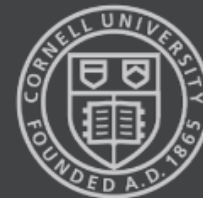


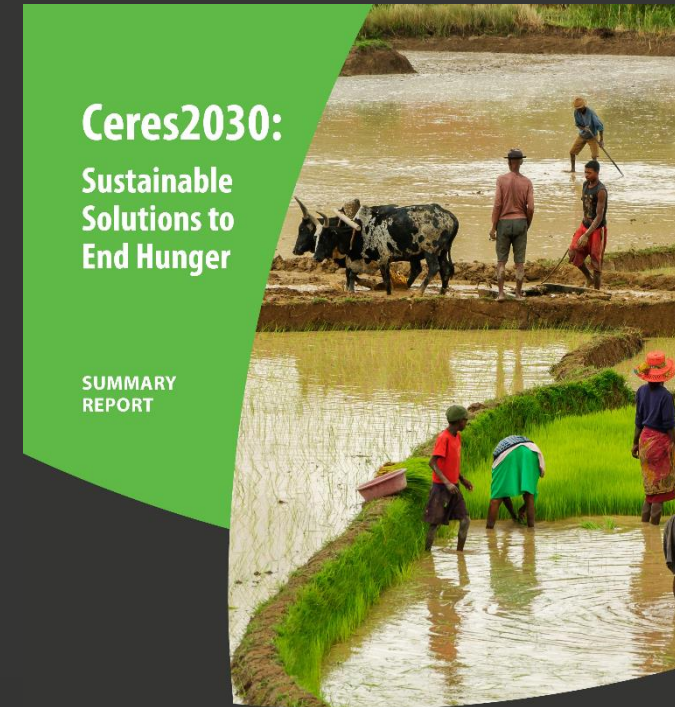
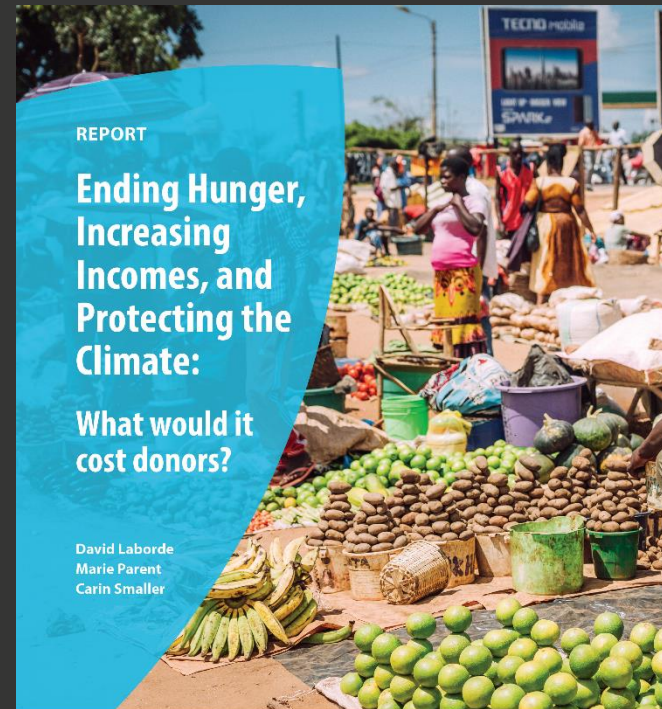
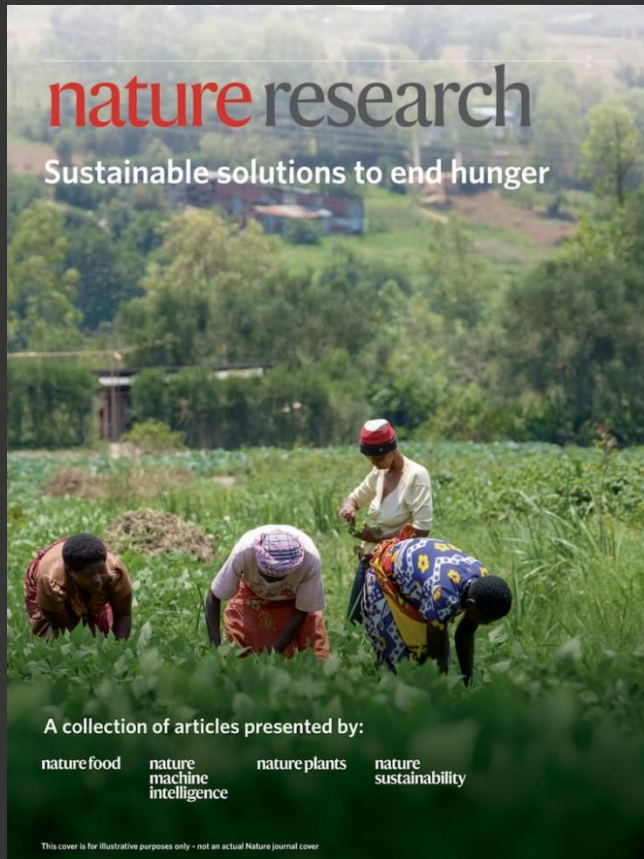
Ceres2030

Sustainable Solutions to End Hunger



New research

Sustainable Solutions to End Hunger



<http://ceres2030.org>



**Joined by 84
researchers from
25 countries**

A new generation committed to ending hunger through evidence-informed decisions



Dr. Saweda Liverpool-Tasie
Market links for farmers



Dr. Isabelle Baltenweck
Livestock feed interventions



Dr. Vincent Ricciardi Water scarcity



Jaron Porciello
Synthesis and AI



Dr. Maricelis Acevedo Climate resilient crops



Dr. Tanya Stathers
Post harvest loss



Dr. Valeria Piñeiro
Policy incentives for sustainable practices



Dr. David Laborde Debuquet
Economic modeling



Dr. Livia Bizikova
Farmers organizations



Dr. Eugenie Maiga
Youth employment



Dr. Leslie Lipper
Understanding tradeoffs for SDG2



Carin Smaller
Policy relevancy

A portfolio of interventions designed to achieve multiple outcomes



ON THE FARM

Interventions provided directly to farmers, including farm inputs, R&D, improved livestock feed, and irrigation infrastructure.



FOOD ON THE MOVE

Interventions to reduce post-harvest losses, including storage, to improve returns from sales, and to support the mix of services provided by SMEs, such as cooperatives, traders, and processors.

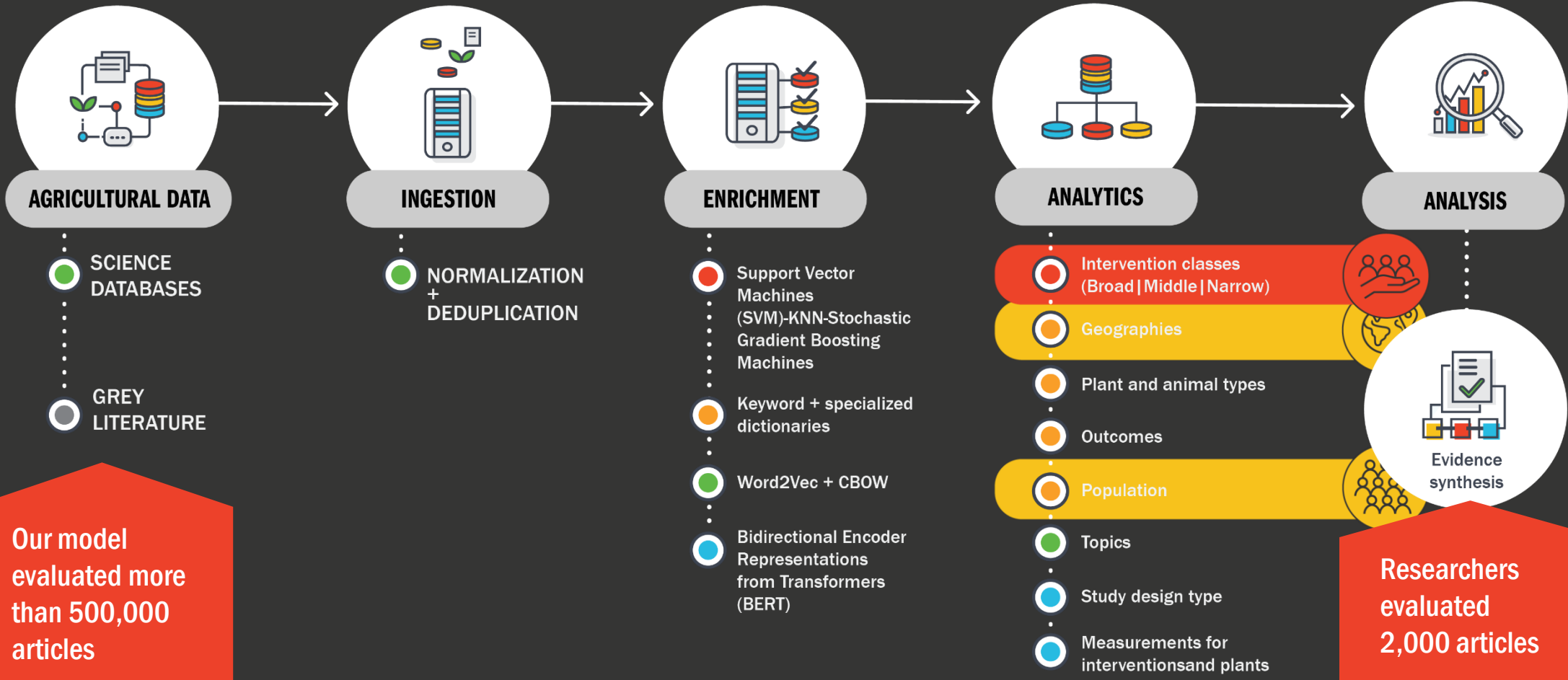


EMPOWER THE EXCLUDED

Interventions related to social protection, institutions such as farmers' organizations, and education through vocational training.

Accelerating the evidence process using machine learning

Researchers evaluated more than 100,000 articles





Findings: On the Farm

DONOR CONTRIBUTION: USD 9 BILLION PER YEAR

FINDINGS FROM NATURE RESEARCH	MODEL INTERVENTIONS	RECOMMENDATIONS
The most important determinants of adoption of climate-resilient crops were the availability and effectiveness of extension services.	Extension services	4. Investment in extension services, particularly for women, must accompany research and development (R&D) programs.
Market and non-market regulations and cross-compliance incentives that include short-	Agroforestry subsidy Capital endowment Extension services Investment subsidy	5. Agricultural interventions to support
developing countries are in water-scarce regions. Underexplored solutions include digital applications and adding livestock to mixed farming systems.	Capital endowment Extension services Rural infrastructure (irrigation)	water-scarce regions to scale up effective farm-level interventions to assist small-scale producers.
Obvious and useful options to improve the quantity and quality feed are being overlooked, such as better support for the use of crop residues.	Capital endowment Extension services Improved forage subsidy Production subsidy R&D National Agricultural Systems (NARS) & CGIAR	8. Improve the quantity and quality of livestock feed, especially for small and medium-scale commercial farms.

Successful adoption is positively correlated with inclusive extension services, access to inputs, and crop varieties that are commercially viable.

Extension services combined with input, production, and investment subsidies

R&D National Agricultural Systems (NARS) & CGIAR

6. Support adoption of climate-resilient crops.



Dr. Maricelis Acevedo
Climate resilient crops






Findings: Food on the Move

DONOR CONTRIBUTION: USD 2 BILLION PER YEAR

FINDINGS FROM NATURE RESEARCH

Storage interventions are effective, but other interventions are also needed, such as better handling, improved packaging, and careful timing of the harvest.

SMEs are successfully serving farmers in low and middle-income countries, particularly in Africa, and are correlated with technology adoption and higher productivity.

MODEL INTERVENTIONS

Extension services
Storage (post-harvest losses)

Rural infrastructure (roads)
Storage (post-harvest losses)

RECOMMENDATIONS

9. Reduce post-harvest losses by expanding the focus of interventions beyond the storage of cereals, to include more links in the value chain,

10. Invest in the infrastructure, regulations, services and technical assistance needed to support SMEs in the value chain.



Findings: Empower the Excluded

DONOR CONTRIBUTION: USD 3 BILLION PER YEAR

FINDINGS FROM NATURE RESEARCH

Membership in a farmers' organization was associated with positive effects on income in 57% of the cases reviewed.

MODEL INTERVENTIONS

Currently no modellable intervention

RECOMMENDATIONS

1. Enable participation in farmers' organizations.

Programs that offer training in multiple skills to rural youth show promise in increasing employment levels and wages.

Vocational training

2. Invest in vocational programs for rural youth that offer integrated training in multiple skills.

Social protection programs work best when they create a bridge to productive employment and remove barriers in accessing markets, education, and credit.

Income support through food subsidy

3. Scale up social protection programs.

Nature Research hosts a conversation with the Ceres2030 authors



October 22, 2020
<https://conferences.nature.com/d/v7qczi/>



Credit: Camille Delbos/Art In All of Us/ Getty

Uniting Science and Policy to End Hunger

A conversation on Sustainable Development Goal 2 presented by Nature Research

This will be a live virtual conversation

22 October 2020

13.00 - 15.30 GMT

[Register Now](#)

Ten percent of the world's population are currently undernourished. To achieve the United Nations Sustainable Development Goal 2 (SDG2) of zero hunger by 2030, profound changes to our global food and agricultural systems must be made. Much of the future increase in food demand will come from sub-Saharan Africa and South Asia; regions that remain hotspots of hunger and poverty. What interventions then will be effective in transforming the lives and incomes of rural farmers and what will be the cost of ending hunger sustainably?

This free, online event — organised by Nature Research to coincide with new, evidence-based syntheses from the [Ceres2030 consortium](#) — will bring researchers and decision-makers together to discuss and align the policy agenda.

The event will be of interest to social and agricultural scientists in research and development organisations, donors and other agencies who are working to achieve better connections between science and policy, and other stakeholders sophisticated in issues of science who are engaged in agricultural development, poverty eradication and sustainable agriculture.

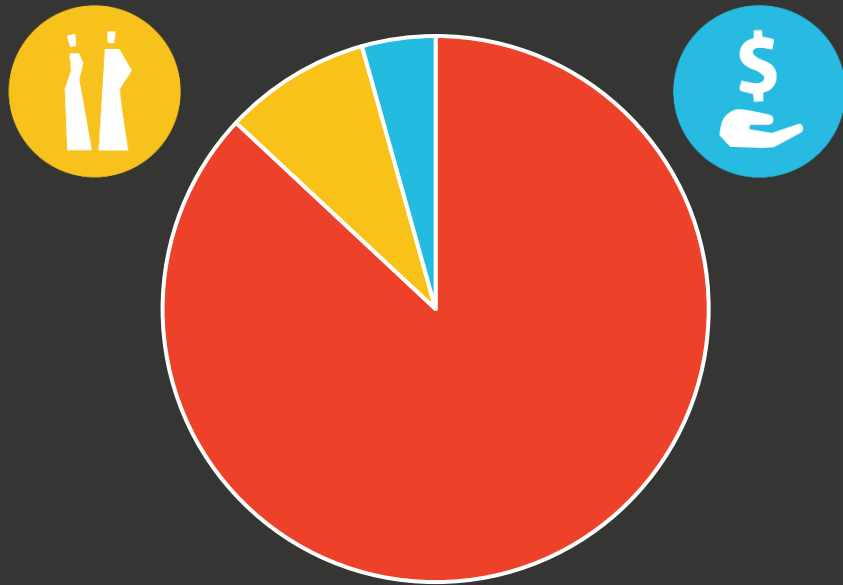
We have less than ten years to work together as a global community to transform food systems to deliver sustainable, nutritious and healthy diets for all people. The clock is ticking. [Register now](#) to secure your place, be part of this important discussion and learn how we can achieve this ambitious goal.

Confirmed Panellists:

- Jaron Porciello, Cornell University, USA
- Paul Winters, University of Notre Dame, USA
- Leslie Lipper, Cornell University, USA
- Hale Tufan, Cornell University, USA
- Gero Carlotta, World Bank
- Joachim von Braun, UNiversity of Bonn, Germany
- Chris SurrIDGE, Nature Plants
- Anne Mullen, Nature Food
- Monica Contestabile, Nature Sustainability

Findings: Major gaps in the evidence base

Persistent gaps in gender and costs of interventions

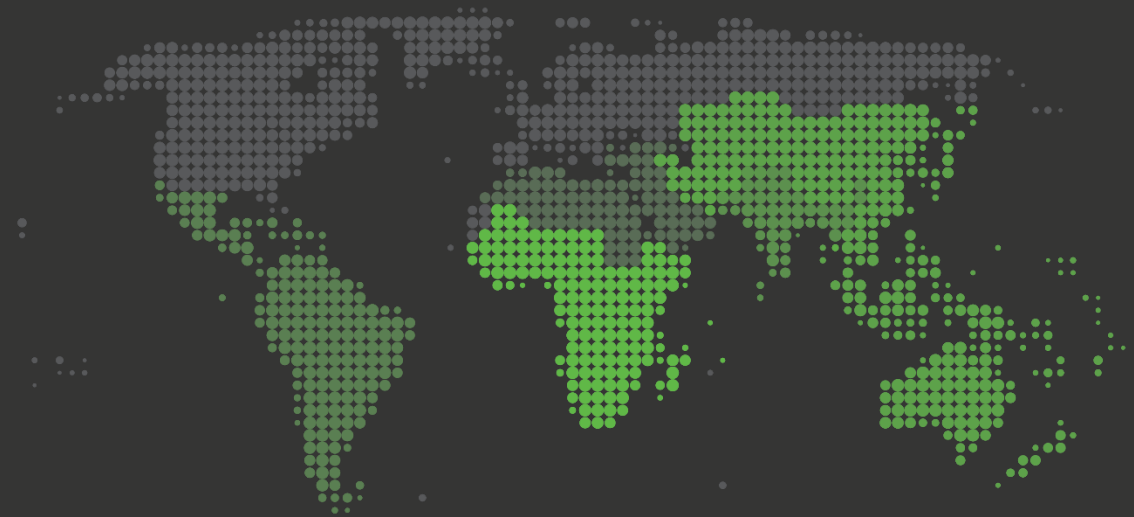


Limited data about gender and the costs of interventions

■ Papers supporting ■ Gender ■ Costs

Data Scarcity By Regions

Sub-Saharan Africa	40,000
East Asia and Pacific	30,000
South Asia	25,000
Latin America and the Caribbean	20,000
Middle East and North Africa	15,000



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Sustainable Solutions to End Hunger



A systematic review of youth skills training programmes **in agriculture in low and middle- income countries**

W.H. Eugenie Maïga, Mohamed Porgo, Pam Zahonogo, Cocou Jaurès Amegnaglo, Doubahan Adeline Coulibaly, Justin Flynn, Windinkonté Seogo, Salimata Traoré, Julia A. Kelly, Gracian Chimwaza

Introduction

- Lots of welcome attention on the issue of youth employment, but what does the evidence say?
- We reviewed skills-based training interventions which aim to increase youth engagement in agricultural employment in LMIC in order to better inform investment decisions made by donors and policy makers
- We define youth between the ages of 15 and 40



What outcomes and interventions did we investigate?

Interventions of interest:

- agriculture-related courses
- on the job training
- technical or vocational education and training
- general skills training (entrepreneurship and financial literacy)

Outcomes of interest:

- jobs created in the agricultural sector
- self-employment and entrepreneurship
- provision of extension services
- profit/income/earnings from an agricultural activity or job
- farm productivity



Vocational programs that teach **multiple skills** show promise

A multi-country radio and interactive ICT campaign boosted adoption of orange-fleshed-sweet potatoes in Ghana, Tanzania, Uganda, and Burkina Faso

One more detail about the program

Overall, there was a 60% adoption of orange-fleshed sweet potato farming for listeners, versus 7% for non listeners in Ghana



Vocational programs that teach **multiple skills** show promise

In the Philippines, an infomediary campaign called Read, Surf and Text for Your Parents boosted youth interest in agriculture

68% of participating students reported that they now want to be involved in farming as a future occupation



Overall, we find major gaps in the evidence base

- A total of just sixteen studies presented qualitative, quantitative and mixed-methods evidence that could support our research
- **Chronic lack of evaluation** of effectiveness of interventions
- **Gender** disaggregation of outcomes is seldom done
- **Youth** are seldom targeted or evaluated as the target audience



Policy recommendations

- Invest in vocational programs for rural youth that offer training in **multiple skills**
- More **rigorous evaluation** of these programs is needed
- Estimate returns to **investment of agricultural skills training**



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Sustainable Solutions to End Hunger



**Y Baarka!
Anitche!
Thank you!**

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Empowering the vulnerable in a sustainable way, **by the numbers**

Dr. David Laborde Debuquet

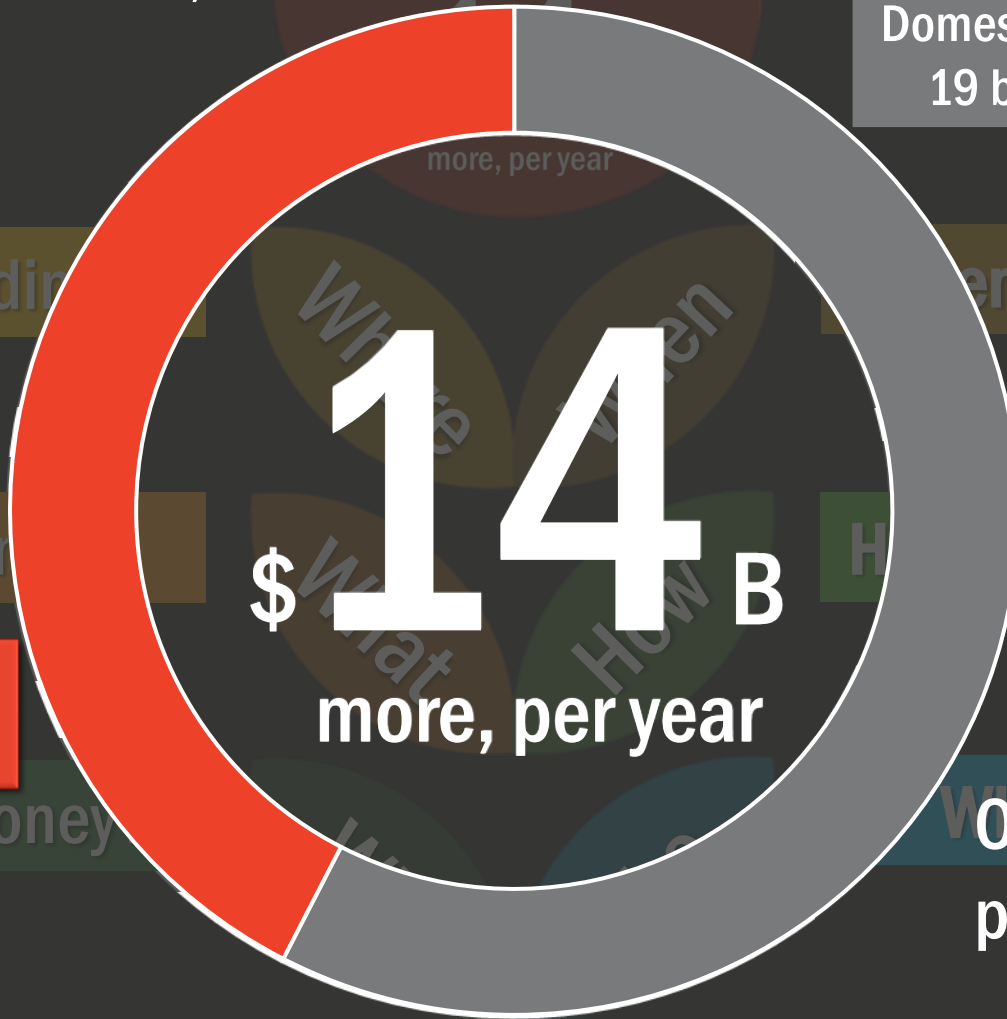
Ceres2030 Co-director

Research Theme leader and Senior Research Fellow at IFPRI

In addition of national efforts,
We need to mobilize

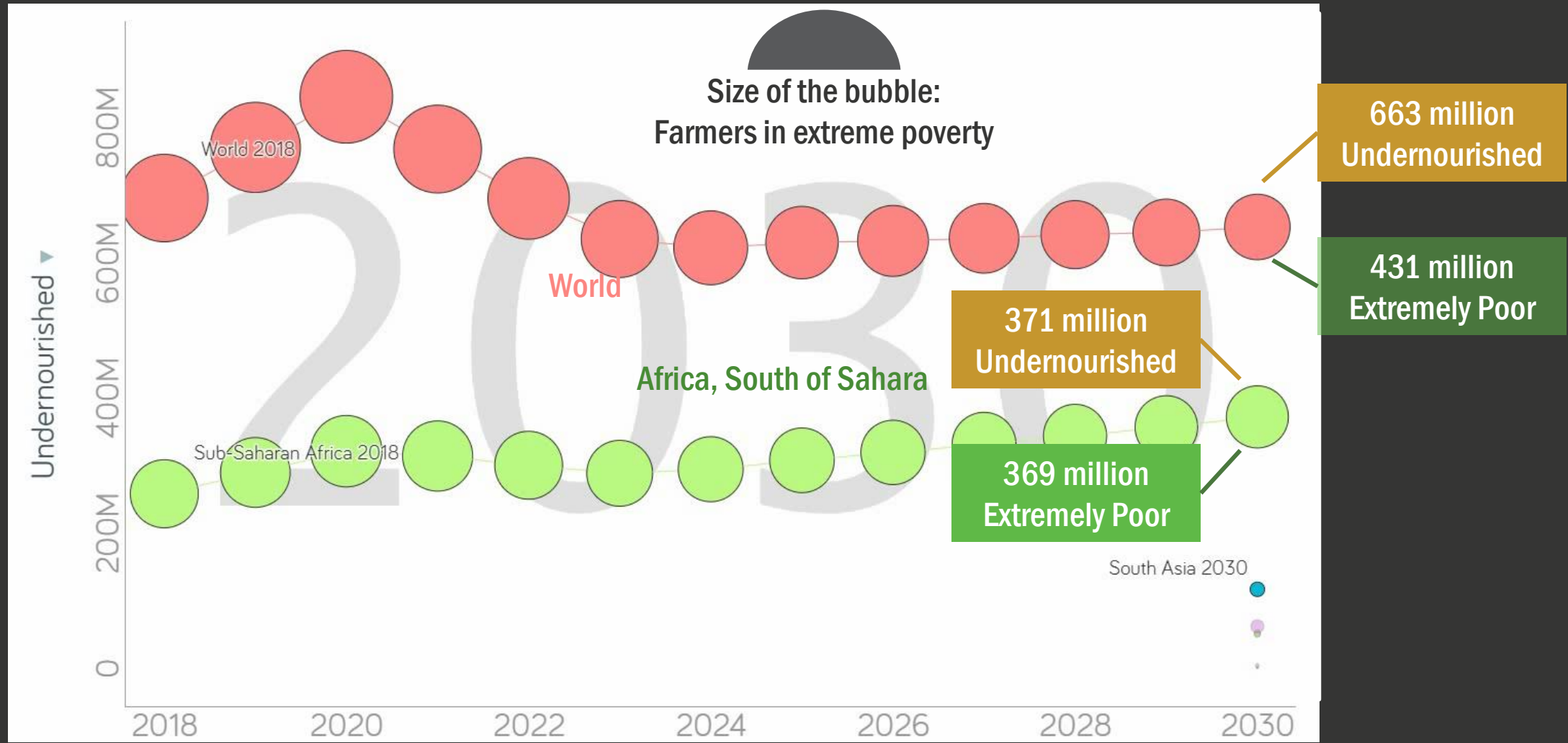
Domestic Resources,
19 billions, 58%

External Resources,
14 billions, 42%



Of external public or
philanthropic resources

Who? *The undernourished and the poor small-scale producers*



Why? *Because the world will improve, but not for everyone*



SDG
2.1



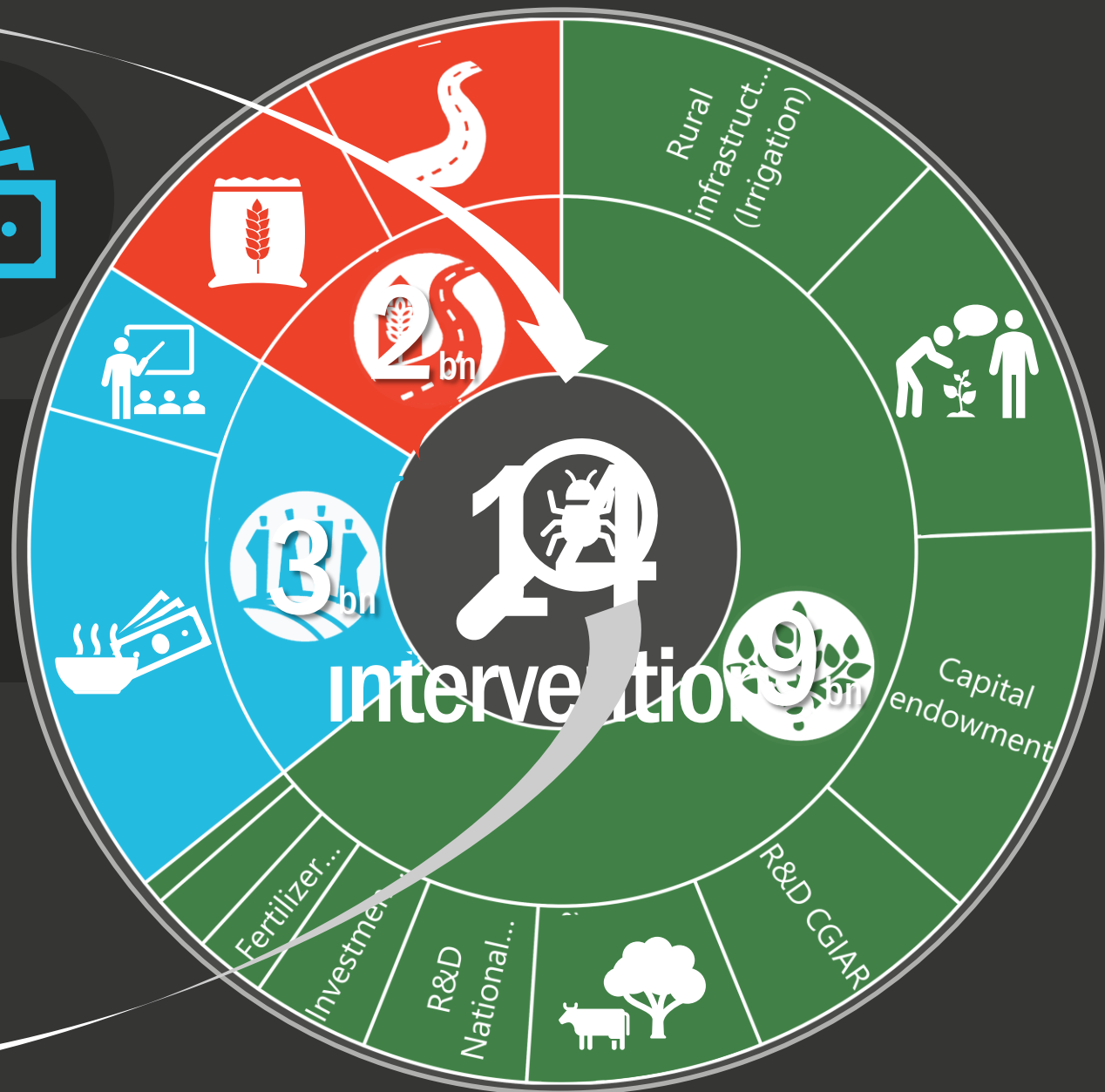
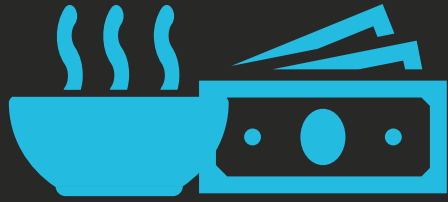
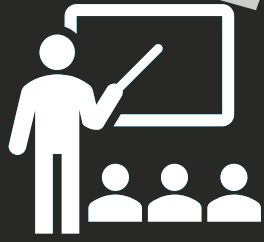
SDG
2.3



SDG
2.4

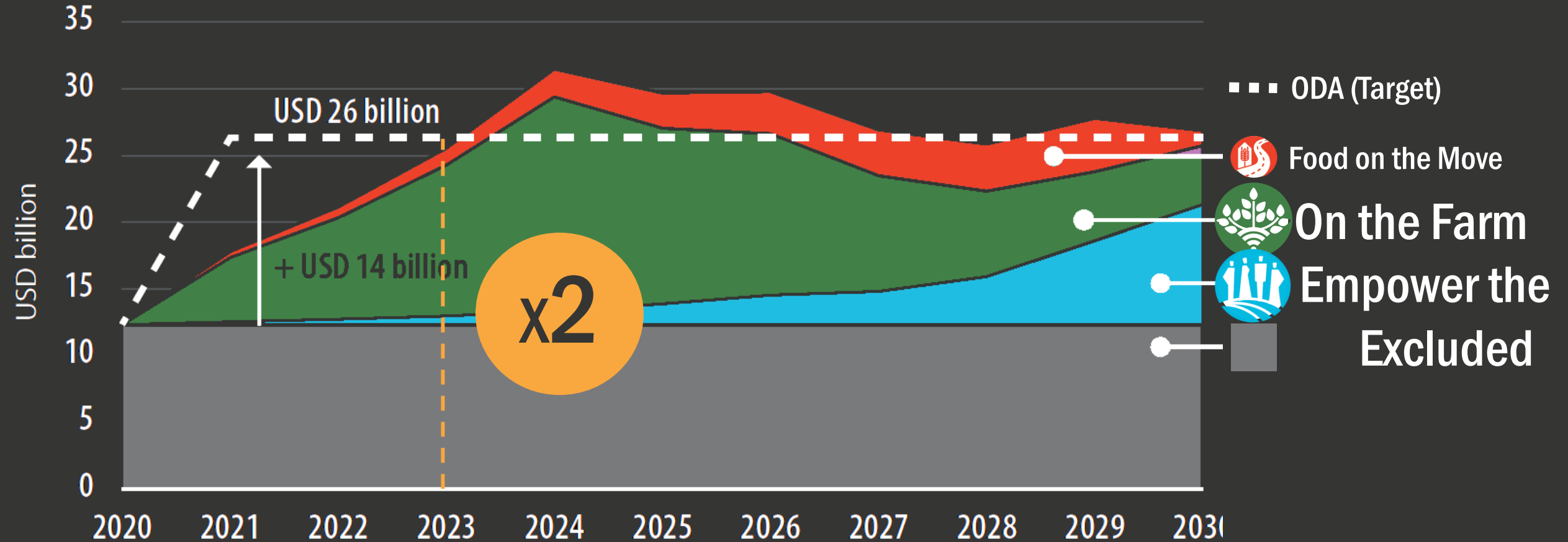
How did we get these numbers?

A sophisticated model



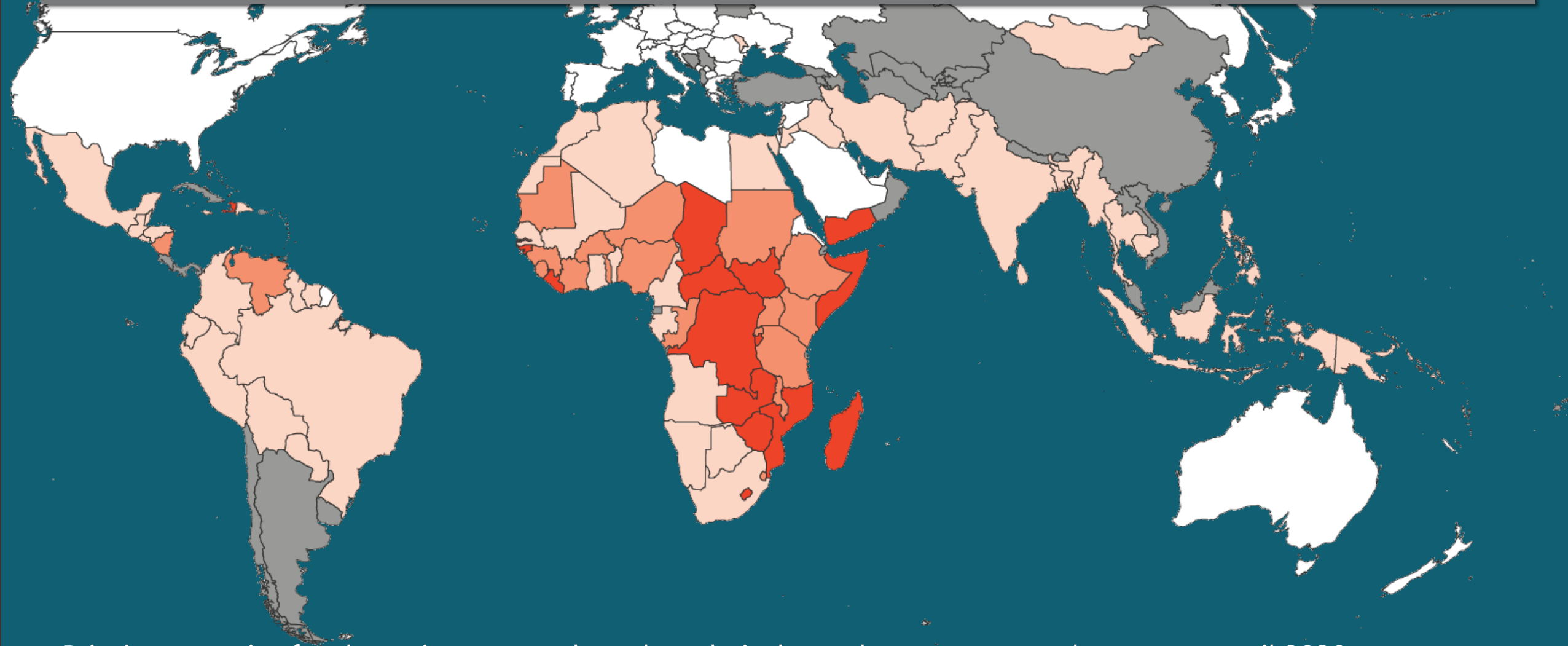
What should we do with the money? *A portfolio of interventions*

The funding gap over time and by category of intervention



When should we be spending? *Invest without delay*

Where should we prioritize spending? A Focus on Africa



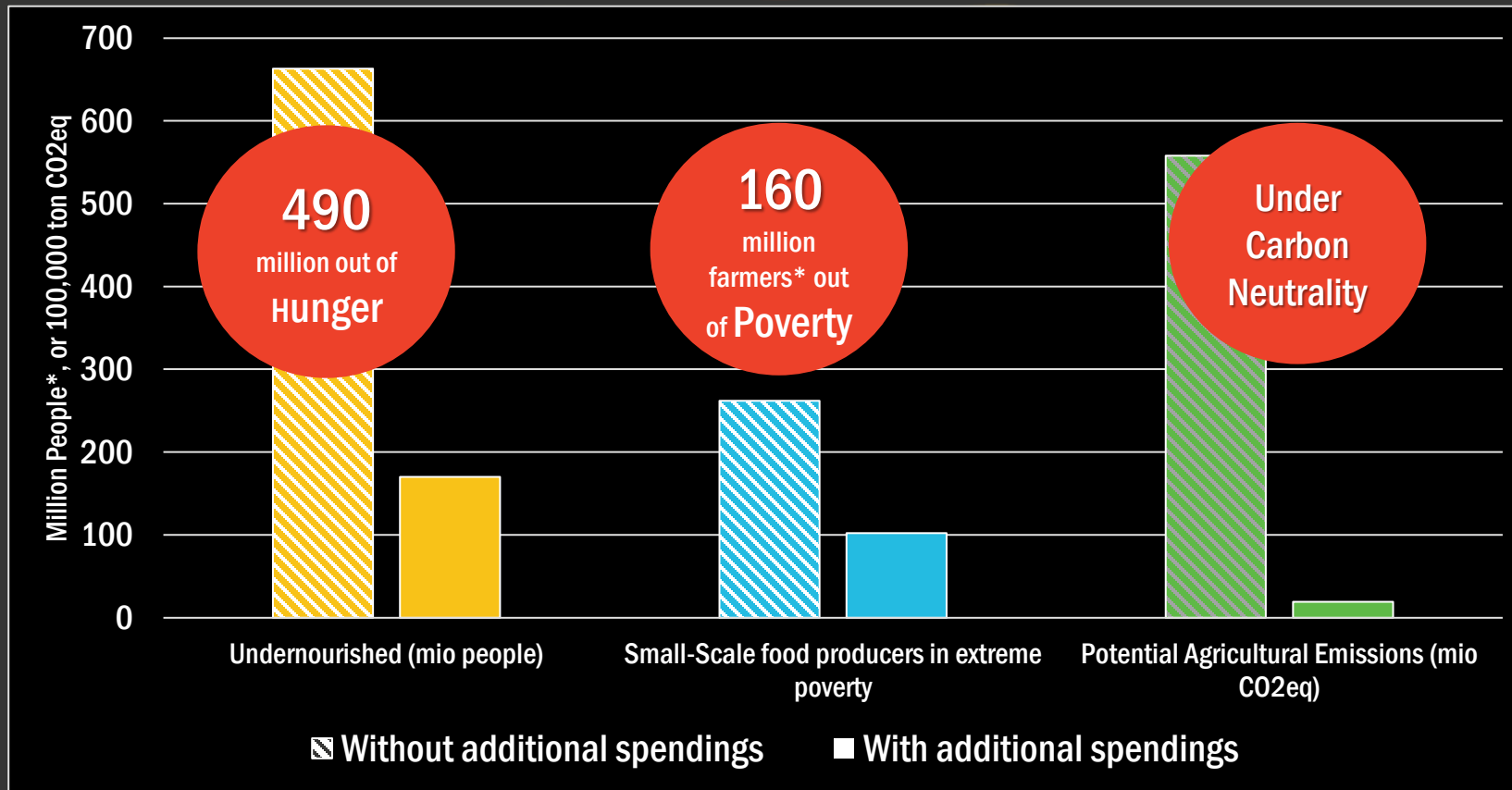
Priority countries for donor investment based on their dependency on external resources until 2030

■ High Priority ■ Medium Priority ■ Low Priority ■ On Target ■ Not Included in Assessment

If we mobilize

\$ **14** B
more, per year

We will change the world:



Thank you

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