



CERES 2030: Sustainable solutions to end hunger is a joint initiative of Cornell University, the International Food Policy Research Institute (IFPRI) and the International Institute for Sustainable Development (IISD). By combining state-of-the-art modelling techniques with expert evidence, our collaborative project aims to build consensus on the best way to end hunger sustainably, with costs and effective solutions.

The project started in January 2018 with support from the Federal Ministry for Economic Development Germany (BMZ) and the Bill & Melinda Gates Foundation.

With strong involvement of stakeholders, the project will contribute to building and monitoring a global roadmap to

achieve SDG 2. The implementation strategy is based on two core complementary activities:

- Designing an advanced modelling framework to measure the cost of ending hunger through sustainable productivity growth; and
- Consensus-building on the most effective set of interventions, with results released in a special journal issue.

We have been busy behind-the-scenes during the last six months and would like to share some of the highlights in this first activity update. We will provide regular updates on progress, latest developments and key activities of the project.

Highlights

Journal advisory board established

Between January and May 2018 we invited leading food and agriculture experts to join a journal advisory board to guide development of the intervention questions, recommend key authors, and advise on engagement with stakeholders.

We are pleased to announce the current composition of the journal advisory board:

- Belay Begashaw, Director, Sustainable Development Goals Center Africa
- Catherine Bertini, Fellow, Rockefeller Foundation, and Chicago Council and Chairperson of GAIN
- Joachim von Braun, Bonn University
- Ronnie Coffman, Cornell University
- Boaz Keizire, Policy Advisory, Alliance for a Green Revolution in Africa (AGRA)
- Segenut Kelemu, Director, International Centre of Insect Physiology and Ecology (ICIPE)
- Uma Lele, International Policy Expert
- Leslie Lipper, Executive Director, Independent Science and Policy Council (ISPC)
- Lindiwe Majele Sibanda, Alliance for a Green Revolution in Africa (AGRA)
- Njuguna Ndung'u, Executive Director, African Economic Research Council (AERC)
- Nicola Randall, Harper Adams College
- Will Martin, IFPRI
- Prabhu Pingali, Cornell University
- Maximo Torero, World Bank
- Paul Winters, IFAD
- Scott Vaughan, CEO, International Institute for Sustainable Development

**Additional colleagues will be announced shortly*

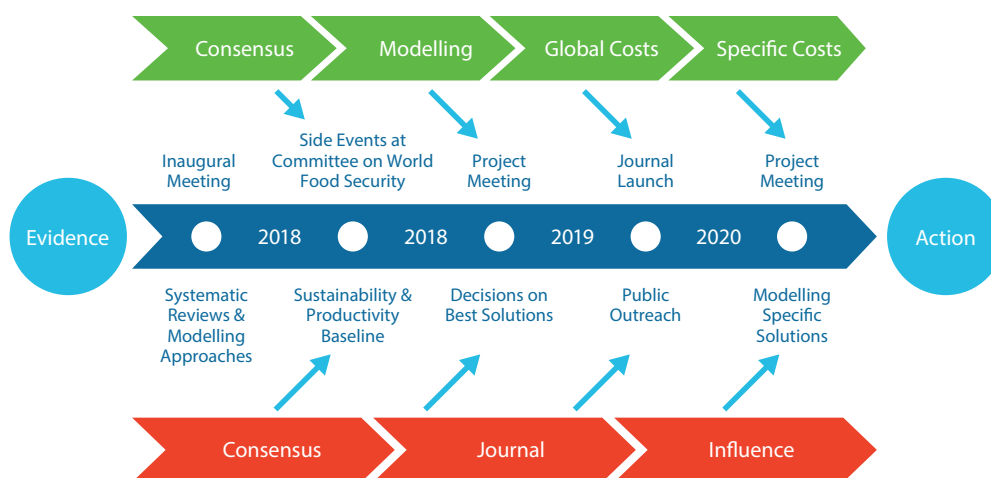


Figure 1. Snapshot of the project

Inaugural journal advisory board meeting

The inaugural journal advisory board meeting took place on June 4, 2018 in Washington DC. The role of the advisory board is to help guide the development of a special peer-review journal issue published by Nature. The special issue aims to build awareness and evidence of scientific, social, and technical contributions of ways to double smallholder productivity in an environmentally sustainable way.

Key discussion points from the meeting included:

- The project's focus on SDG 2.3 (smallholder productivity) and 2.4 (sustainable agriculture) was a point for discussion, particularly concern regarding the lack of interaction with nutrition outcomes (SDG 2.2). The project team reiterated that the project responds to HLPF's 2017 review of SDG2, which highlighted a lack of critical evidence for how to achieve SDG 2.3 and 2.4. Furthermore, there are a number of other groups, including the World Bank, Research for Development (R4D) and 1000 days doing similar work but focusing on nutrition.
- There was confusion about the title of the project and suggestions were made to rename it: *The role of sustainable agricultural production and the place for small scale farmers*. The project team explored further options for a new project title. The new project title is CERES 2030: Sustainable solutions to end hunger. CERES was the Greek goddess of agriculture.
- The focus of the issue will remain on providing evidence in the form of systematic reviews, but will now also include other "types" of articles such as editorials, promising future directions of research, and a narrative conclusion. The next step is a first attempt at an expanded table of contents for the *Nature* issue.

The primary working model of the advisory board will be webinars and on-line work via Dropbox. The next in-person

meeting of the advisory board will be scheduled for late 2018. A series of stakeholder engagements are currently taking place and will continue through fall 2018.

Landscape review conducted

The project team conducted a landscape review to discover, collect, and assess the state of current systematic reviews and meta-analyses¹ relevant to SDG 2.3 and 2.4. We included meta-analyses in this landscape review because, similar to systematic reviews, they attempt to draw generalizable conclusions by analyzing the results of multiple individual studies. We conducted targeted searches of African and Indian regional journals from 2010-2018 (~13,000 articles) and research affiliated with all CGIAR centers, FAO, World Bank and others from 2010-2018 (~10,500 articles). Overall, this search resulted in 212 meta-analysis and systematic reviews published between 2010-2018. Few systematic reviews met our criteria (~65 reviews) and most are published by known systematic review groups such as EPPI and 3ie. Meta analyses (~120 meta analyses) are favored in peer-review journals. The review is available on request.

SDG2 Roadmap Initiative meeting

The SDG2 Roadmap Initiative held a meeting on **24 April 2018 in Washington DC** at the offices of the Bill & Melinda Gates Foundation (BMGF). The project partners were invited to present the project. The group of donors present at the meeting welcomed the initiative and supported the approach and timeline of the project (presented in figure 1). One of the key audiences for the project are donors and so it will be essential to continue engaging with this group, sharing results and receiving feedback.

¹ Note that this is a first iteration and we excluded other summary evidence such as impact evaluations due to time and resource constraints. We will incorporate other available summary evidence throughout 2018.

Upcoming Events and Milestones

We will participate in a series of consensus-building activities in 2018 in order to opportunities to get feedback on the process, topics, and the modeling framework.

28 July – 3 August

International Conference of Agricultural Economists (ICAE)

29 – 31 August

Towards Zero Hunger – partnerships for impact, Wageningen University and A-5 meeting

Early September

First Baselines and Scenarios for Modeling Framework

16 – 18 September

T20 Summit in Buenos Aires

10 – 12 October

Science Forum 2018

15 – 20 October

Committee on World Food Security (CFS) 45th Session

22 – 23 November

IFPRI – FAO global event on “Accelerating the End of Hunger and Malnutrition”

7 December

Ceres2030 advisory board meeting

Global support model

Meeting the Sustainable Development Goals (SDGs) requires “better” evidence—that is, evidence that is relevant to current issue, uses criteria-based selection and appraisal of all relevant studies, assesses the quality of primary research, synthesizes results reliably, and concludes with a clear recommendation. We have engaged a diverse group of stakeholders who share our mission of building consensus through better evidence and communication of the results through both mainstream science and media outlets. We seek new partners for the following activities:

Working with journalists to communicate scientific complexity

Evidence has to be intelligible, accessible, and assessable to all stakeholders if it is going to be seen as trustworthy by all stakeholders. Politicians and the public need to be able to grasp our findings quickly in a language and context that is relevant to their needs.

We are working with the International Statistical Institute (ISI) to explore a series of on-the-ground workshops and online supporting material that explains evidence-based reviews

Engagement opportunities

and statistical modeling to journalists and policy makers in a language they can understand and, in turn, communicate to their audiences.

The systematic reviews from Ceres2030 will be used as case studies in the workshops. This will help journalists become familiar with the style, content, and relevance. It was recently reported at a Gender Data and Statistics Workshop hosted by UN Women (Rwanda) that the SDGs are strikingly absent from African media and are far more invisible than the MGDs were. We want to encourage the media to report on progress towards SDGs using better evidence (and agriculture more broadly) while building statistical and data literacy capacity.

Protocols as a consensusbuilding tool

Non-systematic reviews and reports often employ unclear or nonexistent a priori methods. Systematic reviews use a protocol to publish the intervention question, study design, and sources before completion of the final study. Publishing protocols ahead of the completed study protects both replicability and transparency of the work and reduces introduction of bias. Once the protocol is published, the scope of work cannot change

A small working group in Ceres2030 developed a protocol for agricultural development. The working group has modified the internationally accepted guidelines of PRISMA-P² and tailored it to the discipline-specific considerations of evidence in agriculture. Key among the differences is the need to balance qualitative and quantitative evidence and a risk of bias assessment.

We are in the process to discuss how to validate a protocol tool and build a risk of bias assessment. Our publisher partner Nature plans to implement a new technical article type specifically for systematic reviews if we can provide them with a validated set of tools. This would mean that any researcher, in any discipline, could contribute a full systematic review to any of their journals (this does not currently exist at Nature/Springer). This is an important step to encourage leading experts to contribute more evidence into mainstream scientific publications.

² D, Shamseer L, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA. Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) 2015 statement. *Syst Rev.* 2015;4(1):1. doi: 10.1186/2046-4053-4-1