

Science for Development Showcase



Irish Aid
An Roinn Gnóthaí Eachtracha agus Trádála
Department of Foreign Affairs and Trade

Date: Wednesday, 9th April 2025

Time: 12.00 am - 2.00 pm

Venue: Iveagh House, 80 St Stephen's Green, Dublin 2, D02 VY53

Information

The Science for Development Award is a special award category at the BT Young Scientist Event. Every year following the BT Young Science & Technology Exhibition (BTYSTE), Self Help Africa hosts an in-person showcase in collaboration with Irish Aid.

Each year Self Help Africa select projects that have entered the BTYSTE whose research has potential for application in the Global South, including in those countries where Self Help Africa has ongoing projects.

The Science for development showcase will be hosted at the Department of Foreign Affairs, Iveagh House, 80 St. Stephen's Green in Dublin, and will be an opportunity for young people to display their projects, connect with like-minded peers, policymakers, professionals in the fields of development, climate change and technology.



Nikishi Polgolla from Our Ladys School in Dublin presents her project "Investigating the active components in gooseberry (nelli) extracts that are effective against antibiotic resistant bacteria found in skin diseases" at the Science for Development 2024 showcase.

Event Schedule

When: Wednesday, 9th April 2025

Where: 12.00 am - 2.00 pm

TIME	ACTIVITY
11.00 am	Students exhibitors arrive for registration and project set up. Video interviews conducted with the attendees and their projects
12.00 pm	Guests arrival. Guest tour of the different projects and engagement with students and teachers
12.30 pm	Refreshments served
1.00 pm	Addresses by invited guests
1.30 pm	Further opportunity for students and guests to discuss projects insights with students and teachers
2.00 pm	Event ends



Minister Sean Fleming and CEO of Self Help Africa with winners of the Science for Development Award 2024 Ella Ryan and Rachel Hamm from Moate Community School, Westmeath.



Science for Development 2025 selected projects

HemaSense - Screens for anemia, blood conditions without needle sticks.

Anaus (Sam) Syed Muhammad
Bruce College (Cork)

Winner of this
years 'Science
for Development
Award'

PM-DAC: A system for removing CO₂ from the atmosphere

Tomas Markey
St Brogan's College (Cork)

'Sheep strength': Using wool to reinforce concrete

Aoife Fadian and Jessica O'Connor
Ursuline College (Sligo)

A novel approach to regenerative agriculture through the use of Comfry as a sustainable soil enhancer

Luke Blackwell
CBS Thurles (Tipperary)

'Crisis Crunch' – A Healthier and Sustainable Alternative for Emergency Relief

Dania Ahmad
Coláiste Choilm (Cork)

Forever farming – Sustainable Pest Control

Emily O'Brien
Meán Scoil an Chlochair (Westmeath)

Energy Crisis? – Let me help you! – A novel solar desalination method to extract clean water, fertilizer and biochar from our coastal resources

Amber McDonald
Ursuline College (Sligo)

OtoInSight – converts virtually any smartphone into an otoscope, allowing ear infections to be diagnosed remotely.

Aoibhilinn Heath, Caoimhe Greene
Desmond College (Limerick)

Sticky Stethoscope – a stethoscope that sticks to the patient to provide continuous monitoring in ICU settings.

Gagana Kumar, Sarah Reilly
Presentation College Headford (Galway)

Fungi Civil War: Using Birch Polypore to develop a treatment spray for bovine ringworm

Aoife Ross, Katie Creggy and Katie Ann McHugh
Moate Community School (Westmeath)

Investigating the effectiveness of zeolites as a soil amendment to reduce nitrate runoff from fertilisers

Fionn Murray
Tullamore College (Offaly)

Harnessing Donegal's Coastal Wealth: The sustainable & renewable harvesting of Donegal seaweed using the advanced solar drying method for biodiesel production

Klara Piechocka
St. Columba's Comprehensive School (Donegal)

Vitamin C retention in vegetables using different cooking methods

Bridget Hickey-Montoro, Laura Connolly and Abha Dillon
Santa Sabina Dominican College (Dublin)

Waste to Watts: Harnessing Microbial Fuel Cells as a renewable resource for Developing Countries

Sine McGovern and Alicja Czop
St. Brigid's Vocational School (Cavan)

'Verdura', An AI-powered organic fertilizer recommendation scheme that supports sustainable farming

Loughlin O'Donnell and Sean O'Riordan
Árdscoil Uí Urmoltaigh (Cork)

Which Plant is the Best Defence Against Ocean Acidification?

Ruben Massey
Coláiste Chiarain (Limerick)

'No Environment, No Wellbeing' - An intervention to reduce eco-anxiety and increase climate engagement in teenagers

Roise Glynn and Clodagh O'Dwyer
Ursuline Secondary School (Tipperary)

Electrobloom: An electroculture growth chamber to increase the germination and yield of protected crops

Hollie Field, Heidi Shellam and Saoirse Lynam
Moate Community School (Westmeath)

An assessment of reliability of weather proverbs in a time of climate change

Anna Buckley, Saoirse Kiely and Meabh Casey
Millstreet Community School (Cork)

FAQs for students and teachers

When should I get at the venue?

You will be expected to be at venue by 11.00.am for registration and set-up of your project display and stand.

What do I need to take with me?

Each project will be allocated a table and if necessary, a display board.

You are more than welcome to bring items that illustrate your project which may include:

- Your project book
- Graphs and images, visual representations of data
- A prototype or example of something you have made
- A laptop to share data

What am I expected to discuss during the event?

You will be presenting your project – as exhibited at this year’s BTYSTE – to guests (NGO workers, academics and scientists) that work in the field of international development, climate change and technology.

Here are some prompts that may help you ahead of the day:

- Give an overview of the project and what you wanted to achieve
- Why did you choose to research this topic?
- What value could it have for a community in the Global South?
- Did you make any unusual or surprising discoveries during your research?

Please view this video of the 2023 showcase [here](#) to familiarize yourself with the event.



Science for Development Award

The Science for Development Award is a Special Award presented annually at the BT Young Scientist & Technology Exhibition to a research project that addresses sustainable development challenges faced by communities in the Global South.

The Science for Development Award is organised by Self Help Africa's Development Education team, and the winning project receives a travel bursary sponsored by Irish Aid. This bursary funds one student and their teacher to travel with Self Help Africa to one of their programme countries on a study visit where they have the opportunity to carry out field research on their project, interact with African student counterparts, and to meet local communities who they could exchange ideas with regarding their project findings.

Learn more about the Science for Development Award past winners on our website scanning this QR code



Minister for International Development and Diaspora Seán Fleming, awarded the prize to Anas Syed Muhammad, student at Bruce College, Cork, for his project 'Hemasense: screens for anaemia, blood conditions without needle sticks'.

School Workshops



Our Development Education team at Self Help Africa delivers interactive workshops for post-primary students in both schools and Youthreach centres across Ireland. You can choose from a wide range of topics e.g. Climate Action, Food Security, Sustainable Agriculture, Gender Equality and Ethical Fashion. Each topic is linked to the activities implemented by Self Help Africa through our programmes in different countries. Themes underpinning workshop topics suit the required delivery of wellbeing hours and Transitions Year activities.

You can consult the full list of workshop topics and access our resources scanning this QR Code



Workshops are free of charge as the programme is funded by Irish Aid.

To book a workshop contact our Development Education team at **schools@selfhelpafrica.org**