



Addressing nutrition challenges in developing countries

An interdisciplinary workshop and seed funding competition

21 November 2018

Rayleigh Seminar Room, Maxwell Centre, Cambridge

Global Challenges SRI (CGC) and Cambridge Global Food Security IRC (CGFS) wish to support interdisciplinary research addressing specific challenges relating to malnutrition in Official Development Assistance-target countries. The TIGR²ESS project in India, in which both CGFS and CGC are involved, and emerging CGC partnerships in Eastern and Southern Africa, have enabled the identification of specific malnutrition challenges.

Isaac Newton Trust funds have been awarded to run a workshop and seed-funding competition. Small grants of up to £3,000 will be available to attendees, on a competitive basis, to fund either travel or equipment to investigate early-stage ideas. The aims are i) to bring together new interdisciplinary teams of researchers who will work collaboratively, and ii) to develop new research ideas to the point where larger applications to established funding bodies are feasible, for continuation of the research on a larger scale.

Workshop

A day-long workshop will facilitate interdisciplinary dialogue and promote the generation of collaborative research ideas. Only those attending the workshop will be eligible to apply for seed funding. **The participation of early career researchers is encouraged.**

Researchers from Bahir Dar University (Ethiopia) and from Nabakrushna Choudhury Centre for Development Studies (India) will present case studies representing specific challenges to addressing malnutrition in developing countries. Through an interactive exercise, participants will form small groups to develop proof of concept projects to address these challenges. Single page summaries of these projects with proposals for the use of seed funding will be submitted at the end of the day. Proposals will be judged by an independent panel, and the best ones will be selected to receive funding. In addition, the development of promising ideas projects will be supported by the opportunity to present them at the Cambridge Global Challenges Annual Conference in November 2018 and at the Cambridge Global Food Security Symposium in April 2019.

Registration

Please [register here](#) before 16 November, 2018. The event is free but places are limited; register now to secure your place.

Contact

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Case studies to be presented

Revival of millets in crop systems for improved nutrition and economic security in Odisha

Professor Srijit Mishra, Nabakrushna Choudhury Centre for Development Studies, India

Millet has long been a staple part of the diet of the tribals of Odisha, but development agencies and farmers have ignored it recently in favour of rice, wheat and other cash crops. Millets are climate resilient crops systems, and their revival will enhance the resilience of farming systems and household food security against climate change. Increasing urban demand, improvements in processing machinery, availability of improved cultivars, better agronomic practices and the possibility of accessing support irrigation has increased the potential of realising higher productivity in millets, thereby improving nutrition security, resilience and economic security of Adivasi households.

In September 2018, the Indian Government launched a mission on nutri-cereals for the promotion of millets and to improve nutritional security. The launch highlighted the successful initiative of Odisha Millets Mission, which won a SKOCH Award (December 2017) from among the top 30 Transformational Innovation Projects in India. The Odisha millet intervention began in 2017 and will run for five years. It facilitates improved agronomic practices, has initiated a procurement process to pay cost price to farmers who grow millets and has also introduced minor millets into state nutrition programmes on a pilot basis. The aim is to revive millets in crop systems, and improve their productivity for a marketable surplus thus enhancing farmers' income. The programme also aims to increase household consumption of millets, reducing hunger and improving nutrition.

Improving food security and nutrition in Ethiopia using novel technologies to irrigate from groundwater, process crops, prepare food and enhance market access

Dr Seifu Tilahun, University of Bahir Dar, Ethiopia

Since 2015 Bahir Dar University has supported a Small Scale Irrigation (SSI) and Sustainable Intensification (SI) innovation lab as part of an international Feed the Future initiative. This consists of research interventions to introduce dry period irrigation with two farming communities that previously practiced rain-fed agriculture.

Demand-driven field level pilots, including analysis of novel technologies and practices (water lifting, distribution, irrigation scheduling, productivity, irrigated fodder, and conservation agriculture), were implemented with more than 100 farmers in the two communities. International partners such as IFPRI conducted surveys to assess linkages between Small Scale Irrigation, nutrition and gender, while IWMI did a market analysis of technology supply chains and private sector role in Small Scale Irrigation.

An applied human nutrition study was conducted, including training 50 farmers on nutrition. The key findings were that farmers gain multiple benefits with a range of incentives to adopt new technologies. Irrigators have higher household dietary diversity (economic access to foods) and irrigation improved child growth (reduced stunting). In order to promote dry period irrigation, however, reducing labor (including household task) through technologies is critical to increase profit and transform livelihoods through intensification. The intervention also found that irrigated fodder was feasible, both as a cash crop and for small farm use. While the results of this intervention are promising, if food security and sustainable livelihoods for Ethiopian farmers is to be achieved, further research is needed to evolve context-appropriate technologies for irrigation, farming, food processing and preparation and market access.

Responding to chronic maternal and child undernutrition in Ethiopia

Dr Hirut Assaye, University of Bahir Dar, Ethiopia

Despite the progress made in recent years, Ethiopia still has one of the highest levels of chronic undernutrition (stunting and underweight) in the world. Micronutrient deficiency is also a serious public health problem in the country as more than 50 thousand children die each year due to vitamin A, iron and folic acid deficiencies. Ethiopia's GDP is depressed by 1.42% due to current levels of anemia, vitamin A and folic acid.

The Government of Ethiopia finds this situation unacceptable and has decided to focus on ending child undernutrition by 2030 with a commitment to the 'Seqota' Declaration. The current situation regarding maternal and child nutrition in the country will be discussed, along with the challenges and opportunities to improve the situation, and strategies and programs being developed and implemented in response.