BT YOUNG SCIENTIST & TECHNOLOGY EXHIBITION



ADDRESS GLOBAL DEVELOPMENT **CHALLENGES**





THE SCIENCE FOR DEVELOPMENT AWARD

The "Science for Development Award" is presented at the BT Young Scientists anbd Technology Exhibition to a research project that addresses a social/environmental challenge faced by communities in the world's poorest countries.

The award is organised annually by the Development Education team at Self Help Africa, and is sponsored by Irish Aid. This 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 fuelefficient cooking stoves, solar-powered water purification devices, ergonomic seed planting tools, research on traditional home-births and on the treatment of dairy produce.



BT Young Scientist Founder Dr. Tony Scott and Tánaiste Simon Coveney with students of North Monastery Secondary School displaying their project of an economical sensor that leads to the conservation of water using sound frequency.

SCIENCE FOR DEVELOPMENT SHOWCASE EVENT

Each year Self Help Africa invite selected projects to a Science for Development Showcase Event which celebrates the work of students at the BTYSTE which relates to development. These are projects which our team from Self Help Africa and our sponsors in Irish Aid identify as projects we

believe were frontrunners for the award. The event, which is now in its fourth year, gives students the opportunity to demonstrate and discuss their projects with science educators, technical experts and development practitioners as well as their peers.



Students from St. Mary's Secondary School exhibiting their project on the effect of different materials on bee health at the 'Science for Development' Showcase Event in Iveagh House

At the 2018 event Simon Coveney, Tanaiste and Minister of Foreign Affairs and Trade lent these words of encouragement to students, "Keep doing what you're doing and challenging norms because that's what we need from a new generation of thinkers in Ireland." The event was held in the Iveagh Ballroom of Iveagh House on the 12th of April 2018.



Science for Development' Winners 2015 Zoe McGirr and Megan Duffy from Oakgrove College.

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/

We would encourage schools who intend to submit projects for the BT Young Scientist Exhibition to contact us and learn more about this special category Science for Development Award.

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
- Threats posed by crop pests and disease
- Absence of agricultural advice & support

- Challenges cooking, preparing & storing food
- Limited access to credit (micro-finance)
- Insufficient/unreliable access to electricity
- How to best access/utilize new 'smart' and mobile technologies (eg phone apps)
- Rapid diagnostic testing
- Mobile banking and accessing up to date trading data.

Why not respond to some of these questions at this year's BT Young Scientists Exhibition?

SPEAKING ABOUT THE CHALLENGES



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:



www.selfhelpafrica.org/ie/education



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Contact Dorothy Jacob at: schools@selfhelpafrica.org 086 8654170



If you would like to develop BT Young Scientist projects that address 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.