



SCIENCE FOR DEVELOPMENT AWARD



STUDENT SCIENTISTS ADDRESS AFRICA'S DEVELOPMENT CHALLENGES

GOT A GREAT IDEA? FANCY A FACT-FINDING VISIT TO AFRICA? YOU COULD BE OUR NEXT AWARD WINNER!



Above: President Michael D Higgins with 2017 winners Jack O'Connor and Diarmuid Curtin at Áras an Uachtaráin

The “Science for Development Award” is presented at the BT Young Scientists Exhibition to a research project that addresses a challenge faced by communities in Africa.

The award is organised annually by the education unit of Irish development agency **Self Help Africa**, and is sponsored by **Irish Aid**.

The award provides the entrant with a travel bursary to fund the cost of one student and their teacher to travel on a fact finding ‘research’ visit to Africa.

Previous winning projects have included fuel-efficient cooking stoves, solar-powered water purification devices, ergonomic seed planting devices, research on traditional home-births and on the treatment of dairy produce.

WHO IS ELIGIBLE TO ENTER

This award is open to any entrant (individual or group) who has been accepted in the Intermediate or Senior sections of the BT Young Scientist & Technology Exhibition, and whose project addresses an issue facing people living in the Global South.

Projects could include:

- Biological and Ecological Sciences
- Chemical Physical and Mathematical Sciences
- Social and Behavioural Sciences
- Technology

Learn more about the competition:

www.btyoungscientist.com

www.selfhelpafrica.org/ie/education/

Self Help Africa’s Development Education team will run workshops for students and teachers who might be interested in submitting suitable ‘Science for Development’ projects in the 2018 BT Young Scientists Exhibition.

We would also request those who are submitting projects for the award to forward an additional copy of their project to us.



SCIENCE FOR DEVELOPMENT AWARD WINNERS

2006

The inaugural winners from Moyne Community School, Co. Longford, won the award for their study on volunteering and support for charity in Ireland.

2007

A device to purify drinking water using solar panels won the 2007 award for a group of students from St. Joseph’s Secondary School in Creggan, Derry.

2008

Tara McGrath from Presentation School, Kilkenny, won the 2008 award with her fuel efficient pressure cooking device.

2009

Students from Muckross College, Dublin, won the award with their study on home birth practices and services in rural Kenya.

2010

A fuel efficient cooking stove developed by Richard O’Shea from Scoil Mhuire Gan Smál, Blarney, won the award in 2010.

2011

Daniel Nyhan, Sean White and Michael McCarthy from Clonakilty Community School, won with their garden vegetable pack designed to help improve family diets.



PROJECT CRITERIA

The winning project of the 'Science for Development' award should clearly address a specific issue in a Global South context and show a willingness to learn more.

Topics that could be addressed include:

- Hunger eradication and food production
- The environment (e.g. deforestation, clean water & sanitation, soil fertility, soil erosion, pollution)
- Climate change
- Appropriate and sustainable technologies
- Health care, HIV/AIDS, TB eradication, etc

Projects should demonstrate a clear understanding of a partnership approach to development, and demonstrate an understanding of the connections between the local (Ireland) and global context for tackling the chosen development issue.

WHAT ARE THE CHALLENGES?

Self Help Africa works with some of the world's poorest and most marginalised people. Amongst the challenges people face in their daily lives are:

- Famine and food shortage
- Limited access to water for drinking or irrigation purposes
- Limited seed stock to produce crops
- Poor soil fertility and land degradation
- Poor sanitation
- Inadequate healthcare
- Problems with transportation and accessing markets
- Threats posed by crop pests and disease
- Absence of agricultural advice & support
- Challenges cooking, preparing & storing food
- Limited access to credit (micro-finance)

Those are the challenges. Why not respond to some of these questions at this year's BT Young Scientists Exhibition?



Above: Emily Lecky and Zoe Chesire, West Africa, 2014.
Right: 2016 winners giving a presentation in Malawi.



2012

Keane Nolan and DJ Hanley from St Mary's Academy, CBS, Carlow won for a project that analysed milk, and the potential use of natural preservatives.

2013

Fergus Jayes, Darragh O'Donovan and Ciaran Crowley from Clonakilty Community School scooped the award with their solar powered fridge.

2014

Ballyclare students Emily Lecky and Zoe Cheshire were winners with their solar powered water sanitation furnace.

2015

Megan Duffy and Zoe McGirr from Oakgrove College in Derry created a seed harvesting kit for subsistence farmers in Africa.

2016

Ruaidhri Jordan, Ben Conlon and Mason Scallan from Salesian College, Kildare: Preservation of Water Supplies Using Hygroscopic Polymers

2017

Jack O'Connor and Diarmuid Curtin from Desmond College won with their ergonomically designed portable planter.





Above: Habibou Tiendrebeogo with her cooking stove at her home in Nomgana Village, Burkina Faso, 2016.

Right: Stephen Linga, Malela village, Northern Zambia, 2016.



Self Help Africa organises a fact finding visit for students and teachers to Africa, each year.

During these visits participating students have had the opportunity to meet with local people and ask them about the issues affecting their lives. Below are some of their answers:

- *I have to walk two miles to collect 20 litres of water, twice a day. It's hard work collecting water, and takes a lot of my time*
- Grace, Ethiopia (14 years)
- *I have to cut and carry firewood twice a week from 5 miles away*
- Betty, Zambia (12 years)
- *My school has no electricity, toilets or running water*
- Benjamin, Eritrea (8 years)
- *The only way I can afford to send my daughter to school is by borrowing from a loan shark at 1,000% interest*
- Anna, Togo
- *I have excess potatoes once a year but nobody in my small rural village can afford to buy them*
- Mary, Ghana
- *When we store our main maize crop, a lot of it doesn't last because it rots*
- Amos, Uganda (30 years)

CONTACT US:



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**Self Help
Africa**

If you would like to develop BT Young Scientist projects that address any of the challenges faced by people in Africa, we can help.

- One of our team could visit your school and facilitate a workshop to look at the role that innovation could play in African development.
- We can provide curriculum materials to help with your research.
- We would be happy to answer any questions that you have about the competition, or talk through any project ideas you might be considering.