants have grown or can grow in the areas where you find *datranga*. *Datranga* is also known for its use in the treatment of toothaches as well as diarrhoea and dysentery.

Editor & Publisher

Mahfuz Anam

Features Editor and Head of Content Marketing Ehsanur Raza Ronny

Rising Stars In-Charge Faisal Bin Iqbal

Rising Stars Team

Syeda Afrin Tarannum

Abir Hossain

Adrita Zaima Islam

Photographer Orchid Chakma

Graphics & Layout
TDS Creative Graphics

Production **Shamim Chowdhury**

Send your articles, feedback, and opinion to rs@thedailystar.net Find our content online at thedailystar.net/rising-stars

CHICKEN NUGGET ALESSONINHOWNOTTOTAKETHINGSSERIOUSLY

ADRITA ZAIMA ISLAM, PRATHOM MITRA

What would you do if your crush turned into a chicken nugget? That is the question Baek-joong faces as Min-ah, his boss's daughter and his crush, steps into a machine that mysteriously arrives at their office's doorstep and metamorphs into a chicken nugget. The series follows Baek-joong and his boss, Seon-man, as they are dragged across a crazy adventure that includes mad scientists, purple aliens, a subplot that dates back two hundred years, a bizarre chicken nugget restaurant, and, shockingly enough, a parody of Christopher Nolan's *Interstellar* while trying to turn Min-ah human again.

If the premise sounds absurd, we can assure you that the actual show is even more so. Constantly indulging in dad jokes and slapstick comedy, the show's humour is downright horrendous. However, *Chicken Nugget* is refreshingly self-aware about its less-than-funny humour and doesn't shy away from it. It continues playing into those jokes until the audience starts finding the situation ridiculous, thus perfectly executing the so-bad-it's-good trope.

The highlight of the series is the few moments of tenderness sprinkled in. In Baek-joong's backstory of having to push aside his dreams of singing to become an engineer at his father's prodding and in Seon-man's pained frenzy to get his daughter back, we see the poignancy of the story. With their tremendous emotional range and ability to truly immerse themselves in the absurdity of their fictional situations, the actors are undoubtedly incredible in their respective roles.

The only aspect of *Chicken Nugget* that was somewhat irksome was its pacing. At times, the story draws itself



out a bit too long or the comic elements become a tad bit repetitive because of the limited amount of situations the characters are allowed to be present in. However, that is perhaps only a small bone to pick considering the sheer amount of amusement we derived from the show otherwise.

The show is weird, unabashedly so. It takes care to never take itself seriously and does not even try to be artsy. At a

time when every piece of content we consume seems to be emotionally charged or high-strung, it felt very relaxing to watch something so unapologetically nonsensical and weird. Watching *Chicken Nugget* was, honestly, the most fun we have had with a TV show in a pretty long time.

The writers are glad to have been able to spend a weekend watching this wonderful show.



TRIP TO THE MIDWEST

Attending a two-week creative writing and cultural exchange programme at the University of Iowa

ARIBAH FARZEEN SHAH

After years of monotonous academic stress, I was looking for something refreshing to do in the summer of 2024. And no, I don't mean re-watching my comfort movies and shows for the umpteenth time or sleeping for as long as I want to without guilt. I wanted to try something productive, out of my comfort zone, or simply new. Although I was convinced that my attempts were futile, a fantastic opportunity came my way.

From June 9 to June 22, I had the privilege to be a participant of a creative writing and cultural exchange programme called "Between the Lines (BTL): Peace and the Writing Experience" at the University of Iowa, sponsored by the Bureau of Educational and Cultural Affairs of the US Department of State. This cultural exchange, through The International Writing Program, focused on various forms of creative writing.

Over two intensive weeks, 19 of us, from across the world took part in creative writing workshops and global literature seminars hosted by award-winning

writers Tariro Ndoro (Zimbabwe), Rochelle Potkar (India), Vladimir Poleganov (Bulgaria), and Senka Marić (Bosnia and Herzegovina). Other special seminars on digital storytelling, literary translation, playwriting, bookmaking, and dance were facilitated by esteemed faculty members and candidates pursuing master's at the University.

Some memorable events during my stay include the Jefri Palermo Art Show showcasing social and political commentary in miniature models at The Englert Theatre Gallery, movie night at the Iowa Memorial Union, attending a Juneteenth celebration in Downtown Iowa City, watching *Julius Caesar* live open-air at the Riverside Theatre and meeting the cast afterwards, a faculty reading followed by a book signing by the award-winning writers at the Prairie Lights Bookstore, and finally a graduation ceremony to celebrate our accomplishments with a published anthology collection of our writings.

Apart from the long flights, my two weeks stay in lowa City was wonderful to say the least. I felt creatively inspired and appreciated in an inspiring environment due to the amazing people I had met, and the friends I made

along the way. The BTL staff created a warm and friendly atmosphere for all of us to feel like we were at home. The different workshops and seminars widened my horizons – creating a deeper sense of admiration for all creative forms of expression.

On the other hand, interacting with young writers from around the world expanded my understanding of their identities and fostered respect for their cultures. We also had an open mic night to showcase the literary talents and a karaoke night to bond with each other better (I was relieved to find out people my age love ABBA just as much as I do)!

Now that I am back home, I cannot help but miss the ordinary sights of rabbits hopping, squirrels running, and blossoming flowers around every block of structure with triangular roofs. Nonetheless, I am truly grateful for having the opportunity to attend this prestigious programme upon being nominated by my school counselor, which enabled me to become more confident, open-minded, compassionate, empathetic, and hopefully, a better writer



YOUR HOME WILL BE BUILT ON TIME WITH THE BEST QUALITY RODS



Choosing friendships over academic prestige when applying abroad

There's a spectrum of universities in every country, from well-reputed ones that only accept the most decorated applicants to others that still offer high quality education while accepting students who didn't prioritise academics as much in high school. This means that even if you're particularly ambitious, you don't have to choose between academic prestige and long-standing relationships.

ARANYO RISHI CHOWDHURY

University admissions season usually has us bawling our eves out as we leave our old lives behind. We confront feelings of grief and loneliness as we realise that our friend group is breaking apart, with some of us leaving for distant lands. While applying abroad, however, we tend to develop tunnel-vision on university rankings and prestige because we perceive these as indicators of how instrumental the institution will be in making us successful moving forward.

It feels only natural to prioritise prestige while making everything else secondary. It's what everyone – from teachers and family to even friends - tells you to do. However, it seldom occurs to people that the bonds we've forged till now, that have had years of effort poured into them and have invaluable shared experiences inextricably tied to them, are something that should, and likely could, be carried with us into adulthood.

The idea of applying together with friends feels

far-fetched. There's this narrative that going

when applying abroad, including going somewhere close to where your companions are going. Thus, most people don't try to work towards the latter However, achieving a combination of the two might be easier than you think.

There's a spectrum of universities in every country, from well-reputed ones that only accept the most decorated applicants to others that still offer high quality education while accepting students who didn't prioritise academics as much in high school. This means that even if you're particularly ambitious, you don't have to choose between academic prestige and long-standing relationships. You can keep both. And that's something that could turn out to be really helpful in the long run.

The great thing about applying abroad with your friends is that you will definitely find options in the same country or region that suit your individual student profiles while making it possible for you to meet up relatively frequently. Vast places like Australia or Europe are also great for this because travelling across cities or countries is really easy due to the efficient and accessible public-transport system. Even if they live really far away, you can still probably meet them halfway in two hours by train. Being well-researched about part-

time jobs and scholarships will also make your individual financial burdens lighter. And applying to the same places will make that research easier since you have more minds working together

on the

same goal.

seems too

country where you're unfamiliar with

Even if all this

the way of life and/or the language can be deeply isolating. Most people initially struggle to make friends in this scary, new setting. Coupled with the pressure to perform well in the new academic environment so your parents' money does not go to waste, it can be really hard to

Having your close friends around can really help in adjusting with this drastic change. You've built these connections over years of spending time together at school, coachings, or any number of other places. Settling into a new environment is not just easier with companions nearby, but it also deepens those already strong bonds.

Bringing your support-system with you to a foreign land not only means you don't have to build one from scratch, but it also ensures the support system will be more effective because these people will have an easier time relating to you. Tirades about the culture shock, the things you miss back home, and the struggles you're facing while trying to integrate will sound much more coherent to them.

Ranting about board exam PTSD or reminiscing about diarrhoea-inducing street-food will feel that much more worthwhile with someone who has lived the same experiences and been surrounded by the same culture. As this person comes from the same background as you, it will be less difficult for you to find solidarity in your struggles with them. Moreover, rituals of spending time together with them just wouldn't be the same through Zoom calls without that physical proximity.

Comparatively, you wouldn't miss out on too much by deprioritising the brand value of the school you go to. Most of the time, people use ranking systems like the

QS World University Rankings to define prestige. Even if these are somewhat accurate in gauging relative prestige, the difference between going to a top 200 school and a top 300 school isn't that significant in terms of career prospects, especially in STEM fields where the work you

do after graduation determines your trajectory much more than your school's reputation.

All of this is to say that compromising on some of your lofty academic aspirations is certainly worth sustaining these relationships that could last a lifetime. In the distant (or very near) future, when you're feeling lonely or discontented, you might find yourself wondering what institutional prestige ever held over emotional intimacy.

Aranyo Rishi Chowdhury is a graduate of S.F.X. Greenherald International School.



ILLUSTRATION: ADRITA ZAIMA ISLAM

THEMARVELLOUSLIVESOFCHILDACTORS Pursuing passion and thriving through art

MD. NAYEEM HAIDER

It wouldn't be a stretch to say that for most of us, the exciting world of pop culture occupies an imperishable position in our lives. But all of that is mostly common. What may truly be out of the ordinary are the experiences of those who grow up on the other side of the screen. The young people who, with aspirations simmering in their hearts, strive to one day be stars in their own right.

"I started my acting career at the age of eight," says Shadman Sharar Zayan, 17, who performs in stage plays at Shishu Academy Theatre and has appeared in multiple commercials, movies, and series. He vividly describes the time that led up to that momentous turning point in his life.

"I was attending drama classes at the Shishu Academy when two people came in to observe us. They took some pictures and videos of our performance. At the time, I had no idea who they were, but later, our teacher told us that they had come to scout for new artists for TV ads. I. along with three others, were then called to the office of Goodluck Ballpen, where we had to demonstrate our acting ability," he says. "I didn't hear back from them for many days. My parents and I thought that perhaps it had gone in vain. It wasn't until my father left for Cox's Bazar to attend a programme that the call came, telling him that I had been selected. Even now I can feel the pride I felt then in completing my first commercial and being the lead."

Elsewhere, Otithi Israt, 15, having played diverse roles in various television dramas and web series such as August 14, Vanga Putul, and The Broker, in addition to having over 50 commercials under her belt, recalls

the first time she had acted. "I was very excited but not nervous in the least." says Israt confidently. "In fact, I didn't even feel scared of the

This composure, according to her, stems from the depth of passion she had for acting. She then spoke in detail about her own acting process. She savs, "I don't think it's even possible to act unless you've completely immersed yourself in the role. This is true for every role, but it is especially true for my web series roles."This is because her roles on television were mostly of child characters whose personalities range from shy and quiet to witty and boisterous. Her web series work, however, involved more serious

"For example, in Vanga Putul, there is a scene where the character I played has seizures. The director, Shihab Shaheen uncle, told me to practise having seizures every day until the day the scene would be shot. While practising this, I made sure to go through a good number of videos online to make sure the seizures were realistic. To portray the trauma of my character. I observed and took inspiration from similar characters in other movies and series," she added.

The children who work in this profession, pursue their passion and thrive through their art. But in order to hone their talent, they must also go through a great deal of hard work. But for a young soul to truly realise their potential, they need to be surrounded by people who can appreciate and help them grow and mature as artists.

BotTala, a theatre organisation that aims to promote and nourish the artistic traditions of Bangladesh, offers workshop productions to children who wish to



Humayun Azam Rewaz, the **Communication Director** at BotTala, talks about the dedication these young performers show towards the craft, and how even after the political turmoil of the July Revolution, almost everyone in the batch had returned enthusiastically to

Rewaz says, "Initially, it is of course impossible to tell where the child's talents lie. But rather than imposing any rigid structure, we create a playful environment and let children from diverse backgrounds engage together and bond. We try our best to discover their talents and let them flourish. Throughout the workshop sessions, we observe them and pinpoint their skills and the areas they excel in. We then incorporate those in the play."

Yet, no matter how dedicated a young actor or actress is, at the end of the day, they are still students who must balance work and education. On this matter, Abantika Rahman, 14, who has acted in several commercials, speaks of her experience. "Sometimes, due to school or exams, I have to turn down offers of work. Other times, I've had to balance both by attending shoots and exams on the same day. This one time, I completed my shooting by morning and then went to take exams. I didn't get any rest or sleep on that particular day, but taking the exam was something I had to do. I love my work, and I want to continue with it to perfect it, but my studies always come first," she says

these young actors balance the two aspects of their lives. Takbir Chowdhury, 8, who has appeared in five dramas and in over sixty commercials, attests to the support his teachers and classmates have shown him, "My friends at school often tell me that they've seen me on TV, and they repeat my lines to me. I find it very fun."

Irfan Murshid Khan, 16, who appeared in over 80 commercials, 50 dramas, and two movies, Poramon 2 and Chironjeeb Mujib, also spoke about the joy of being appreciated whilst talking about the effect his acting career has had on his personal life.

"I don't think I've experienced anything negative because of my acting. On the contrary, the positives have been very wholesome. When I am visiting a restaurant and the waiter comes along to take my order, they often recognise me from one of my roles. That is a very good feeling," he says.

"My biggest fans are my family members," Khan says, humorously describing the adoration he receives when attending family gatherings, "They ask for my autograph even though I can't sign properly yet. I even forget to give the dates sometimes, and they have to remind me!"

These young actors speak with passion and exude a certain charisma when speaking of their big dreams. Takbir Chowdhury proudly says that he wishes to be an actor like the famous Shakib Khan when he grows up. For Abantika Rahman, the charisma and skill of Chanchal Chowdhury are what she aims to acquire. Otithi Israt, who idolises the celebrated actresses, Mehazabien Chowdhury and Tasnia Farin, aspires to qualify as a doctor someday alongside her acting journey.

GIS IS ON A MISSION

to become the nation's leading Cambridge curriculum school

FAISAL BIN IQBAL

Ramesh Mudgal, the Principal of Glenrich International School (GIS), Satarkul is a highly accomplished education administrator who has played a pivotal role in driving the growth and success of schools in both the UAE and Bangladesh. Campus sat down for an interview with Mudgal where he talked about his experience, GIS, and Bangladesh's academic sector in general.

Campus (C): As the school's Principal, how would you describe the vision of Glenrich International School? Ramesh Mudgal (R): I can't compare Glenrich with a 30-year-old school, especially in terms of results since we are yet to send our first cohort of students for IGCSE or A level exams. But our vision is to turn GIS into the nation's number one Cambridge curriculum school. We believe that as a new school, we are almost there.

If you ask me which was the most popular, most sought after, and most spoken about school in the last year, that would be Glenrich International School. Our student numbers have significantly increased this year. That's because what we delivered last year has been liked by almost every single parent whose child attended our school. So, in a way, we are already living our vision.

Having said that, we believe in continual improvement because, for us, excellence is not a destination; it's a journey. We want to continue on the path of excellence.

> Our teachers here at GIS are very caring and always concerned about the wellbeing of our students. We say that academics and everything else can wait. First, a child should feel respected, valued, and safe. That's why everyone at GIS - the teachers, admin, and support staff - are trained on how they should interact with students and how they can support them. We also have a very well-defined child safety policy in place.

C: Could you please discuss a little about the curriculum at GIS?

R: The curriculum here is basically the Cambridge curriculum. Cambridge is an internationally recognised curriculum that gives you clear guidelines as to what the learning outcomes need to be for the students. That being said, we are not the only Cambridge school in the country. But then, how did Glenrich become so successful?

It is because academics are the bare minimum these days. If a guest visits your house, offering them water is



the first thing that you'll do. But what next? Are you going to give them pastries? Will you be serving them coffee? All these things take the experience of the guest to a completely different level.

GIS is a true 21st-century school. The education we offer here is a complete package. We provide top-notch scholastic education. Also, our focus on co-curricular activities makes the entire educational experience a memorable one for students.

C: How important do you think school-student relationships are for the development of students in the modern day?

R: Our teachers here at GIS are very caring and always concerned about the well-being of our students. We say that academics and everything else can wait. First, a child should feel respected, valued, and safe. That's why everyone at GIS – the teachers, admin, and support staff – are trained on how they should interact with students and how they can support them. We also have a very well-defined child safety policy in place.

Our students and parents have the freedom to approach the school anytime. In some schools, it is very difficult to get in touch with the principal. But, at GIS, it's completely different. Every parent has my email address and, if they write to me, I respond to them accordingly. So, we're very approachable. For us, our students always come first

C: In ten years or so, where do you see GIS?

R: GIS started with one campus in this city and now it has two. We want to establish the Glenrich brand throughout Bangladesh. STS Group has the vision to take Glenrich to other cities like Sylhet and Chattogram — wherever there is a need for world-class education.

Ten years down the line, I can see GIS successfully thriving. This particular campus will be at full capacity and will be churning out world toppers in IGCSE and A level exams, and many of these toppers will be pursuing their higher studies in some of the top universities in Bangladesh and around the world. Some of our students will go on to become top entrepreneurs in Bangladesh and create hundreds of jobs.

When that day comes, I will feel very proud because these successful people were, at one point in time, students of GIS.

C: When schools are a bit 'unconventional', many parents in Bangladesh tend to be sceptical of them. How would you like to address their scepticism?

R: Parents have to be open to the idea that the world is no longer only focused on academics. We should not develop our children in such a limited, narrow capacity. The world is changing, and what was good 20 years ago is not good anymore. The definition of education has also changed, and modern education needs to prepare students for a new 21st-century environment. Parents need to accept this reality.

When you can explain to parents the value behind what you are doing, they accept it. And GIS is a visible example of this. There is hardly anything conventional here at Glenrich, but it is still growing because people believe in what we are doing.

Bangladesh has a very young population and a tremendous opportunity to make use of it. People here are hungry for success, and that's very important for a country that wants to transform its economy. Glenrich is excited to be a part of this journey, and we are contributing to the future successes of Bangladesh by offering a top-notch school education.

THE BOX

AYESHA SHIREEN QUADIR

"Aaliyah! Come quick, I found something!"

She turned wide-eyed, with a cement slab still in hand, to see Fayaz smoothing the dirt at his feet. He was always doing something with dirt. Drawing in it, throwing it in her face, making mountains with it. A wave of frustration mixed with exhaustion passed over her. How could he be playing games right now?

She frantically whisper-screamed at him, "Stop yelling! And this is serious Fayaz, we need to find that box." It's the only reason they were anywhere near their old neighbourhood. It only brought back painful memories of lost family and friends. She looked at whatever was left of the Husseins' house and felt sick. The memory was still fresh in her mind; everyone in the Hussein family had rushed inside the house for cover from the shells and never came out.

She faced Fayaz again, to check if he was alright, and started moving the bricks and stones with more urgency. They needed to get back to their tent before anyone realised that they were missing.

Their family was currently camped out in Rafah and had to leave almost everything behind when the bombing got too intense. Fayaz still didn't really know or understand what was happening, just that there were bad men, who might possibly be monsters, and, for some reason, they wanted to hurt him. Aaliyah knew he was afraid, but, in some incredible Fayaaz way, he didn't let this hell of a life take away his hope, humour, or kindness.

But while her brother was still somewhat naive about the world they were living in, Aaliyah's mind was a constant thunderous storm of fear, anxiety, and dread. But, most of all, desperation to ensure her family's survival. She was the one to fight for the Egypt plan. Her parents had always been considering it, but it had never seemed to be a viable option because the cost to cross the border was too great, and they were absolutely penniless.

So, she had taken things into her own hands. She had always undergone great risks to take care of things that mattered to her— scouring for food and water at night, while everyone else was fast asleep or stealing from others' tents.

But this was different. This could be catastrophic. She had snuck out late at night to venture into their old neighbourhood in search of the box. The box held Aaliyah's idea of a treasure trove. Passports, money, and pictures of her and her family when she was little. It could only be opened with a key, which was currently hanging around her grandmother's neck. As a child, it would always be a wonder to her and seemed as if her grandmother was guarding



ILLUSTRATION: ABIR HOSSAIN

secrets. Her grandmother always caught her staring and laughed – squeezing her cheeks – but she hadn't smiled ever since they had to leave home.

During their frantic escape from the flaming neighbourhood, her family had left the box behind, and it had been on her mind ever since. Only one thing worried and irked her – Fayaz. He wasn't supposed to be here with her, and it was only halfway to the area that she realised he had followed her. She was furious when she realised, he was there

How could he put himself in danger like this? But there was nothing she could do but take him along with her. She couldn't let him go back alone. Alternatively, going back with him and then coming back again was also too risky and time-consuming. To keep him safe, Aaliyah let him come along, but on the condition that he remained by her side and in her sight no matter what.

Fayaz's insistent calls penetrated her anxious thoughts.

"I'm not joking though, look at this!" She looked around
to check no one was there and swiftly crawled over to him.
She hissed. "What is it?"

He was still taking the object out of the rubble. He blew the dirt and dust off of it. Finally, he managed to uncover the whole thing. Aaliyah nearly cried. She would recognise the floral outward design anywhere. The rusty old lock was still hanging on the latch, almost as though it was beckoning her to learn its secrets to protect her family.

"What does this mean?" Fayaz asked. She turned to him to see a curious and awed look on his face.

"It means we have a chance to get out, and it is all thanks to you," she replied with a bittersweet smile. A wide smile grew on his face, and she laughed seeing his missing front tooth. She looked into his eyes, and it was almost as if she was looking at the stars themselves with the way they were shining

They walked back to the camp with a spring in their steps. Aaliyah held the box in her arms and felt a hundred times lighter. She felt almost giddy with this newfound hope of a substantial, genuine chance to escape. She turned to Fayaz, about to crack a joke, when she saw him frozen in his place, looking up at the dark sky. She was too slow, too encapsulated in her joy to recognise the drone when she saw it high above his head.

And then everything turned white.

The full version of this short story has been published online.



Serendipity

ARIBAH FARZEEN SHAH

The ringing of the cyclist's bell as the newspaper is delivered

And the starling chirping from her nest in the walls of my house

Wake me up every morning as dawn becomes a new day.

When I am away from home, I realise those are the sounds I miss in immeasurable amounts.

I look down my balcony to appreciate the familiar view –

The asphalt road and leaves glistening from the sunlight.

I see vehicles passing by and hawkers ready to start their businesses

At that moment, everything feels alright.

The simplicity of the present delights me while

The intimacy of the environment gives me comfort.

I look to the sky and dive into the hues.

It is a feeling that nothing can contort.

Carbon sinks in crisis EXPLAINED

ADRIN SARWAR

Growing up, I was told not to pick leaves from plants, especially at night. At the time, I was told plants sleep at night and it hurts them when we pick leaves. I never quite questioned it further. Little did I know, as the sun goes down, the entire forest wakes up with trees, plants, and fungi engaging in a quiet daily exchange.

Through photosynthesis, these organisms pull carbon dioxide from the air and convert it to the energy they need. While we sleep, the plants continue to inhale carbon dioxide, and other organisms tend to store vast amounts of it. This is just one of the many efficient systems working to protect the equilibrium in the atmosphere. One of these systems is the Earth's natural carbon sink which collects nearly half of the carbon dioxide released in the atmosphere by humans.

A carbon sink is anything that absorbs more carbon from the atmosphere than it releases. On the other hand, a carbon source is anything that releases more carbon into the atmosphere than it absorbs.

Carbon is present everywhere – in our food, in the air we breathe, in our DNAs. The amount of carbon on earth has never quite changed but the places where it is stored has. Most carbon is stored in sinks, such as rocks and sediments. The remainder is stored in the atmosphere, oceans, and living organisms. Respiration by animals and plants releases the carbon back into the atmosphere. This process of storing and releasing is known as the carbon cycle.

This process has remained in balance for thousands of years on Earth. But now scientists are anxious over this cycle breaking up, resulting in 2023 being recorded as the hottest year in the 174-year observational record, according to World Meteorological Organisation (WMO). Terrestrial sinks only absorbed between 1.5 and 2.6 billion metric tons of carbon dioxide in 2023

which is only a quarter to a third of the usual.

This breakdown of land carbon sink could be temporary if there is no additional pressure of droughts or wildfires. Unfortunately, that is not the case. While land carbon sinks may return to absorbing carbon again, there are indications of the fragility of the ecosystem. These discrepancies are not only limited to land carbon sinks but also includes the ocean which are showing major instability in their system.

Carbon is stored in the ocean's depth both in dissolved form and as part of marine sediments. With the rising temperature, the oceans are losing their ability to absorb carbon dioxide because warmer water tends to absorb less of it.

Moreover, Greenland glaciers and Arctic ice sheets are melting faster than expected. An increased melting rate is also disrupting the Gulf Stream current –slowing down the rate at which oceans absorb carbon. Melting ice is also exposing the algae-eating zooplankton to the sun for an extended period. Scientists say that this change could keep the zooplankton in depth for longer leading to disruption of the storage of carbon on the ocean floor.

Human activities, such as the burning of fossil fuels and deforestation, release significant amounts of carbon dioxide into the atmosphere – disrupting the natural carbon cycle. In 2023, carbon pollution – as a result of human activity – reached a record 37.4 billion tonnes. With such record-breaking carbon emissions, it is getting harder for natural carbon sinks to absorb atmospheric carbon. While it may be possible to remove carbon on a large scale with the aid of technology, reaching net zero is not feasible with it alone.

Despite the challenges, there is growing interest in artificial carbon

sinks. Artificial carbon sinks use technology to capture carbon dioxide directly from the atmosphere and store or repurpose it. This approach, known as Carbon Capture, Utilisation, and Storage (CCUS), is becoming increasingly important.

One such technology is Direct Air Capture (DAC). DAC systems use large fans to pull air from the atmosphere, passing it through chemical filters that extract carbon dioxide. This captured carbon dioxide can then be utilised or stored in several ways. While artificial carbon sinks provide a new way to capture and store carbon, the use of CCUS technology has faced many challenges, making it hard to adopt and scale these systems.

In the period that we have observed the earth's climate, it has existed in a fragile equilibrium. But this balance has been disrupted, driven primarily by rising temperatures. With the ecosystem already under strain, there remains only one strong carbon sink in the Congo basin. Yet, we are lulled into a comfort zone relying on nature to do its work. But can we really ignore the crisis?

The weakening of land sinks, though regional, is already undermining nations' efforts on decarbonisation and climate goals. Natural carbon sinks have been taken for granted in political and governmental spheres, despite uncertainty about their long-term reliability. While some propose increasing carbon absorption through forests and ecosystems, researchers emphasise that the priority should be protecting existing carbon sinks by stopping deforestation, reducing emissions, and maintaining their health.

Adrin Sarwar is a student of Printing and Publication Studies.

