CERN & SOCIETY FOUNDATION · BEAMLINE FOR SCHOOLS

2025 BL4S OUTREACH AWARD

“Can This Show Us Aliens?”

A New Question Beneath the Skies of Netrokona

Students of Saima Shahjahan Academy, Kendua, Netrokona

Students of Dulain Abdur Rahman Government Primary School, Kendua, Netrokona

By Team Jagrata 24

Kendua Upazila, Netrokona District, Bangladesh · May 2026

I. Ayesha

It was 10 a.m. The moment a telescope was set up on the grounds of Saima Shahjahan Academy, Kendua, a line began to form behind it. From somewhere near the back came a question, “Can this show us aliens?” Every child in the line turned toward the sound, waiting, as if the question belonged to all of them at once.

Students at Saima Shahjahan Academy line up for their turn at the eyepiece.

A young girl looks through the telescope for the first time, steadied by a classmate.

At the front of the line stood Ayesha, a fifth-grade student, still holding yesterday's exam paper in her hand. Her eyes stayed fixed on the telescope, sharp with the effort of trying to understand what it was. She had no answer of her own. She had never seen anything like it before.

Her turn came. She bent toward the eyepiece. For a few seconds, she said nothing. Then, almost speaking to herself, she asked, “Do scientists look at the stars through this too?” She had no way of knowing that the very tube she was looking through carried the engraved names of five scientists who had done exactly that. Beside her, a fourth-grader named Ramisa asked, “How far away is the sun from us?”

For girls like Ayesha, in this part of the country, a moment like this was never easy to come by. At every session, one rule was followed quietly but without exception: girls went first. Before the crowd pressed in, before the boys lined up, girls were shown how to level the tripod, align the finder scope, and be the first to look through the eyepiece. When Ayesha's early hesitation gave way, in front of her classmates and teachers, to open wonder, that single moment did more than any speech could - it made her presence at the instrument feel entirely natural, and it visibly steadied her confidence.

> *“51.4% of girls in Netrokona district are married before the age of 18 - a figure that runs even higher in the haor and border regions.”*
>
> **— Bangladesh Bureau of Statistics (BBS) & UNICEF MICS Survey**

Ayesha's question spoke for something larger than herself. It spoke for an entire district where, for generations, primary classrooms in villages like Kendua have taught science through nothing more than black-and-white chalk diagrams, no instruments, no hands-on experience and where, to this day, there is no dedicated astronomy society or observation facility of any kind.

II. Sami

A few days later, a second line formed on the grounds of Dulain Abdur Rahman Government Primary School. This time, many of the children waiting were not in school uniform. They had come straight from the fields, from fishing in the haor wetlands, from the local brick kiln.

Children who came straight from the brick kiln and the fields - many seeing a telescope for the first time in their lives.

Among them was Sami, fourteen years old. He had never been enrolled in school. His father's income wasn't enough, so Sami worked too, at the brick kiln nearby. But that afternoon, instead of carrying bricks, his hands were on the finder scope of a telescope, learning to align it.

When he finally looked through the eyepiece, his question came without hesitation, almost matter-of-fact, “Could we go to the moon too, like the scientists?” It wasn't a question that asked for sympathy. It was a simple piece of arithmetic if scientists could go, why not him? In Sami's world, the word “scientist” had never before shared a sentence with his own future. That afternoon, for the first time, it did.

Trying to meet that spark with something solid, campaign lead Redwanul Islam knelt down and said, “Of course you can.” He pulled up a photo of Valentina Tereshkova on his phone and told Sami, in the simplest terms he could find, about a woman who had once worked in a textile factory, without any advantage of birth or privilege, and who had still found her way into space. “If you hold onto a dream the way she did,” he told him, “one day it could be you in a photograph like this one.” It was a story shaped, in that moment, for one boy not a lesson in history, but a hand held out toward what might be possible. Something in Sami's posture changed. For the first time, he let himself imagine standing somewhere far beyond the brick kiln, a place he had likely never allowed himself to picture before.

Hearing so much talk of Nobel laureates, another child nearby asked, “What's a Nobel Prize?” Redwanul Islam answered as simply as he could: “It is the highest award in the world given to people who study hard and devote their lives to serving humanity, they become real-life heroes.”

> *“6.8% of children aged 5 to 17 in Netrokona are classified as child labourers - their circumstances recorded in government statistics, but rarely in any plan for science education.”*
>
> **— BBS / UNICEF MICS data**

The second session had been built specifically with children like Sami in mind, so that the absence of a school uniform would never mean exclusion from the wonder of that afternoon.

Ayesha and Sami have never met. Their stories were never meant to be told side by side. But in front of the same white telescope - one arriving from a classroom, the other from a brick kiln, carrying entirely different realities - their curiosity weighed exactly the same.

III. Team Jagrata 24

In May 2026, Team Jagrata 24 carried a telescope signed by Nobel laureates into two schools in Kendua upazila, Netrokona, running these two separate sessions. Among the more than 150 participants were students, parents, teachers, and children like Ayesha and Sami, for whom the word “science” rarely enters daily life at all.

The journey carried personal weight for the team as well, Netrokona is the ancestral home of team member Redwanul Islam. Returning to this soil was never just about organising an educational campaign. It was a homecoming.

The signed telescope beneath the gate of Saima Shahjahan Academy, Kendua — founded 1995.

The telescope at the centre of the campaign is no ordinary donation, it carries a story of its own. Won through Team Jagrata 24's participation in Beamline for Schools (BL4S), CERN's international particle physics outreach competition, the instrument bears the signatures of five Nobel laureates in physics - Samuel C. C. Ting, Gerard 't Hooft, François Englert, Michel Mayor, and Didier Queloz alongside that of CERN's Director-General, Fabiola Gianotti. Almost none of Kendua's children, and few of their teachers, had ever heard of CERN or BL4S before that day. But the meaning came through when it was put simply, “The greatest scientists on Earth signed this telescope for you, so that you could look at the stars the way they do.”

The most striking reaction, though, came not from the students but from their teachers. When it was mentioned, almost in passing, that the World Wide Web (WWW) the technology behind the internet on their own phones had been invented by researchers at CERN, their disbelief was immediate. In that instant, CERN stopped being some distant European laboratory. It became something already woven into their daily lives.

> *"We are truly moved to receive such a wonderful gift. I cannot fully express how much our students, especially the younger ones, needed practical equipment like this. Because of you, our students have felt the universe for themselves, not just through a telescope drawn on a textbook page, but through the real one you gave them. The small questions and curiosity that stirred in them today will be what carries them forward into science, just as it once carried you."*
>
> **— Md Azizul Haque, Headmaster, Dulain Abdur Rahman Government Primary School**

When the idea of starting an astronomy club was raised at Saima Shahjahan Academy, the school's science teachers, Md. Fazlur Haque Talukder and Salma Akter, along with students from the eleventh and twelfth grades, responded with genuine enthusiasm and expressed their own interest in one day entering Beamline for Schools themselves.

Advancing Three Sustainable Development Goals

SDG 4 Quality Education
So that students would encounter science as something practical, not confined to a textbook.

SDG 5 Gender Equality
Giving girls like Ayesha priority and the first turn at the telescope, in a district with a 51.4% child-marriage rate.

SDG 10 Reduced Inequalities
Including children like Sami, who are usually left outside the reach of outreach programmes like this one altogether.

For the team, the guiding belief has always been simple: no single seminar or one-day programme, on its own, can create lasting change. But if one underprivileged child from a village is given the guidance to reach an international stage, that child becomes living proof for every other overlooked child in that village, that this is possible for them too. That kind of inspiration outlasts any workshop money can buy.

Netrokona Was a Beginning, Not a Destination

Plans are now underway to bring the same model to Hatiya Island in Noakhali one of Bangladesh's most isolated communities, cut off from the mainland by the mouth of the Meghna River. The next phase envisions formal partnerships with CERN, BL4S, the Embassy of Switzerland in Bangladesh, the German Embassy in Dhaka, local university science clubs, and other BL4S Outreach Award-winning and shortlisted teams from Bangladesh. If realised, it would mark the team's first step toward SDG 17 (Partnerships for the Goals) extending this work to students and communities who have never heard the name Beamline, let alone looked through a telescope.

> *“As the team lead, I deeply believe that with CERN, SSVI and BL4S support, guidance, and collaboration, we can bring Beamline to the most remote and underserved regions of Bangladesh. There are still children here who have yet to discover that they themselves are made of billions of fundamental particles, or that the cosmos holds so much more wonder beyond just the moon.”*
>
> **— Ibrahim Islam Fahim, Team Lead, Jagrata 24**

Ayesha and Sami will likely never know the telescope's full journey, how it came to exist through SSVI – ‘Stars Shine for Everyone’ a project founded by Jean-Pierre Grootaerd, an amateur telescope maker and associate member of the Department of Physics and Astronomy at Ghent University, Belgium, in partnership with CERN, the world's largest particle physics laboratory. They won't know that this year's BL4S competition drew 508 proposals from 72 countries and more than 3,500 students, and that Team Jagrata 24, born in Bangladesh was named among the top 15 teams for the quality of their outreach, carrying this telescope roughly 7,600 kilometres from CERN to a primary school field in a remote village of Netrokona. They will only know that one day, on their school grounds, they asked a few questions and someone chose to take those questions seriously.

That “someone” was, in truth, many people. Ibrahim Islam Fahim, under whose leadership Team Jagrata 24 first took shape. Redwanul Islam, who returned to his own ancestral ground to lead this campaign on the field. Shahadath Sabbir, team coach and beside them, Md Twashin Ilahi, Tasfiya Zaman Totiny, Shaira Anjuman, Nirban Bin Shahjahan, Waseka Mehrin, Ajmain Hussain Adiyan, and Mashfia Rahman Mithila - who worked quietly behind every telescope set up, every question answered, every child's smile. Ayesha and Sami will never know their names either. But what happened beneath the sky of Netrokona that day was the result of all of their work, together.

TEAM JAGRATA 24

Ibrahim Islam Fahim (Team Lead) · Redwanul Islam (Campaign Lead, Netrokona) · Shahadath Sabbir (Team Coach) · Md Twashin Ilahi · Tasfiya Zaman Totiny · Shaira Anjuman · Nirban Bin Shahjahan · Waseka Mehrin · Ajmain Hussain Adiyan · Mashfia Rahman Mithila