

Measuring the Cost of Ending Hunger

Technical Meeting Summary
Geneva, Switzerland
July 18–19, 2017

The Model and Feedback from Participants

- The model achieves an important milestone of getting every country to a situation where at least 95 per cent of the population is free from hunger. The model estimates the costs of additional public investments that need to take place to achieve the milestone, with a focus on the donor share. It will cost, on average, an extra USD 11 billion of public investment per year from 2016–2030. Donors will have to increase spending by USD 4 billion per year, which represents a 3 per cent increase in current official development assistance (ODA) spending. Participants emphasized that, while this is an important step, it does not achieve all the goals set out in Sustainable Development Goal 2 (SDG 2). A number of times, participants asked what it would cost to get to zero per cent hunger (see Figure 1).

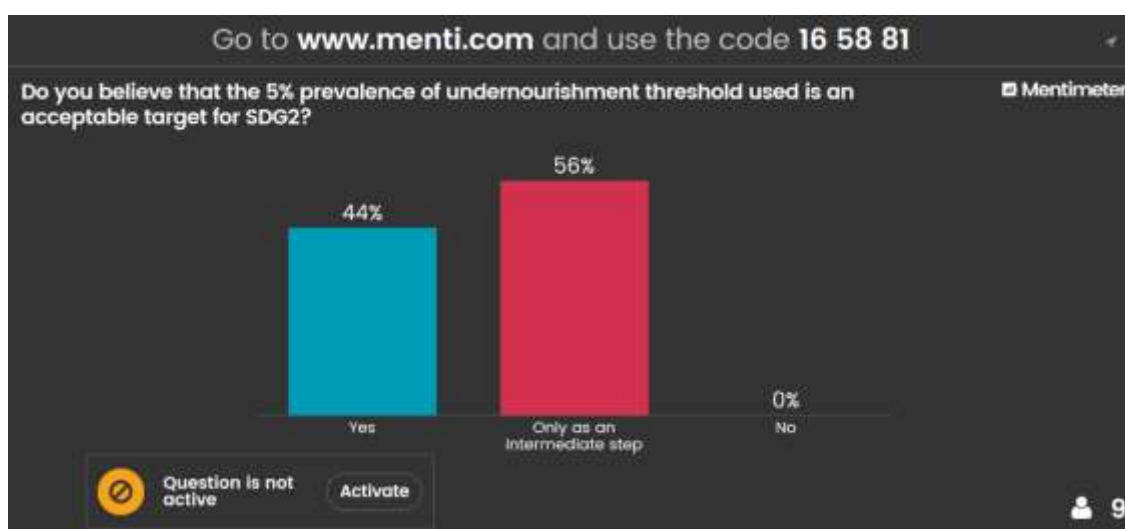


Figure 1

- The milestone is achieved through five broad categories of interventions (safety nets, farm support, rural development, enabling policies and nutrition), but the model selects a narrower set of interventions to calculate the cost, based on the quality of available data, donor priorities and a link to increased calorie consumption. Some participants were concerned with the set of interventions selected and emphasized the importance of the other categories, particularly governance, nutrition and sustainability (see Figure 2).

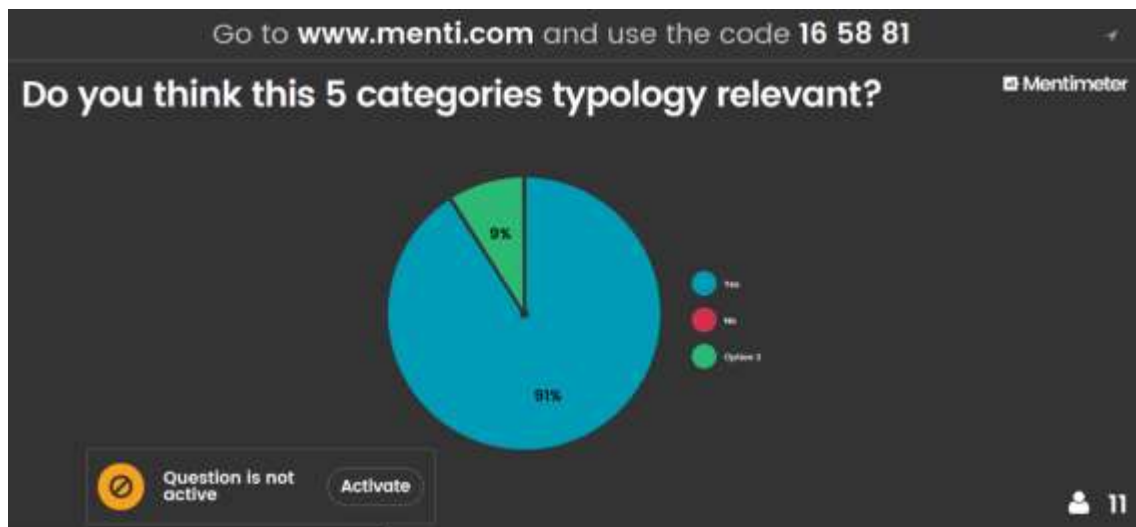


Figure 2

- The model is novel because it combines a macroeconomic computable general equilibrium (CGE) model with household data. Participants praised this effort and asked for a more detailed explanation in the technical paper for how this is done and what it helps to achieve for policy-makers. Participants also shared some skepticism on the method for scaling up from a sample of seven African countries to the global costs. IISD and IFPRI are interested in expanding the number and geographical diversity of countries (see Figure 3).

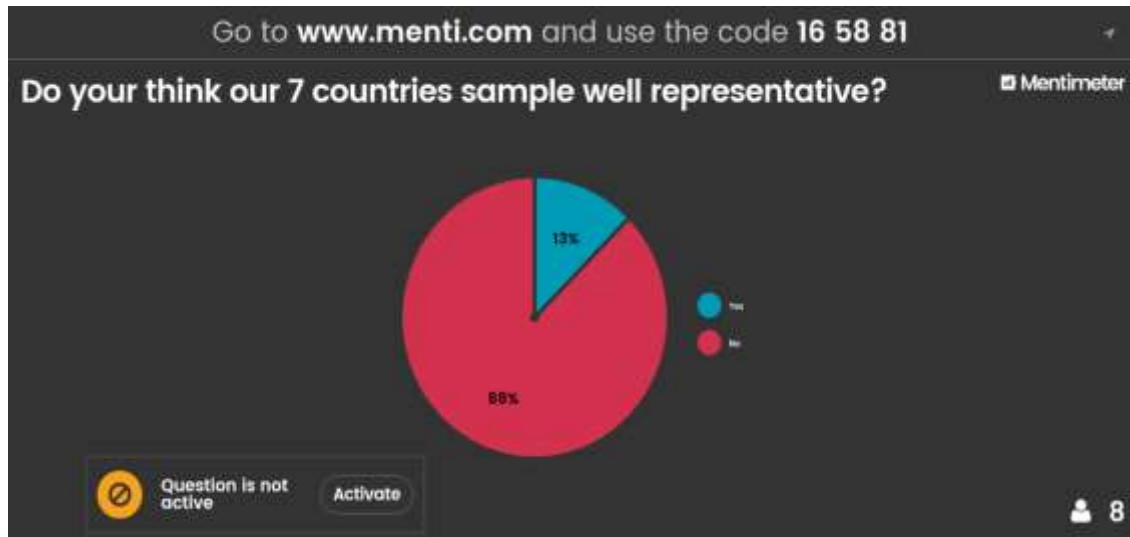


Figure 3

- The model assumes optimal behaviours for the efficiency of interventions. This results in lower costs than other global costing efforts. Spending is also targeted at hungry households and in countries that are not on target to achieving the 95 per cent milestone by 2030. Participants said it was important to contextualize and distinguish this costing effort with previous efforts and explain the differences (for example, the UN Food and Agriculture Organization (FAO) and Shared Socioeconomic Pathways (SSP)) (see Figure 4).



Figure 4

- All additional spending has to be paid for by either donors or the governments themselves, through increased taxes. This opened up policy dialogue about financing development and the need to explore alternative sources of finance (domestic vs. external, public vs. private).
- The model can be modified and expanded to take other concerns into account (for example, gender, sustainability, nutrition and policy reform). This largely depends on who is interested and what would be most useful to different stakeholders. It also depends on the robustness and availability of existing data. But in short, the model can answer a much larger or different range of questions. Some donors discussed the possibility of creating a roadmap to guide funding decisions, which would line up with the priority list of countries that are not on target to achieve SDG 2.
- There were questions about the extent to which the model treats marginal changes to investment. For example, you cannot build half a dam. This model could provide ammunition to informing advocacy and guide implementation of an SDG 2 roadmap.
- While the model focuses on SDG 2.1, it is important to place it in the context of other sub-SDG targets, especially SDGs 2.3, 2.4 and 2.5. Some interventions explicitly address 2.3, while the connections to 2.4 are less obvious. Due to the role of the sustainability issue in the SDG framework, this question should be discussed. (See Figure 5)

- 2.1 - By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
- 2.2 - By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
- 2.3 - By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 2.4 - By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- 2.5 - By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed
- 2.a - Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- 2.b - Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round
- 2.c - Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

Figure 5: SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Effective Interventions to End Hunger and How They Can Be Modelled

- The organizers presented a literature review of 200 studies on the impact of public interventions to achieve food security, with a focus on interventions that support farmers and rural development, but also linked to social safety nets (or cash transfers).
- The bundle of interventions makes it difficult to isolate a single intervention as the most effective, because interventions feed into each other and are interlinked, and can each fall into multiple categories.
- The existing evidence does not help to rank the efficiency of interventions, but does build consensus on the pool of interventions needed and the factors for success within each intervention. There is evidence of positive results coming from extension services, input subsidies, irrigation, storage, research and development (R&D), and value chain development.
- Some donors commented that there are limits to how food and nutrition security ODA data is collected and categorized, as well as how donors interact with these categories.
- The model has an existing list of interventions but that these can be changed and others can be put in, including interventions for gender, farmers' organizations and land allocations, and markets.
- The U.S. Agency for International Development shared a study by Karl Pray and Will Masters entitled *Overview of Evaluations and Impact Studies* as a further contribution.

Building Consensus Through a Special Journal Issue

- Cornell University and Duke University presented the initial stages of a project to build consensus on the most effective interventions to end hunger through a special journal issue. Participants asked whether the aim was to build consensus or build an evidence-base. There was a reminder of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report, which was a consensus-building exercise, and there was a preference that the special journal issue focus on building the evidence base.
- The special journal issue will be aimed at the donor community but rely largely on academia for building the evidence base. A number of participants felt it was important to have broad stakeholder buy-in and not solely focus on donor priorities. Participants also emphasized the importance of the process and ownership, speaking with the right people, and clarifying the role they are expected to play.
- The special journal issue will focus on SDG 2.3, given its broad coverage and the fact that it is where evidence and consensus are weakest. Participants said there was a need to clarify and potentially rethink the narrow focus on SDG 2.3. Many felt the scope should

be broader and encompass all of SDG 2. One participant said that the SDGs are not an analytical framework, but rather a political ambition, and therefore we should not rely solely on them to build the analytical framework.

Next Steps

- IISD and IFPRI to revise and publish the technical paper on ending hunger based on comments and feedback.
- IISD and IFPRI to finalize our literature review on effective interventions to end hunger.
- Duke University and Cornell University to start the process of building evidence on the most effective ways to support smallholders, including through expert consultations, convening meetings, establishing an advisory board, building a database on literature and randomized controlled trials (RCTs), and ultimately publishing the special journal issue.
- Participants to share relevant literature and names of people to speak to for ongoing research work.