

Rural People in the Developing World: How to Escape Hunger and Poverty? A Data Challenge

Competition Launch Date - 23 February 2018

Drop-in information session – 1 March 2018, 10:00-11:00, Queens Building Room 1.18, BS8 1TR.

Entries deadline – 30 March 2018

Join our global farming data competition to better understand farming practices and outcomes in low-income countries and compete for a cash prize of £1,000.

The challenge

The first and second sustainable development goals are “No Poverty” and “Zero Hunger”. It is estimated that 836 million people live on less than \$1.25 per day, and that 795 million people are chronically undernourished¹. More than three quarters of these people live in rural areas².

- Rural and national economies are changing rapidly in both positive and negative ways due to factors such as economic development, urbanisation, communication technology, climate change and conflict. There are winners and losers amongst the rural people of developing countries, but untangling the drivers of success or failure can be a complicated process.

Data

- We present here a harmonised dataset built from over 4,000 interviews with rural households in 12 countries across Africa and South East Asia. Topics covered include household demographics, land management, crops, livestock, income and livelihoods, food security, dietary diversity and gendered control of household resources.
- Some well-known indicators to assess poverty and food security have already been calculated for these data, but we would also welcome the use of more innovative measures of household welfare or behaviour.

Example research questions

- Why do some households succeed where others don't? What can we learn from those who do well, and how can we apply those lessons to help those who don't?
- How do drivers of success vary between different locations? In what ways do location-specific factors influence household level drivers of success?

¹ <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>

² <http://www.ophi.org.uk/wp-content/uploads/Poverty-in-Rural-and-Urban-Areas-Direct-Comparisons-using-the-Global-MPI-2014.pdf>

- Could increased agricultural production be a viable route out of hunger or poverty? Or are non-farm sources of income essential? How great is the role of markets for sale of produce and purchase of foodstuffs?
- How do findings change with differing methods used to quantify hunger, malnutrition and poverty?
- How can we make sense of such multi-dimensional data, and how can we visualize results in ways that are easily understandable for non-scientists or the general public?
- Can these data be used to build or test visions for the future of developing world agriculture?

Competition rules

- The competition opened on 23 February 2018.
- Potential participants are invited to attend a **Drop-in information session (1 March, 10:00-11:00)** when the providers of data will be available to answer questions about the dataset.
- The competition is open to all individuals over the age of 18 at the time of entry. Individuals or teams can enter. Teams can have up to five members.
- Anyone can enter, but to be considered for the cash prize, teams must have at least one member who is a current staff member or student at the University of Bristol.
- The Jean Golding Institute and the data providers have the rights to publicly disseminate any entries (but contestants will be appropriately credited as the creators of any content).
- Participants can link other sources of open data to the analysis.
- The teams that wish to showcase their solutions in the future will need to refer to the competition as follows: *'This work was undertaken as part of a data challenge organised by the Jean Golding Institute for Data-Intensive Research at the University of Bristol and ILRI'*.
- The winning teams will be invited to attend the prize ceremony at the '[Global Partnerships for Global Challenges Symposium](#)' that will take place in Bristol on the 12 April 2018. Also the teams will be invited to attend the Jean Golding Institute Showcase on 3 July 2018.
- The final deadline for entries is 30th March 2018.

How to enter

- Teams/Individuals will need to sign up to the competition by completing the [Competition entry agreement](#). Once the form is completed you will be given access to the dataset.

Entries and judging criteria

- Entries can take any shape or form, but contestants are expected to submit both a presentation of the results (e.g. a data visualisation, a brief report) as well as the code/analysis syntax used to generate the outcome.
- If you choose to make your entry available through an online repository (e.g. Github) please consider the terms and conditions attached to the data (T&C's are available on the sign-up form, to which a link is included above under "Signing up")
- Entries will be judged by a panel convened by the Jean Golding Institute and will be judged on the following:

- Potential value of the insight into the problem generated by the work
- Innovativeness of the work
- The extent to which the presentation of the work is clear and engaging

Drop-in Information event

There will be an information session on 1 March, 10:00-11:00 am, in Queen's Building, 1.18, BS8 1TR. At this meeting the data providers will be available to answer any questions surrounding the competition. The meeting is also an opportunity to meet other contestants and form teams should you wish to do so and to explore the datasets.

Prizes

The winner of the competition will receive £1,000, with the two runners-up each receiving £250. The prizes will be sponsored by the University of Bristol.

The Jean Golding Institute will discuss with the winning team how to potentially continue supporting the development of their projects.

Conditions

The winning teams will need to be available to showcase their entries on 12 April during the 'Global Partnerships for Global Challenges Symposium' and the Jean Golding Institute Showcase on 3 July 2018. Participants will also be asked to be part of a film showcasing the results, the video will be shared with the communities that supplied the data and also be added to the University of Bristol YouTube channel.

Timelines

Competition opens:	23 February 2018
Entries deadline:	30 March 2018
Winning team announcement:	6 April 2018
Prize presentation:	12 April 2018 – 'Global partnerships for global development symposium'.

We look forward to seeing how you can use your skills to make a difference!