IFPRI Discussion Paper 02238

February 2024

From Promises to Action

Analyzing Global Commitments on Food Security and Diets Since 2015

Christina Zorbas, Danielle Resnick, Eleanor Jones, Shoba Suri,
Elyse Iruhiriye, Derek Headey, Will Martin
Rob Vos, Channing Arndt, Purnima Menon

Markets, Trade, and Institutions Unit
Foresight and Policy Modeling Unit
Development Strategies and Governance Unit
Nutrition, Diets, and Health Unit
Food and Nutrition Policy Unit

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

The International Food Policy Research Institute (IFPRI), a CGIAR Research Center established in 1975, provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition. IFPRI's strategic research aims to foster a climate-resilient and sustainable food supply; promote healthy diets and nutrition for all; build inclusive and efficient markets, trade systems, and food industries; transform agricultural and rural economies; and strengthen institutions and governance. Gender is integrated in all the Institute's work. Partnerships, communications, capacity strengthening, and data and knowledge management are essential components to translate IFPRI's research from action to impact. The Institute's regional and country programs play a critical role in responding to demand for food policy research and in delivering holistic support for country-led development. IFPRI collaborates with partners around the world.

AUTHORS

Christina Zorbas (c.zorbas@deakin.edu.au) is a Postdoctoral Research Fellow in Deakin University's Global Centre for Preventive Health and Nutrition and Institute for Health Transformation, Australia.

Danielle Resnick (d.resnick@cgiar.org) is a Senior Research Fellow in IFPRI's Development Strategies and Governance Unit and a Non-Resident Fellow at the Brookings Institution.

Eleanor Jones (eleanor.jones@cgiar.org) is a Program Coordinator in IFPRI's Foresight and Policy Modeling Unit.

Shoba Suri (shoba.suri@orfonline.org) is a Senior Fellow with the Health Initiative of the Observer Research Foundation, India.

Elyse Iruhiriye (e.iruhiriye@cgiar.org) is an Associate Research Fellow in IFPRI's Nutrition, Diets, and Health Unit.

Derek Headey (d.headey@cgiar.org) is a Senior Research Fellow in IFPRI's Development Strategies and Governance Unit.

Will Martin (w.martin@cgiar.org) is a Senior Research Fellow in IFPRI's Markets, Trade, and Institutions Unit.

Rob Vos (r.vos@cgiar.org) is the Director of IFPRI's Markets, Trade, and Institutions Unit.

Channing Arndt (c.arndt@cgiar.org) is the Senior Director, Transformation Strategies, with IFPRI and CGIAR.

Purnima Menon (p.menon@cgiar.org) is the Senior Director, Food and Nutrition Policy with IFPRI and CGIAR.

Notices

[1] IFPRI Discussion Papers contain preliminary material and research results and are circulated in order to stimulate discussion and critical comment. They have not been subject to a formal external review via IFPRI's Publications Review Committee. Any opinions stated herein are those of the author(s) and are not necessarily representative of or endorsed by IFPRI.

[2] The boundaries and names shown and the designations used on the map(s) herein do not imply official endorsement or acceptance by the International Food Policy Research Institute (IFPRI) or its partners and contributors.

ABSTRACT

Achieving Sustainable Development Goal 2 (SDG 2), Zero Hunger, by 2030 is in jeopardy due to slowing and unequal economic growth, climate shocks, the COVID-19 pandemic, conflict, lackluster efforts toward investing in food system sustainability and agricultural productivity growth, and persistent barriers to open food trade. Nevertheless, numerous commitments to achieving SDG 2 have been repeatedly expressed by Heads of State and Ministers at diverse global meetings since the SDGs became a focus in 2015. To identify the intensity and degree of convergence of commitments that national governments have collectively made to realizing SDG 2, this paper provides a qualitative assessment of statements from more than 68 global meetings and 107 intergovernmental commitment documents since 2015. Analyzing these commitments against seven critical factors necessary for impact at scale, we find that stated intentions to solve the global food security and hunger challenge have become more pronounced at global meetings over time, especially in the wake of the crises. However, the intent to act is not consistently matched by commitments to specific actions that could help accelerate reductions in hunger. For instance, while increased financing is often recognized as a priority to reach SDG 2, few commitments in global fora relate to detailed costing of required investments. Similarly, many commitment statements lack specificity regarding what and how policy interventions should be scaled up for greater action on SDG 2 or the ways to enhance different stakeholders' capacities to implement them. While horizontal coherence was mentioned across most global fora, it was only present in about half of the commitment statements, with even less recognition of the necessity for vertical coherence from global to local levels. Despite global acknowledgement of the importance of accountability and monitoring, usually by way of progress reports, we find few consequences for governments that do not act on commitments made in global fora. We discuss the implications of these findings and offer recommendations for how to strengthen the commitment-making process to help accelerate actions that can reduce food insecurity and hunger and augment the legitimacy of global meetings. This work can inform the policy advocacy community focused on SDG 2 and those engaged in catalyzing and supporting intergovernmental action on other SDGs. Our findings reiterate the importance of attention to global governance and the political economy of global meetings—which is necessary to strengthen our focus on delivering outcomes that put the world on a path that brings the solution to the problems of global hunger and food insecurity within reach.

Keywords: Accountability, food policy, food security and hunger, global governance, global commitments, nutrition and diets, and sustainable development goals

ACKNOWLEDGMENTS

The authors are grateful for intellectual inputs from Kathryn Backholer and James Thurlow, and for the insights provided by participants at workshops in New York on the sidelines of the 2023 UN General Assembly meetings and in Dubai on the sidelines of the COP28 meetings. In addition, they thank experts who participated in two hybrid consultations to provide regional perspectives from Africa and Asia. They are also grateful to the team from the Rockefeller Foundation, especially Catherine Bertini, Emily Fredenberg, and Roy Steiner, and Amy Auguston, consultant to The Rockefeller Foundation. Any errors remain their own.

Funder acknowledgment

This report was made possible with support from The Rockefeller Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of The Rockefeller Foundation.

ACRONYMS

AMIS	Agricultural Market Information System
BRICS	Brazil, Russia, India, China, and South Africa
COP	Conference of Parties
COVID-19	Coronavirus Disease 2019
FAO	Food and Agriculture Organization of the United Nations
G20	Group of Twenty
G7	Group of Seven
GFFA	Global Forum for Food and Agriculture
HLPF	High-Level Political Forum on Sustainable Development
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
LMIC	Low- and Middle-Income Country
MDG	Millennium Development Goal
ODA	Official Development Assistance
R&D	Research and Development
SDG	Sustainable Development Goal
UN	United Nations
UNFCCC	UN Framework Convention on Climate Change
UNFSS	UN Food Systems Summit
UNGA	UN General Assembly
UNHLPF	UN High-Level Political Forum on Sustainable Development
WFP	World Food Programme
WHO	World Health Organization
WHA	World Health Assembly
WTO	World Trade Organization

I. Introduction

Beginning in the mid-2010s, measured progress toward Sustainable Development Goal (SDG) 2—achieving Zero Hunger by 2030—began to stall. With the onset of the COVID-19 pandemic in early 2020, followed by the outbreak of war in Ukraine, progress was reversed across a broad array of indicators. As a result of these compounding crises, an additional 120 million people are estimated to have experienced hunger worldwide between 2019 and 2022 (FAO et al. 2023), driving the prevalence of undernourishment to about 2005 levels (FAO et al. 2023; UN-DESA 2023). The stalled progress has been linked to several factors, including slowed economic growth in low- and middle-income countries (LMICs), persistent inequality, and increasing frequency/severity of shocks to agricultural productivity due to climate change. Since 2019 a detailed analysis of 20 countries attributes most of the increase in hunger to the COVID-19 pandemic followed by Russia's invasion of Ukraine (IFPRI 2023). The recent escalations of civil and cross-boundary conflicts in, for example, Ethiopia, Sudan, the Sahel, and Yemen are adding to the number of hungry people in some of the most food insecure regions of the world.

Overall, the compounding shocks and crises of recent years have arrested or reversed progress across multiple indicators, not least hunger, which is both more prevalent and more acute. Looking forward, one should expect some bounce-back, assuming a return to a greater level of stability. However, much ground and time has been lost. According to some estimates, upwards of US$350 billion per year would be needed to galvanize action and reverse these trends for SDG 2 and achieve progress on other related food system objectives (Diaz-Bonilla et al. 2023).

Recent trajectories notwithstanding, governments have routinely made commitments to SDG 2 and the other SDGs at major meetings of Heads of State and Ministers since they were launched by the United Nations General Assembly (UNGA) in 2015. This paper examines how national governments have responded to the challenge of hunger and food insecurity through written commitments in global fora. In doing so, it addresses three principal questions:

(i) To what degree have governments' visions for addressing SDG 2 shifted over time given recurrent food and diet crises affecting vulnerable people around the world?
(ii) What are the main types of policy interventions that have been prioritized for scale-up and implementation?
(iii) To what extent have these commitments to *act* translated into commitments to *action*, including mechanisms for financing, tracking, assessing, and refining interventions over time?

This paper tackles these questions based on a collection of 107 commitment statements tied to 68 major global meetings since 2015 linked directly or indirectly to SDG 2. We look at commitments because they are essential to the legitimacy of these meetings; without them, the meetings would lack a clear purpose and outcome and the international institutions and global bodies that host them would begin to lose their relevance among the public. Given the critical need for strengthened global governance for food systems (World Bank, IFPRI, and FOLU 2021), it is imperative that commitments in these meetings are linked to clear, time-bound responsibilities for actions and have the potential to address known challenges to achieving food security and to making healthy diets accessible to all.

To assess these questions, we use an analytical framework previously used to assess successes in reducing malnutrition at scale in diverse countries (Gillespie, Menon, and Kennedy 2015). The framework in this paper anchors our analysis of the documented commitments to tackle hunger, food insecurity, and unhealthy diets along seven key dimensions:

1. vision/goal
2. what is being scaled
3. scaling up strategy
4. capacity to scale up
5. governance structures for implementation
6. financing
7. accountability and monitoring.

Our key findings are as follows. On the upside, we find that attention to SDG 2 has become more pronounced in vision statements over time, especially with the onset of COVID-19, and numerous reports exist on how the pandemic affected access to healthy, affordable, and nutritious food. On the downside, we identify many vaguely defined aspects of global commitments to SDG 2, including: lack of specific strategies for scaling up actions and enhancing different stakeholders' ability to do so; failure to ensure alignment with extant initiatives and institutions or vertical coherence with subnational actions; inadequate costing of needed finances; and a lack of clear and actionable consequences for national governments that fail to adequately act on their commitments.

This paper first provides insights on progress toward SDG 2—specifically on SDG 2.1 on food security and diets—and offers a brief assessment of why progress on reaching this goal has stalled (Section II). This is followed by a discussion of the importance of commitment making as a tool for advancing progress on meeting the SDGs in general and SDG 2 in particular (Section III). It also highlights the unique contribution of our analysis vis-à-vis other efforts to track commitments from global meetings. Subsequently, we present our methodology for assessing commitments to SDG 2, detailing how meetings were selected and how data were collected, and the analytical framework used to assess the data (Section IV). This is followed by an in-depth elaboration of the main qualitative findings for each dimension of the framework, often showcasing directly the language used in the final declarations and political statements of these global meetings (Section V). Before concluding, we discuss implications of the analysis and opportunities for further action.

This paper is accompanied by a detailed analysis of global foresight scenarios for food security and diets (Vos and Martin 2024).

II. Slow Progress on SDG 2

The aim of SDG 2 is to "end hunger, achieve food security and improved nutrition, and promote sustainable agriculture" by 2030.[1] While the goal consists of multiple targets, we focus here on the first: end hunger, measured as the share of undernourished people, by ensuring all people at all times have access to safe, nutritious, and sufficient food (Target 2.1). As noted, the measured prevalence of undernourishment first stalled and more recently has been rising. While progress has been realized in infant mortality and child anthropometric measures, it has been slower than desired, leaving about 148 million children under the age of five stunted and 45 million wasted. No progress has been made in reducing anemia in women aged 15–40; in fact, the worldwide prevalence of anemia has stagnated at 30 percent (FAO et al 2023).

An important innovation since the setting of the SDG 2 targets is metrics that improve our understanding of the economic constraints to purchasing healthy, nutritious foods. Poverty lines are historically based on calorie standards met by the typical consumption patterns of the poor or near-poor, patterns that reflect monotonous consumption of cheap starchy staples with inadequate intake of more expensive but more nutrient-dense fruits, vegetables, legumes/nuts, and animal-source foods. Considering this, as many as 3

[1] See https://www.globalgoals.org/goals/2-zero-hunger/

billion people are unable to afford the cost of a healthy and balanced diet and most will be affected by significant micronutrient deficiencies, a condition also labeled as "hidden hunger" (FAO et al. 2023). The vast majority of people lacking the means to cover the cost of a healthy diet live in Sub-Saharan Africa (875 million) and South Asia (1,283 million). Existing projections suggest that under baseline assumptions, more than one-third of the world population will still not be able to afford the cost of a healthy diet by 2030, while three-quarters of the population in Africa will still be suffering from hidden hunger (FAO et al. 2023; Glauber and Laborde 2023).

Shocks and slowdowns have disrupted progress on SDG 2

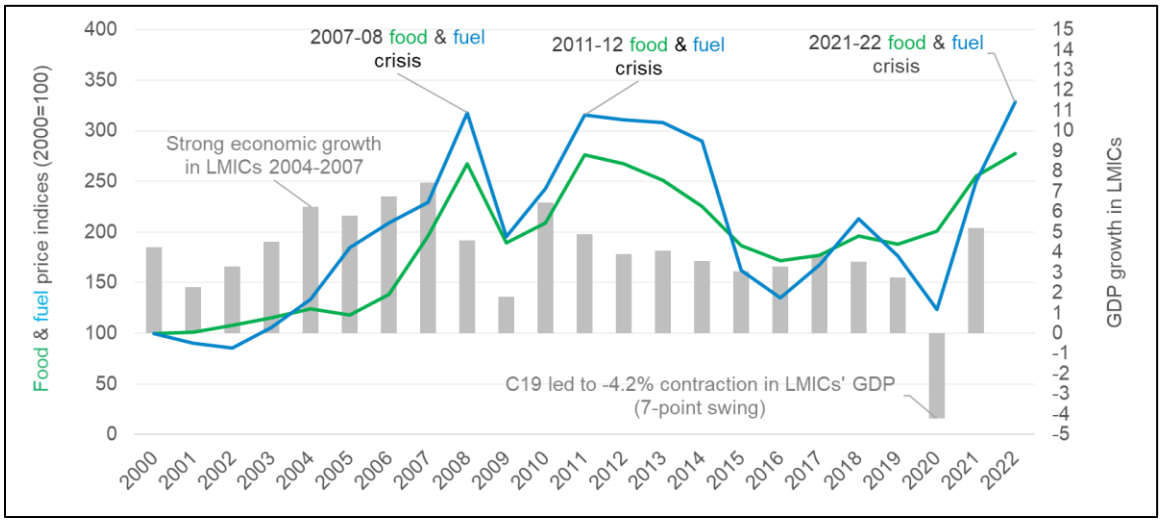
Several reasons explain why achieving SDG 2 has been difficult.

First, economic growth in LMICs is uneven and has slowed since the end of the first decade of the millennium, with particularly large growth slowdowns in many poorer countries and regions (Figure 1). Due to lower growth, many countries are currently grappling with rising debt distress and borrowing costs. Shifts in the financial landscape have also contributed to rising public and external debt distress, including recent rises in interest rates and a longer-term trend away from concessional lending toward private sector creditors, who charge higher interest rates. This combination of factors—slower growth, greater demand on public spending to address impacts of crises, and higher borrowing cost—has led to increasing debt burdens, especially for Sub-Saharan Africa (Devarajan et al. 2021). Even before the COVID-19 pandemic hit, LMICs were facing major debt challenges. According to the International Monetary Fund, debt levels were higher going into the pandemic than they were on the eve of the global financial crisis in 2008.[2] Debt servicing consequently has crowded out investments in productive and social sectors, such as health, agriculture, and education (Federspiel et al. 2022), all of which are key to shifting outcomes on hunger and malnutrition.

Second, this macroeconomic landscape has been characterized by high volatility. Three food and fuel crises have occurred over the last 15 years (2007–08, 2010–11, and 2021–22), with sharp surges in agricultural input costs and food prices in international markets and many domestic markets (Figure 1). The most recent food crisis started with the COVID-19 pandemic that caused severe declines in incomes constraining access to food for many vulnerable households around the world in 2020. As the global economy recovered from the COVID recession in 2021-2022, global supply chain disruptions emerged leading to skyrocketing energy, food and fertilizer prices in international markets during 2021-2022with the COVID-19 pandemic in 2020–2022, which disrupted global supply chains and contributed to inflationary pressures just as the pandemic itself was easing up. FAO's international food price index reached an all-time high in 2022, following prices the Russian invasion of Ukraine, which exacerbated the global price shocks, especially for wheat, vegetable oils, and fertilizers. Diet quality is projected to have deteriorated as a result of these recent shocks, as measured by the Reference Diet Deprivation (ReDD) index, which captures diet shortfalls across several distinct food groups that constitute the EAT-Lancet healthy diet (Pauw et al. 2023). Another recent study shows that increases in the real price of food increase the risk of child wasting and stunting, especially among the poor and landless rural households (Headey and Ruel 2023). While international food prices fell again over 2023, these past episodes of volatility underscore the vulnerability of many food systems to unanticipated global shocks.

[2] See https://www.imf.org/en/Blogs/Articles/2021/02/01/the-pre-pandemic-debt-landscape-and-why-it-matters

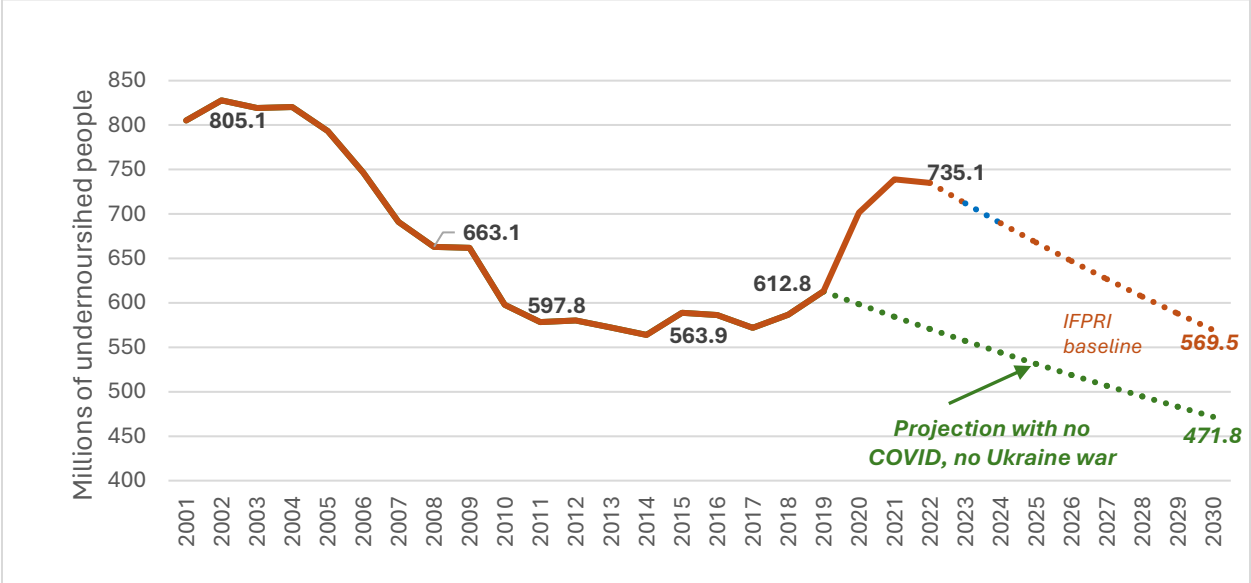
Figure 1: Slowing LMIC growth rates, COVID-19, and recurring food and fuel crises



Source: Headey and Hirvonen (2023).

Soberingly, however, as Figure 2 indicates, ending global hunger by 2030 remains elusive even in a hypothetical scenario in which the global economy and food systems would not have been shocked by COVID-19 or the war in Ukraine during 2020–2022 (FAO et al. 2023).

Figure 2: The world is off track to reach the End Hunger goal by 2030



Source: Vos and Martin (2024), based on: FAO et al. (2023). *The State of Food Insecurity and Nutrition in the World*, Fig. 5; and Glauber and Laborde (2023). Repurposing food and agricultural policies to deliver affordable healthy diets, sustainably and inclusively: What is at stake? Background paper for The State of Food Security and Nutrition in the World 2022. FAO Agricultural Development Economics Working Paper 22-05. Rome, FAO. https://doi.org/10.4060/cc4348en

Third, the world is currently facing the highest number of violent conflicts since World War II.[3] Conflict, sometimes exacerbated by extreme weather shocks, has contributed to a resurgence in global hunger (FSIN 2023; FAO et al. 2017, 2023). and food systems' infrastructure and divert scarce resources to military expenditures. Many of the most severe food-insecure countries—Afghanistan, Ethiopia, Sudan, South Sudan, Democratic Republic of the Congo, Syria, and Yemen—have been mired in civil war for many years. Poverty has also become concentrated in conflict-affected countries; in fact, while only 10 percent of the world's population lives in conflict-affected countries, 40 percent of those living in extreme poverty reside in such places.[4] This conflict-poverty nexus generates a vicious cycle that hinders certain countries from improving the food security and diets of their populations.

Minimal progress on means of implementation[5]

In addition to the above shocks and slowdowns, minimal progress has been made on the three designated "means of implementation" that were intended to foster achievement of SDG 2 by increasing agricultural productivity and strengthening market systems. Other means of implementation that could have an impact on SDG 2, such as the expansion of social safety net programs, are linked to SDG 1 in the United Nations (UN) framework; therefore, for this paper, the scope of our analysis is restricted to those means of implementation explicitly linked to SDG 2. These include:

> **2A** Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks.
>
> **2B** Correct and prevent trade restrictions and distortions in world agricultural markets in accordance with the mandate of the Doha Development Round.
>
> **2C** 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.

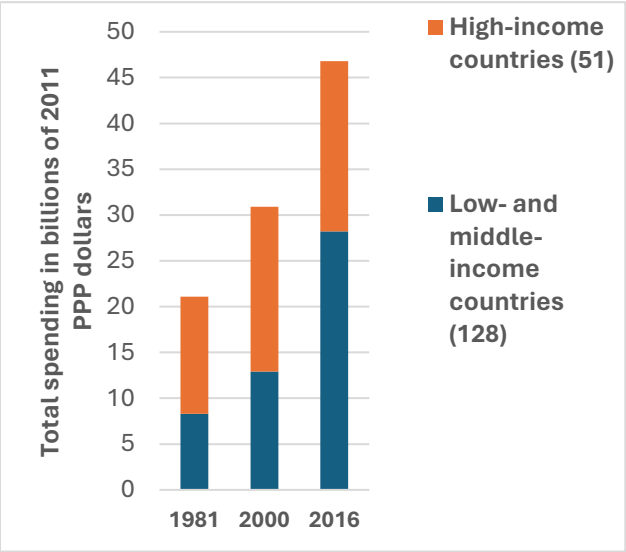
With respect to 2A, despite increased agricultural research and development (R&D) spending in countries such as Brazil, China, and India, accelerating agricultural productivity has been hampered by underinvestment in the development of improved technologies in recent decades, and current levels of R&D expenditures are grossly inadequate in low-income countries. The FAO (2017) recommends that countries should spend at least 1 percent of national gross domestic product on R&D expenditure for science and technology. Yet this metric—known as the agricultural research intensity (ARI) index—is especially low in LMICs and has barely shifted for a number of decades (Figure 3).

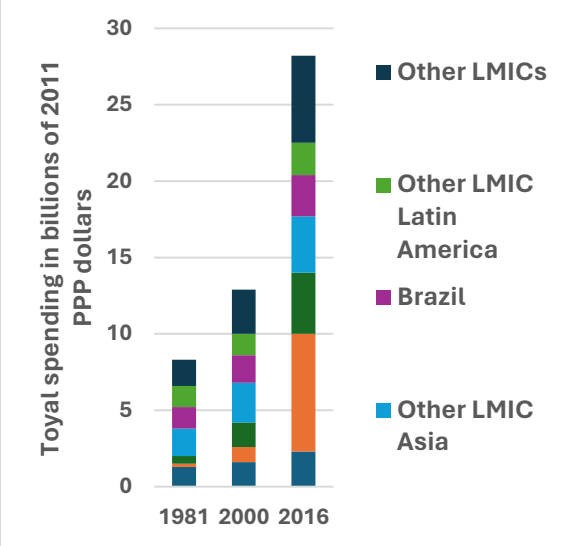
[3] See https://press.un.org/en/2023/sc15184.doc.htm

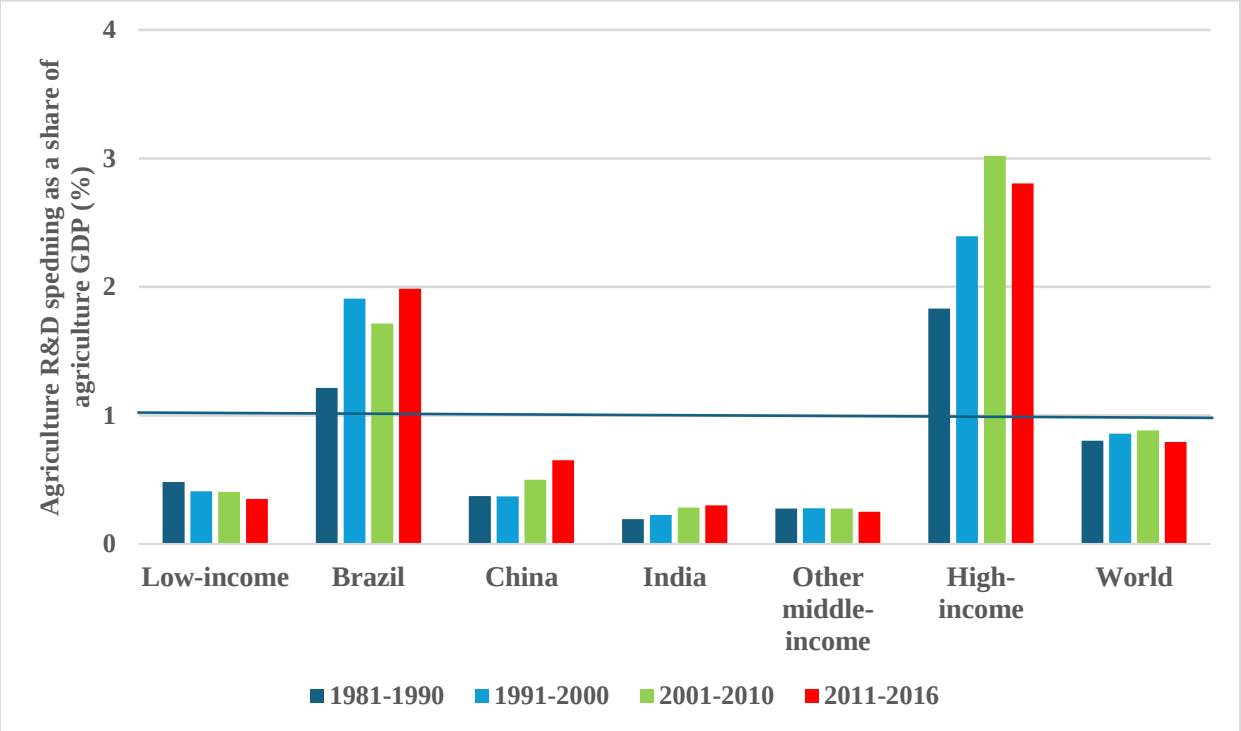
[4] See https://blogs.worldbank.org/developmenttalk/end-extreme-poverty-getting-back-pre-covid-19-reduction-rates-not-enough#:~:text=Mathematically%2C%20it%20is%20harder%20to,lower%20per%20capita%20income%20growth

[5] An in-depth analysis of these means of implementation is provided in a companion paper by Vos and Martin (2024).

Figure 3: Averages of agricultural research intensity index, 1981–2016







Source: Beintema, Nin Pratt, and Stadts (2020). ASTI Global Update. https://ebrary.ifpri.org/digital/api/collection/p15738coll2/id/134029/download.
Note: Simple average of annual agricultural research intensity (ARI), measured as the ratio of public expenditure on agricultural R&D to agricultural GDP.

Beintema (2020) estimates the global gap for agricultural R&D investment at 34 percent of attainable investment.[6] The Commission on Sustainable Agriculture Intensification (CoSAI) focused on the gap in investments for R&D for technologies and practices for sustainable intensification. It estimates this R&D investment gap at US$15 billion per year to be allocated toward innovations for sustainable intensification tailored to production conditions in LMICs (CoSAI 2021). Meanwhile, private investment in R&D has increased, currently contributing an estimated 20 percent of total agricultural R&D expenditures (FAO 2017, 2022). Public expenditures on R&D for agricultural development currently are only a small portion of total support to the farm sector (less than 7 percent). Most of this massive support (amounting to more than US$800 billion per year) is considered market-distorting, benefiting already better-off farmers and supporting unstainable production practices. Hence, increasing calls are made to reorient (or "repurpose") this support toward much more spending for agricultural R&D, rural infrastructure, and incentive schemes to overcome the barriers to switching to sustainable practices and to the production of nutrient-rich foods (Laborde et al. 2021; Gautam et al. 2022; Vos, Martin, and Resnick 2022; Glauber and Laborde 2023). But this repurposing has yet to take place.

Even less progress has been made on 2B and 2C. Food price insulation remains a persistent problem due to the prevalence of export bans, tariff changes, and a range of trade restrictions. Based on IFPRI's Food and Fertilizer Export Restriction Tracker, these restrictions tend to be most pronounced during periods of crisis, including the 2008 food price crisis, the COVID-19 pandemic, and the Ukraine war. During these periods, the world's least developed countries were affected by export restrictions, and countries in South Asia and Southeast Asia were particularly affected by the trade blockage of food staples (Laborde and Mamum 2023). Moreover, export restrictions during COVID-19 and the Ukraine crisis resulted in price insulation that roughly doubled the magnitude of the increases in world wheat prices and quadrupled the degree of price volatility during this period (Martin and Minot 2022).

III. Global Governance and Commitment Making Around SDGs

This lackluster progress on addressing SDG 2 has nonetheless occurred during an active period of summits and multilateral meetings discussing the SDGs in general, as well as SDG 2 and food systems more specifically. Since the 2000s, rising economic powers have demanded greater weight on the international stage, leading to the creation of the BRICS (Brazil, Russia, India, China, and South Africa) in 2006 and the revival of the Group of Twenty (G20) in 2008 (after its original establishment in 1999), with each entity holding its own annual summits to complement G8 (now G7) meetings (Woods 2010). The prominence of summits has been particularly pronounced with respect to Africa, with 26 summits involving African Heads of State since 2010 separately hosted by Japan, the European Union, France, China, India, Russia, the United States, Turkey, and the Arab States (Mishra 2022).[7] These meetings complement more traditional meetings of different multilateral entities, including the World Trade Organization (WTO), the UN's Framework Convention on Climate Change (UNFCCC), the Organisation for Economic Co-operation and Development (OECD), the World Bank, and UNGA, among others. With the UN Food Systems Summit (UNFSS), a more open multistakeholder approach emerged that favored the involvement of many different actors—farmers' groups, social movements, and corporate industry—rather than only representatives of nation-states (Anderl and Hißen 2023). This approach of broader stakeholder consultation reflects reforms in other international institutions, such as the United Nations Food and Agriculture Organization's (FAO) Committee on Food Security, which invited civil society actors to its meetings in the wake of the 2008 food price crisis (Duncan 2015).

[6] In the ASTI (Agricultural Science and Technology Indicators) database, a country's attainable level of investment is defined by the size of its agriculture sector combined with three additional variables: the size of its economy, its income level, and the availability of relevant technology spillovers from abroad.
[7] This excludes the annual UK-Africa investment summits that began in 2020.

For these meetings to be meaningful, they must set out a specific course of action, typically captured in a set of commitment statements—often consensus-based—at the conclusion of the meeting. Such statements have multiple purposes. In some cases, they are aimed at changing the narrative and reflecting a zeitgeist in a particular policy domain. For instance, there is currently a growing emphasis on food systems rather than just food security or hunger. In other cases, such commitments are a signaling device intended to reset the agenda, convey leadership, or encourage "bandwagoning" effects to bring other countries or actors on board with an agreed-upon set of commitments. In still other instances, global commitment statements form the basis of a social contract between governments and citizens; by agreeing to a course of action in a public venue—either verbally or in writing—such commitments suggest that a government is receptive to being held accountable for its promised actions.

Due to the growth in multilateral meetings and summits, the number of commitments made has expanded. Some of these may offer clear, time-delimited actions while others invoke vague goals to "move toward" or "gain consensus over" a particular course of action. Meetings of Heads of State may outsource the implementation of commitments to international organizations, which in turn may avoid naming and shaming individual countries for noncompliance because of their need for cooperation on other global issues. Moreover, commitments vary in the extent to which they are binding and the degree to which they are enforced. In addition, commitments made by a particular political administration may be reneged upon or deliberately ignored once a new administration comes to office. Ironically, this tendency of turnover is particularly pronounced for democratic countries where public accountability and transparency over data and budgets are also typically higher (Citro et al. 2021; Wehner and de Renzio 2013). Unanticipated macroeconomic crises can also require backtracking on fiscal commitments, especially through reductions in foreign assistance allocations by high-income countries.

The challenge of tracking SDG commitments

The proliferation of commitments and governance structures is particularly relevant to the SDGs, the emergence of which represented an important turning point for global governance for several reasons. First, while following their predecessor—the Millennium Development Goals (MDGs)—in creating indicators, benchmarks, and commitments to implement a global agenda, the SDGs were agreed through a public process with input from civil society representatives and at least 70 governments through UN Member State consensus, unlike the MDGs, which were decided by the UN Secretariat. Second, the SDGs differ from the MDGs in that they require concerted action by all countries on all fronts, including high-income ones, not just developing countries. Third, they encompass a broader agenda around development, not just poverty reduction, and therefore refer to an integrated agenda for which progress for one goal is jointly linked to improvements across many. Fourth, the goals were developed through a consultation process and are global, nonbinding, and open for interpretation by governments to tailor them to country needs and conditions (Biermann et al. 2017).

These characteristics of the SDGs mean that assessing the degree of commitment to any one of them is challenging. Many institutions and fora use the SDGs as a basis by which to ground their commitments and the actions they would like to see. Yet since the SDGs are a global agenda and involve multiple policy arenas, they are discussed and debated at multiple international meetings and within institutional arenas that vary significantly in their memberships, consensus and decision-making rules, opportunities for participation by nonstate actors, and enforcement mechanisms. This allows for "forum shopping": choosing the venue that most favorably aligns with a state's principles and objectives (Murphy-Gregory and Kellow 2013). This can explain why states may express stronger or weaker commitments to SDG goals—including for SDG 2—in some meetings and institutional fora than in others.

Tracking commitments made by Heads of States, high-level bureaucrats, Ministers, and international organizations to the SDGs through global meetings is, nonetheless, critical to the legitimacy of such

events and to uncovering the broader consistency of the global development agenda. Indeed, as noted by Young (2017), using goals to improve global governance requires formalized commitments that include clear benchmarks and measurable pledges that can result in embarrassment under cases of noncompliance. Some summit events, such as the G20, lack a structured bureaucracy to track commitments. The follow-through on the SDG agenda by UN Member States is monitored through the UN High-Level Political Forum on Sustainable Development (UNHLPF), which examines negotiated declarations, reviews commitments, and assesses progress toward the 2030 Agenda for Sustainable Development. Several thinktanks and universities have also taken up tracking commitments to enhance accountability. These include the University of Toronto's G20 and BRICS compliance reports that uncover whether countries adhere to certain commitments in the year following the relevant summit and assign a compliance score accordingly.[8]

Research objectives and gaps

These and other important efforts to assess global commitments offer detailed assessments across multiple policy domains, ranging from digital economy, crime and corruption, energy, health, trade, and macroeconomy in addition to food and agriculture. Yet to our knowledge, no current assessment exists of the detailed commitments from multilateral and Heads of State meetings with respect to SDG 2. This is critical given that food and hunger have received growing attention in these meetings due to the impacts of the recent global crises (for example, COVID-19 and the Ukraine war) as well as SDG 2's intersection with so many other policy domains, including climate, education, urbanization, migration, education, and fragility. Because food touches on so many aspects of international development, an expansive view is needed to ensure that all relevant commitments are captured as well as to highlight trade-offs and inconsistencies across commitments and across different global meetings.

As such, Sections IV and V detail the methods and findings that contribute to this understanding of (i) what global commitments to SDG 2 have stemmed from global multilateral and intergovernmental fora since the adoption of the SDGs in 2015, and (ii) whether these global commitments are fit-for-purpose based on their potential to address key dimensions required to impact nutrition.

IV. How to Assess Commitments to SDG 2?

To analyze the range of commitments to SDG 2 and identify whether they acknowledge major barriers to progress and action on the means of implementation mentioned earlier, we first conducted a desk-based review. This involved searching websites of key well-known multilateral global fora for commitments to address SDG 2. Next, we adapted an existing framework to orient these commitments and to guide the assessment of the commitment statements according to seven key domains required to impact nutrition outcomes. Specifically, the Scaling Up Impact on Nutrition theory of change model was adapted to guide our understanding of the potential for rhetorical commitments to SDG 2 to have global impact (Gillespie, Menon, and Kennedy 2015).

Desk-based review

Web searches via Google were conducted to identify policy statements or documents from global fora that articulate intergovernmental commitments for addressing SDG 2 (for example, "G20" AND "leaders declaration" AND "2023"). Publicly available websites and sources were then searched to develop a database of these global fora and commitments since 2015. Initial searches covered websites reporting on

[8] See http://www.g20.utoronto.ca/compliance/2022bali-final/index.html and http://www.brics.utoronto.ca/compliance/2022-beijing-final.html

the UN SDG event calendar, UNGA sessions, and the G20 and G7 Summits.[9] Once an initial list of global fora was identified and checked by the research team for face-validity, additional fora were snowball sampled (that is, identified in commitment statements from previously included meetings). Outcome statement documents (the primary unit of analysis for this research) from the identified global fora were included for analysis based on the eligibility criteria.

Document eligibility criteria

The eligibility criteria required that documents included for analysis were those that met both of the following requirements: (i) they were formal political declarations, resolutions, and decisions related to SDG 2 that were agreed upon by Heads of State, Ministers, or their representatives; and (ii) they were political commitment statements made at global multilateral or major economic fora or meetings where the SDGs have been formally discussed since 2015. Between 2015 and 2023, we identified nine global events that resulted in 68 global meetings and 107 intergovernmental commitment statements to address SDG 2. Some of these fora have alternating foci each year and are often hosted in alternating cities and countries (for example, the UN Conference of Parties (COP) on Climate Change).

Table 1 describes the global meetings considered for inclusion in our analysis, ordered from those with the greatest number of Member States and the broadest topical focus to the least. These are global-level events at which Heads of State, Ministers, or their delegates agree to a final set of commitments, such as the UNGA and G20. These meetings are often held regularly by multilateral organizations to bring together specific categories of Ministers or country delegations. The included meetings are not intended to be an exhaustive list but rather a comprehensive sample that reflects the breadth and diversity of different types of meetings that result in intergovernmental commitment statements that relate to SDG2. Examples of these include the annual UNFCCC COP, the WTO Ministerial Conferences that are hosted every two years, the annual World Health Assembly, , and the annual International Fund for Agricultural Development (IFAD) Governing Council sessions. The Global Forum for Food and Agriculture (GFFA) is an interesting hybrid model; it is not a multilateral institution nor an event for Heads of State, but rather an annual conference hosted by the German government that sees participation from Ministers of Agriculture from around the world who conclude the conference with a communiqué. The FAO Conference was excluded from this analysis as the outcome statements from this meeting predominantly pertain to the organization's functioning and reviewing decisions made by its different executive arms such as the FAO Council and World Food Programme (WFP). Of the included global meetings, 56 percent produced Leaders/Ministerial communiques or declarations, 36 percent resulted in resolutions and decisions, and 9 percent contained commitment statements in meeting reports.[10]

Given our focus on intergovernmental commitments for action on SDG 2, the documents excluded from analysis included commitments made by individual governments, the private sector, donor organizations, and academia. Commitment statements were excluded if they were derived at regional meetings and did not include specific content related to any dimensions of the framework. This means that important events, such as the UNFSS and Committee on World Food Security meetings, are excluded from the analysis because they did not produce global-level intergovernmental outcome statements agreed to by Heads of States or their representatives; instead, they culminate in a set of pathway documents and activities, often calibrated to local circumstances, that national governments intend to follow to achieve their food system transformation goals (Box 1).

---

[9] See https://www.un.org/sustainabledevelopment/sdg-planning-calendar/

[10] Leaders' "communiques" describes an official announcement, while "declarations" are formal or explicit commitment statements toward an issue. "Resolutions" describe formal stances of the UN, typically including reasons for an action and the action to be taken. "Decisions" describe formal UN decisions, sometimes representing Member State consensus on an issue. See https://www.un.org/dgacm/en/content/editorial-manual/res-dec-index#:~:text=United%20Nations%20resolutions%20are%20formal,preamble%20and%20an%20operative%20part

Table 1. Overview of global meetings included in analysis

Meeting title	Mandate	Main attendees	Number of meetings since 2015	Number of commitment statements since 2015
Global meetings				
UNGA	One of the major policy arms of the UN established in 1945 to set UN budgets and Member State terms, while also facilitating cross-member dialogue.	Heads of State or Government Ministers	9	33
UNHLPF	The main UN platform on sustainable development mandated in 2012. Responsible for reviewing the SDG Agenda and meeting annually under the UN Economic and Social Council.	Heads of State or Government Ministers	4	4
UNFCCC COP	The COP is the highest-level decision-making platform of the UN Framework Convention on Climate Change, where Member States review actions taken to implement address climate change. COP meetings have occurred since 1995 and alternate presidencies every 2 years.	Member State Representatives (e.g., Heads of State)	8	8
WHA	The decision-making platform of the World Health Organization established in 1948 to determine budgets and set the global health policy agenda.	Ministers of Health or Ministerial-level State Delegations	9	15
IFAD	Specialized UN agency established in 1977 as an international financial institution to support country-specific actions to reduce poverty and food insecurity in the rural areas of LMICs.	Member State Representatives (e.g., Heads of State)	8	8
WTO	The global platform established in 1995 for governments to set and negotiate international trade agreements that will benefit all people.	Ministers of Trade or Ministerial-level State Delegations	3	11

Meeting title	Mandate	Main attendees	Number of meetings since 2015	Number of commitment statements since 2015
GFFA (includes the Berlin Agriculture Ministers' Conference)	An international forum and Ministerial conference established in 2009 by the German Ministry of Food and Agriculture for discussing global challenges related to food and agriculture policy.	Ministers of Agriculture	9	9
Global economic meetings				
G7	A group of developed economies that meets every year to coordinate actions on major economic and political issues. Different versions of the G7 have existed since the 1970s, with rotating presidencies holding meetings.	Heads of State	9	9
G20	A group of 20 major economies that have met every year since 1999 following the 1997–98 financial crisis to discuss international economic challenges and coordination. The presidency rotates each year.	Heads of State	9	10

**Meetings are ordered from those with the most Member States to the least—UNGA: United Nations General Assembly; UNHLPF: United Nations High-Level Political Forum; UNFCCC COP: United Nations Framework Convention on Climate Change Conference of Parties; WHA: World Health Assembly; IFAD: International Fund for Agricultural Development; WTO: World Trade Organization; GFFA: Global Forum for Food and Agriculture; G7: Group of 7; G20: Group of 20.*

Box 1: The United Nations Food System Summit

The United Nations Food Systems Summit (UNFSS), held on September 23–24, 2021, convened over 163 Member States, including 77 Heads of State (Food Systems Summit Dialogues, 2022). The UN Secretary General announced a call for this summit on World Food Day in 2019 (United Nations Food System Summit, 2019). In his call, the Secretary General highlighted the potential of leveraging a food systems approach to accelerate progress, revive focus, and identify actions to achieve all 17 SDGs by 2030. Using a food systems approach was seen as an opportunity to address the interlinked SDG challenges such as poverty, nutrition and health, hunger, climate change, infrastructure, the management of ecosystems, including water resources, and more. This includes considerations for the synergies, externalities, and trade-offs that exist among food systems components and the SDGs (Torero 2021).

The FSS is not a platform for negotiation, unlike the global events analyzed in this work. Rather, countries used the culmination of several UNFSS processes to develop country- and context-specific commitments. The summit aimed to increase awareness and guide governments, private companies, and civil society, including individuals, to identify specific actions, plans, and innovative solutions to transform food systems globally, nationally, and locally. An independent scientific group of leading scientists provided evidence, knowledge, and policy suggestions that guided technical guidance on potential actions to address the SDGs. The UNFSS grouped the potential actions into five action tracks: (1) ensure access to safe and nutritious food for all, (2) shift to sustainable consumption patterns, (3) boost nature-positive solutions, (4) advance equitable livelihoods, decent work, and empowered communities, and (5) build resilience to vulnerabilities, shocks, and stress (Food Systems Summit Dialogues, 2021). The summit also conducted dialogues at global high-level events, within countries led by national governments, and with other organizations or constituents. These dialogues, conducted by over 140 countries, combined with technical guidance resulted in countries developing their own national pathways documents for food systems transformation (Food Systems Summit Dialogues, 2022). These are clear visions of governments' actionable commitments and priorities to achieve a sustainable food system within their context by 2030.

A post-UNFSS analysis identified that over 111 countries developed national pathways documents (Food Systems Summit Dialogues, 2022). Most had workplans with activities and means of implementation for the summit's five action areas. According to this analysis, the themes most frequently prioritized in countries' national pathways were: (1) shifting to healthier diets, (2) ending hunger, (3) sustainable growth in productivity, and (4) food system resilience in the face of climate change. Most of the pathways highlighted key means of implementation for their commitments: (1) adapting policies and regulations, (2) investing in knowledge and innovation, (3) strengthening human resources capabilities, (4) mobilizing finance and investment, (5) accessing better data, and (6) allowing cross-border food trade.

Despite UNFSS commitments being specific to individual countries, means of monitoring progress of the summit were established. At the country level, UN Resident Coordinators annually report on the support given to national pathways. The UN Secretary General uses this information to also submit an annual progress report to the UNHLPF. The summit also convenes a global stocktaking meeting every two years—the first one took place in 2023—to review commitments, progress toward implementing national food systems transformation pathways, and progress toward the 2030 Agenda. The stocktaking events are intended to keep momentum on achieving the SDGs by urging actions at scale, while also identifying successes and bottlenecks in implementation to inform actions. Lastly, the UN established a UN Food Systems Coordination Hub to coordinate knowledge and expertise and support countries and other stakeholders to implement their national food systems transformation pathways. The Coordination Hub also functions as a knowledge management contact point for 31 UNFSS coalitions—groups of institutions, including Member States and nonstate actors who have self-organized to contribute to the achievement of SDGs by focusing on certain key themes related to food systems (United Nations Food Systems Coordination Hub, 2022). These coalitions include groups such as the Zero Hunger Coalition, the Coalition of Action on Healthy Diets from Sustainable FS for Children and All, Making Food Systems Work for Women and Girls, Social Protection and Food Systems Transformation, and the Climate Resilient Food Systems Alliance.

Analytical Framework

To determine whether global commitment statements aiming to address SDG 2 correspond to what the literature has identified as key factors required to drive changes on the ground that impact the rates of hunger, food insecurity, and healthy diets across populations, we initially drew on the Scaling Up Impact on Nutrition theory of change model by Gillespie, Menon, and Kennedy (2015) (hereafter, Gillespie et al.). This model was originally developed based on a comprehensive literature review of 36 theoretical frameworks and four national case studies to describe nine context-specific factors that support the impactful and equitable implementation of nutrition commitments at scale. While other frameworks and approaches exist to guide the scale-up of nutrition policy commitments into actions, they often narrowly focus on one or two scale-up considerations, such as financing and/or accountability, rather than a more comprehensive set of key criteria as offered by the Gillespie et al. (2015) framework.

We chose this framework for two reasons. First, as described above, it focuses on the elements necessary to *deliver impact at scale* and is based on a review of 36 frameworks. Second, the framework has been applied to analyses of large-scale successes in stunting reduction, demonstrating its use in understanding the interplay of factors contributing to impact at scale. The focus on scaling up impact, rather than scaling up actions or processes, is central to its utility in this context, where our key question is whether global commitments are set out in ways that recognize factors that must be in place to deliver impact at scale.

Nonetheless, although the Gillespie et al. (2015) framework describes the scale-up elements, it does not provide existing sub-indicators to support them. We therefore aligned and adapted the framework using specific policy process or implementation science frameworks to identify additional elements and indicators that may support impactful implementation of SDG 2 commitments in the real world. Elements of Kingdon's (2011) framework on the three streams of policy process were considered to guide in-depth analysis on how problems are defined and the types of policy options that are, and are not, put forward—informing indicators for the "Vision/goal" and "What is being scaled?" The evidence integration triangle (Glasgow et al. 2012) was used to underpin the importance of participatory implementation processes for impacting nutrition outcomes, including through capacity building and equitable governance structures, as well as identifying practical and measurable forms of monitoring progress. This influenced our chosen indicators for scale-up strategy, capacity, governance, and accountability and monitoring. Finally, the implementation performance framework—adapted from Bondarouk and Mastenbroek's research (2018) assessing the implementation of multilateral environmental policy—aligned with indicators reflecting how implementing political commitments requires substance (for example, clear problem definitions, objectives), scope (for example, means of implementation), and effort (for example, capacity, financing, monitoring).

Following pilot testing of the framework's application on the COP and G20 declarations, a final framework comprising seven of the original framework elements, with 29 corresponding indicators, was developed (Table 2). Specifically, our adapted framework for this global commitments analysis focuses on whether commitment statements define the problem/vision being addressed, propose policy responses that align with recommended means of implementation, delineate scale-up strategies, adequately support capacity building and financing, refer to reinforcing governance through coordination and partnership modalities, and include accountability and monitoring mechanisms to ensure commitments are ultimately delivered.

Finally, in refining this framework, two of the original elements from Gillespie et al. (2015)—context as well as drivers and barriers—were removed. Context is not typically referred to in much detail in global meetings since the aim is to identify interventions that can have broad impacts across countries. Our pilot analysis also revealed that drivers and barriers are often integrated into the "problem definition indicator" that examines how commitment statements lay out their vision and goal.

Table 2. Operationalization of analytical framework to assess commitments to SDG 2

Elements to scale up impact on nutrition	Indicators (each indicator is equivalent to a score of 1)
Vision/goal (total score out of 3)	• Problem definition • Objectives • Definition of priority population groups
What is being scaled? Key actions/goals (total score out of 3)	• Recognition of means of implementation that align with SDG 2 • Recognition of any additional means of implementation (that are not above) • Existence of an action plan and/or guidance documents
Scaling up strategy (total score out of 2)	• Mention of activities related to reach or expansion • Statements quantifying the increases in size of an activity, intervention, geographical base, and/or budget
Capacity to scale up (total score out of 4)	• Mention of the need for capacity development support • Specify level of capacity needed (e.g., individual, organizational, policy, community, economic, social, environment, history, systemic) • Purpose/aims/types of capacity building • Modalities for capacity building
Governance (total score out of 5)	• Horizontal (intersectoral/ cross sectoral) coherence—adequate coordination and integration across sectors • Vertical (intrasectoral, national to community) coherence—decentralization of authority, power, resources, and capacity • Recognition of partnerships • Recognition of the private sector's role • Acknowledgement of conflict of interest
Financing (total score out of 3)	• Mention of financing • Mode of financing (including identifying specific financing means of implementation and/or platforms that are responsible for financing) • Costing and financial amounts
Accountability and monitoring (total score out of 4)	• Mention of monitoring and tracking over time • Specific modalities of monitoring and tracking identified • Consequences for inaction • Delineates who is responsible for enacting consequences

***Data extraction:** All data were extracted and deductively coded in a standardized Excel spreadsheet according to the agreed-upon framework. To ensure coding consistency by the research team, two political declarations from the G20 and COP 2023 meetings were originally cross-coded. The remaining extraction was conducted independently by individual researchers, with results cross-checked when there was uncertainty in the coding process.*

Data synthesis

Following review and data extraction of the political declarations, data were narratively synthesized to summarize commitments to SDG 2 from the global fora overall and against each of the framework elements outlined above. Some researchers have argued that narrative synthesis is a trustworthy method

for evidence synthesis that can inform policy and practice (Snilstveit, Oliver, and Vojtkova 2012). This is especially true when narrative synthesis is: informed by theory such as the Gillespie et al. (2015) framework; seeks to describe in-depth patterns according to different global fora (key factors that underpin the policy commitments); and changes over time. The primary narrative synthesis was complemented by a quantitative descriptive summary of the framework elements and indicators that were met, thereby highlighting trends over time and key gaps to be addressed in the future.

These research findings were vetted through in-person and virtual workshops with global and regional food, nutrition, and development policy experts, as detailed in Appendix 1.

V. Findings

This section provides insights on each component of the analysis framework vis-à-vis the outcome statements in the database of global meetings and commitment statements related to SDG 2. The narrative synthesis demonstrates both the interconnectedness and distinct importance of the different framework elements across the global meetings. The extent to which the framework elements are present across the commitment statements is reflected by average scores calculated for each meeting type (Table 3).

Although analysis according to meeting type provides valuable information in this Section, meetings are invariably convened under different agendas and circumstances. The findings should, therefore, be interpreted with this understanding. On average, across all meetings, the GFFA meeting outcome statements covered the most framework elements (approximately 15 of the 24 indicators), with the vision and goal, capacity to scale up, and governance elements most addressed. The G20 Summits had a total score of 14 on average, with elements for the vision and goal, scale-up actions, and scale-up strategies most commonly met. The UNGA meetings had an average score of 12, with indicators for the vision and goal and scale-up actions most frequently observed. The G7 Summits (average of 11 out of 24 indicators) were found to have similar scores as the UNGA meetings. The UNHLPF had an average indicator score of 8, with the vision and goal indicators most frequently met. The COP meetings had an average score of 8, with missing indicators across all framework elements. On average, the WHA and WTO meetings scored similarly (7.5), with the vision and goal being the highest scoring element. Finally, the IFAD Council sessions scored approximately 5 overall, with financing indicators being the most common.

While we considered investigating trends in the presence of indicators over time, no clear trends were identified across the dataset. As such, only notable changes in the commitment statements are qualitatively reported within the findings text, according to framework dimensions, where relevant.

Table 3. Global intergovernmental convenings that produce commitment documents focused on addressing SDG 2 since 2015, summarized with average indicator scores according to a framework of elements required to scale up impact on nutrition outcomes

Global forum	Vision and goal /3	What is being scaled? /3	Scale-up strategy /2	Capacity to scale up /4	Governance /5	Financing /3	Accountability /4	TOTAL AVERAGE /24
UNGA	2.7	2.0	0.4	0.9	2.5	1.6	2.1	12.2
UNHLPF	2.0	1.3	0	1.3	1.0	1.5	1.3	7.6
UNFCCC COP	1.8	1.0	0.5	0.6	1.0	1.4	1.4	8.3
WHA	2.0	0.8	0.3	1.1	0.6	0.5	2.2	7.5
IFAD	0.4	0.3	0	0	0.4	2.5	1.4	4.9
WTO	2.5	0.9	0.7	0.8	0.9	0.4	1.8	7.5
GFFA	2.8	1.7	0.6	3.6	4	1.2	1.3	15.1
G7 Summit	2.6	2	0	1.7	1.9	1.6	1.7	11.3
G20 Summit	2.6	2.8	1.6	1.6	2.3	1.9	1.7	14.1

***Dark blue shading:** >two-thirds of indicators present
Intermediate blue shading: between one-third and two-thirds of indicators present
Light blue shading: <one-third of indicators present

Framework Element 1: Vision and Goals

According to our analysis framework, the vision and goals domain was one of the most commonly included components in the declaration documents analyzed. Seventy percent of documents contained a problem definition, 87 percent contained objectives related to SDG 2, and 76 percent explicitly described a target population group. Overall, 61 percent of the analyzed commitment documents included all three of these indicators. To some extent, the visions within intergovernmental declarations varied in their alignment with SDG 2 according to the type of fora and over time.

Problem definition

With respect to the UN global meetings relevant to SDG 2, the UNGA has long been committed to the problem of *ending poverty and hunger everywhere.* In a similar fashion, even though the rising rates of hunger, malnutrition, and food insecurity were mentioned in the 2022–2023 UNHLPF Ministerial declarations, UNHLPF commitments have remained broader in their scope—with problems predominantly framed in relation to sustainable development and poverty eradication. In comparison to the UNGA and UNHLPF, the WHA has frequently discussed problems related to nutrition, including a reoccurring focus on maternal, child, and infant nutrition problems.

In contrast, the role of unsustainable food and agricultural systems was lacking in problem definitions provided by the UNFCCC COP until recent years.

Commitment statements from the WTO Ministerial conferences placed a high priority on emergency responses to food insecurity.

The G20 and G7 Summits have focused on addressing problems related to economic growth, including foreign policy, health, climate change, and development issues. For example, since 2019 the G7 has increasingly focused on the global impacts on food security from the COVID-19 pandemic and the Ukraine war:

> *"We remain deeply concerned with the ongoing and worsening global food security and nutrition situation, with the world facing highest risk of famine in a generation. Multiple factors including the COVID-19 pandemic, soaring energy prices, the climate crisis and shocks, biodiversity loss, land degradation, water security and armed conflicts have contributed to the global disruption and disorder in food systems and supply chains and the deterioration in global food security in recent years. In particular, Russia's illegal war of aggression against Ukraine has drastically aggravated the global food security crisis." (G7 Hiroshima Leaders' Communique, 2023)*

While the GFFA focuses on different headline problems each year—from soil health, agrifood trade, and the right to adequate food to digitalization to increase agricultural productivity—GFFA problem statements have been broadly focused on reshaping food systems since 2015*:*

> *"We are convinced that the fight against hunger and malnutrition must go hand in hand with the fight against poverty. Only resilient, diversified and sustainable agrifood systems can provide the foundation for achieving the human right to adequate food…" (GFFA Communique: 7th Berlin Agriculture Ministers' Summit 2015. The growing demand for food, raw materials and energy: opportunities for agriculture, challenges for food security)*

Objectives

The UNGA's objectives have remained focused on addressing poverty and malnutrition and upholding the right to food globally—especially since the announcement of the UN Decade for Action on Nutrition 2016–2025 off the back of the Second International Conference on Nutrition (held by FAO and WHO in Rome in 2014).

Furthermore, since 2015–16, the UNHLPF has been a platform focused on garnering political support to sustainable development:

> *"We commit to mobilize and accelerate actions for rescuing the Goals and to leave no one behind by adopting resilient, sustainable, inclusive, low greenhouse gas emission and climate-resilient development pathways in a transparent and inclusive manner in the context of sustainable development and poverty eradication and for the full implementation of the 2030 Agenda." (UNHLPF Ministerial Declaration, UN Economic and Social Council, 2022)*

Despite the dominant focus on nutrition problems, the WHA has focused its objectives more heavily on SDG 3 (*Ensure healthy lives and promote wellbeing for all at all ages)* compared to SDG 2, often comprising a greater focus on noncommunicable disease prevention and treatment and establishing broader public health and well-being strategies in response to recent crises.

In 2022, the Sharm el-Sheikh joint work on implementation of climate action on agriculture and food security was announced at the COP, with *"the fundamental priority of safeguarding food security and ending hunger by designing sustainable and climate-resilient agricultural systems*." This vision was further strengthened at the recent COP28 via the United Arab of Emirates Declaration on Sustainable Agriculture, Resilient Food Systems and Climate Action, which *"underscores the need to progressively realize the right to adequate food in the context of national food security as well as the need to ensure access to safe, sufficient, affordable, and nutritious food for all."*

To address food insecurity, the WTO declarations typically include specific objectives to strengthen the multilateral trade regime, including by discouraging countries from imposing trade restrictions and encouraging them to act in accordance with humanitarian assistance goals. For example, international food aid has been a priority for the WTO since 2015:

> *"Members reaffirm their commitment to maintain an adequate level of international food aid, to take account of the interests of food aid recipients and to ensure that the disciplines contained hereafter do not unintentionally impede the delivery of food aid provided to deal with emergency situations." (Ministerial Conference 12 Outcome Document: Nairobi Ministerial Declaration, WTO Ministerial Conferences, 2015).*

The recent 2023 GFFA's objectives also strongly center on *"creating sustainable and resilient food systems,"* aligning with the UNFSS and building on the COVID-19-responsive 2021 vision to *"take concrete actions to fulfil the right to adequate and food and safeguard global food security… reaffirm(ing) our commitment to the 2030 Agenda for Sustainable Development."*

Since 2015–16, the G20 and G7 have included explicit objectives to address SDG 2—for example, through adoption of the G20 Action Plan on Food Security and Sustainable Food Systems in 2015. Following the COVID-19 pandemic, these objectives were strengthened through the G20 Matera Declaration on Food Security, Nutrition and Food Systems (2021), the focus on Eliminating Hunger and Malnutrition in the G20 New Delhi Leaders' Declaration (2023), and the G7 Hiroshima Action Statement for Resilient Global Food Security (2023).

Population group/s

The objectives presented at global UN meetings strongly focus on calling upon Member States to "*support national efforts aimed at responding rapidly to the food crises currently occurring across different regions" (UNGA Resolution 70/154. The right to food, 2015)*—especially in southern Africa and other parts of the world that have experienced food and funding deficits via the WFP. The recent 2022 and 2023 COP declarations additionally acknowledged the need to work with farmers, producers, low-income households, Indigenous peoples, women, and youth in developing countries to realize climate-resilient and sustainable agricultural systems that can support food security. The 2015 GFFA similarly

identified the importance of supporting farmers and rural dwellers, with other priority groups—namely poor and vulnerable peoples, women, youth, and Indigenous peoples, least developed countries, small island countries, and countries hosting refugees—identified in GFFA statements from 2020 onward. In addition, since the inception of the SDGs, the G20 and G7 political declarations have repeatedly included clear and repeated foci on supporting small farmers, rural women, and youth.

Framework Element 2: Scale-Up Actions

Multiple distinct actions for scaling up were identified as important across the analyzed documents. Approximately 62 percent of all documents acknowledged at least one of the SDG 2 means of implementation, with 63 percent acknowledging additional means of implementation not described in SDG 2 but also recognized as relevant, for example, social policies and programs. However, only 28 percent of the analyzed documents mentioned an action plan and/or guidance documents. In this section, the three means of implementation summarized earlier—SDG 2A, 2B, and 2C—are first reviewed before describing recognition of any additional means of implementation and whether global commitments statements were accompanied by action plans and guidance documents.

Recognition of means of implementation

As noted earlier, SDG 2 is accompanied by three means of implementation: 2A—increase investment, international cooperation, rural infrastructure, research, technology development, and equitable access to knowledge and resources; 2B—address trade restrictions; and 2C—take actions to ensure proper food commodity market functioning to minimize food price volatility.

SDG 2 means of implementation 2A identifies the need for increasing investments, coordination, and R&D. These have been acknowledged in the UNGA, UNHLPF (since 2022), WHA, COP, GFFA, G20, and G7 meetings. This includes research and technological innovations on climate-resilient grains (for example, millets, quinoa, and sorghum) and water management; investment in small and medium enterprises; farming and rural development (for example, improving digital access and tackling depopulation in rural areas); equitably improving access to digital data and knowledge of sustainable solutions; building multisectoral collaborations across government; and ongoing funding and humanitarian assistance that is better targeted from Official Development Assistance (ODA) and repurposing of existing agricultural support. Most fora also made clear actions to better include Africa and the LMICs in multilateral decision-making fora:

> *"(We) Commit to accelerating innovations and investment focused on increasing agricultural productivity, reducing food loss and waste across the value chain, and improving marketing and storage, to build more sustainable and climate-resilient agriculture and food systems… (We) Recognise the role of digital transformation, AI, data advances, and the need to address digital divides. We endorse the G20 Principles on Harnessing Data for Development (D4D) and welcome the decision to launch Data for Development Capacity Building Initiative, and other existing initiatives." (G20 New Delhi Leaders Declaration, 2023)*

The GFFA additionally committed to improving land security and biosecurity, including mitigating the irresponsible use of antimicrobials and encouraging the use of gene banks.

Trade commitments (SDG means of implementation 2B) presented at the UNGA, WTO, G20, and G7 meetings related to rules-based, fair, transparent, and nondiscriminatory food, agricultural, and fertilizer trade, not imposing export restrictions, disciplines on "fisheries subsidies that contribute to overcapacity and overfishing)" (WTO), fiscal measures to support people experiencing poverty and financial stress during the cost-of-living crisis (G20 and G7), and duty-free and quota-free market access for LMICs. The G7 reiterated these commitments in 2023:

"Making fair and appropriate use of existing domestic agriculture resources and harnessing the potential of sustainable local productivity and production across all countries to increase food security and improve nutrition situation while facilitating fair and open trade, in line with WTO commitments. Promoting rule-based, open, fair, transparent, predictable and non-discriminatory trade as an essential basis for building more resilient food systems, promoting food security and making nutritious food more affordable and available." (G7 Hiroshima Action Statement for Resilient Global Food Security, 2023)

In 2022, the WTO Geneva package of agreements also reflected decisions to exempt food from export restrictions when procured for humanitarian purposes by the WFP.

Actions to support the proper functioning of commodity markets (SDG means of implementation 2C) were also discussed in the G20 and G7 meetings with a focus on addressing inflation through central banks to achieve price stability; increasing supply-side labor; developing skills-based migration pathways; increasing access to fertilizer and agricultural inputs; enhancing market value creation in developing countries and locally (the GFFA and UNHPF also included commitments to support smallholders and LMICs to enter markets); addressing structural bottlenecks; and reducing food loss across value chains.

Recognition of additional means of implementation

Other means of implementation in commitment statements from the UNGA, UNHPF, WHA, COP, GFFA, G20, and G7 related to addressing the social and economic inequalities underpinning hunger and food insecurity. Commitments were made to: uphold human rights, often via improving the livelihoods of and social protection policies for farmers, women, gig workers, youth, and other underrepresented groups; provide decent income and working conditions; eliminate child and forced labor and eliminate conflict; ensure equitable paid and safe participation of women and developing countries in decision-making and labor across all levels in society (for example, within food systems, education systems, and Science, Technology, Engineering, and Mathematics [STEM], as well as through inclusive financing and the elimination of gender-based violence and stereotypes); develop early childhood development programs; fight illicit trafficking of cultural property (for example, the over commercialization and misappropriation of Indigenous cultural knowledge); improve the disaster preparedness of health and related systems; and monitor health inequalities (WHA). The WTO also committed to donor countries making food available to poorer countries. For example, the 2023 G20 Summit recognized the overarching importance of support for gender equity as a step toward achieving SDG 2:

"Women's food security and nutrition is the cornerstone of individual and community development as it lays the foundation for women's health, as well as that of her children, family and general well-being of the community. To this end, we will:

i. Encourage investments in inclusive, sustainable and resilient agriculture and food systems. Support accessible, affordable, safe and nutritious food and healthy diets in school meal programmes. Promote innovation for inclusive agri-value chains and systems by and for women farmers.

ii. Support gender-responsive and age-sensitive nutrition and food system interventions by leveraging innovative financing instruments and social protection systems in ending hunger and malnutrition… Emphasize the importance of enabling life-long learning focused on skilling, reskilling, and upskilling especially for vulnerable groups…

……..

vi. Promote women's inclusion into the formal financial system by strengthening their access to economic resources, particularly through digital finance and microfinance.

vii. Eliminate gender stereotypes and biases, and change norms, attitudes and behaviours that perpetuate gender inequality…." (G20 New Delhi Leaders' Declaration, 2023)

Existence of action plan and guidance documents

Specific action plans to support means of implementation were noted by less than one-third of the commitment statements and to varying degrees across the global fora.

Prior to 2020, UNGA Member States endorsed the 2015 Addis Ababa Action Agenda of the Third International Conference on Financing for Development; the WTO Member States committed to the 2015 Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihood; and G20 parties committed to the G20 Action Plan on Food Price Volatility and Agriculture, the G20 Food Security and Nutrition Framework, and the G20 Action Plan on Food Security and Sustainable Food Systems.

Recent action plans include: the G20 Matera Declaration on Food Security, Nutrition and Food Systems (2022) and the G7 Statement on Global Food Security (2022). In 2023, the COP also announced a three-year roadmap for *"accelerated climate actions that can transform agrifood systems and help achieve food security and nutrition both today and tomorrow." (FAO, 2023)*

Framework Element 3: Scale-Up Strategies

Scale-up strategies comprise activities, processes, and pathways that enable greater reach and impact of means of implementation. In our analysis, 31 percent of documents reported statements related to expansion of activities or reach, but few (13 percent) quantitatively described these activities.

Any statements related to expansion or reach of activities

Specific mechanisms underpinning how actions would be scaled up to achieve SDG 2 were mostly functional in nature, comprising: establishing coordinating mechanisms such as dedicated committees, work programs, multistakeholder and participatory platforms (especially those operated by the UN, such as the Standing Committee on Nutrition) tasked with engaging, supporting, partnering, sharing knowledge, and providing technical assistance within national contexts; continuing to prepare evidence and technical reports; designing, implementing, and monitoring policies, laws, and regulatory measures that support SDG 2; preparing global agreements, standards, pathways, and strategies; enhancing cross-sectoral coordination within Member States; developing food systems and nutrition voluntary guidelines; conducting awareness-raising activities and health promotion programs across settings; and improving the interoperability of digital systems and data exchange across stakeholders. In addition, recognizing global inequities in SDG 2, most global meetings consistently emphasized the need for nationally relevant scale-up strategies and pathways.

Over the last few years, the UNFSS and COP27's Sharm el-Sheikh joint work group on climate action, agriculture, and food security (a progression of the 2017 joint work on agriculture) were identified across multiple global meetings as key coordinating platforms for driving national actions:

"We will engage with fellow ministers in our respective countries to ensure that food is available, accessible, affordable, safe and nutritious for all in order to realise the right to adequate food; 26. We take note with appreciation of the ongoing processes initiated by the UN Food Systems Summit and the establishment of the UN Food Systems Coordination Hub. We encourage the UN system and the ecosystem of support, including the Coalitions of Action, to prioritise, in coordination with the Hub, concrete support to countries for the implementation of their National Pathways or other transformation processes and the continuation of the National Dialogues. This should ensure a strong

Summit follow-up process towards the 2023 stocktaking."(13th Berlin Agriculture Ministers' Conference Final Communique, GFFA, 2021)

Quantitative statements related to expansion or reach of activities

There was a dearth of statements that included quantitative assessments to support their proposed scale-up strategies. When included, the quantitative statements varied considerably in their foci. For example, several of the G20 meetings identified the need to strengthen the health workforce over the next two to three years, pledged funding amounts by philanthropists and the private sector over five years, and projected the impacts of scale-up actions on the absolute number of people experiencing poverty and malnutrition.

Framework Element 4: Capacity building

Eight of the nine types of global meetings specifically mentioned the need for some form of capacity strengthening to address SDG 2. Capacity is the function of a person, community, organization, or institution's ability to sustainably support development through iterative assessment and action (Gillespie 2000; UNDP 2000). In complex adaptive systems, such as those that affect actions to address SDG 2, interconnected capacities exist across individual, organizational, operational, structural, and systems levels (Potter and Brough 2004).

Mention of need for capacity development support

In terms of commitment statements, 41 percent broadly mentioned a need to enhance capacity in efforts to scale up actions to address SDG 2. Nearly one-third (32 percent) of statements clearly articulated a purpose for capacity building, typically in terms of individuals' capacity as well as organizational, systemic, and structural capacities. We therefore report next on the purpose of capacity-building commitments across these different levels. Finally, 28 percent of commitment statements described modalities to support capacity building.

Level and purpose of capacity needed

Individual capacity

Individuals' capacity to address issues on food security and healthy diets focused on three key groups: women, youth, and farmers and producers. The UNGA, GFFA, and G7 expressed the importance of investing in young people, their entrepreneurship, and their meaningful participation in decision-making processes. Women's capacity was addressed most strongly in the UNGA, and in meetings such as the COP, GFFA, and G7. These meetings addressed building women and girls' capacity, their education in general, and their knowledge on health and sustainable diets, and addressed their needs to fight hunger. The UNGA and GFFA were more specific compared to other meetings when discussing the capacity of women, calling to increase women's digital literacy, their meaningful participation in decision-making processes, and their access to assets such as land, inputs, and services at local, regional, and global markets. Farmers' capacity was discussed in terms of their access to education, training, and extension services to strengthen capacities in food production, land and soil management, and agricultural practices. Improving farmers' digitalization skills and access to information on value chains for better market access and trade also emerged. Lastly, Indigenous communities and stakeholders were mentioned as individuals whose capacity was important to address. However, no specific information was provided on which of their capacities should be addressed.

Organizational capacity

At the organizational level, the WHA highlighted the need to increase leadership and workforce capacities by providing basic and continuous training.

Systemic or policy capacities

The most discussed type of capacity was that of national governments, regional organizations, and local communities—also known as systems capacity. Systems capacity relates to the capacity at the socioeconomic, political, legislative, and regulatory environment in which organizations and individuals operate (Shrimpton et al. 2014). It describes the working relationships, coordination, and power relations between these levels. National government capacities were the most discussed across the global events, noting that Member States required technical support to develop national plans, policies, programs, data systems, and analyses to assess SDG goals—as stated in the UNHLPF and WHA. Other meetings highlighted capacity building required to reform processes within intergovernmental bodies and to increase countries' trade capacities. Enhanced capacity of governments also pertained to facilitating multistakeholder processes and participation, as mentioned in the WHA and G7 meetings.

While government capacity was described generally, it was also often discussed in reference to least developed countries at the UNGA, COP, WHA, WTO, GFFA, and G7 meetings. For example, the G7 2017 Leader's Declaration stated: "*our goal is indeed to strengthen cooperation and dialogue with African countries and regional organizations to develop African capacity in order to better prevent, respond to and manage crises and conflicts, as regards the relevant goals of the 2030 Agenda for Sustainable Development." (G7 Taormina Leaders' Communique, 2017)*. While many declarations discussed the "*importance of international cooperation and development assistance*" in supporting Member States, especially LMICs to support their ability to address challenges related to SDG 2, one component of capacity missing in most commitment statements was the sustainability of capacity development to ensure it does not lead to dependency.

Although only mentioned at the COP, local and Indigenous knowledge and its importance in scientific and technical discussions at national and global levels were noted as an important capacity consideration for addressing SDG 2.

Structural capacity

Supply-side capacities were mentioned throughout the global declarations, including by the UNGA, UNHLPF, WTO, GFFA, and G7. These capacities create enabling environments for the production and consumption of healthy and sustainable diets at local levels—including infrastructure development, such as rural development for food security, social and economic infrastructure in rural areas, and fostering of regional and local integration of different areas. These commitments, according to the declarations, support the agriculture sector's production of food, the development of value chains including "*expanding storage, packaging, cooling, and transport capacities*," and food supply through local and global trade. Member States' "*capacity to address biodiversity loss, prevent, prepare for and respond to the emergence of diseases, including zoonotic infections and future pandemics, and combat antimicrobial resistance*" as stated at the 2022 UNHLPF was another commitment to building capacity to address challenges related to food security.

Modalities to support capacity building

Although the purpose and need for capacity development to achieve SDG 2 goals was often clear throughout the commitment statements, the modalities of implementing actions to build these capacities were typically inadequately described. The most mentioned modality of building capacity related to education, training, or information sharing. For example, regarding building systems capacities for countries, the 2015 GFFA stated: *"Promoting education and research, the transfer of bioeconomy know-how…in particular to developing countries."* Education and training was the most cited modality of increasing capacity for farmers, women, and young people at the individual level as well, but without specificity on how to achieve this. An example from the 2015 UNGA in relation to young people included: "*we commit to providing inclusive and equitable quality education at all levels—early*

childhood, primary, secondary, tertiary, technical and vocational training." For structural and supply capacities as well, the modalities for enhancing capacity lacked details.

A few examples of detailed commitment statements to scale up capacities to address food security challenges through training and knowledge sharing emerged from the COP and G20 events. COP22 "*recognized that scaling up implementation requires enhanced knowledge-sharing on best practices, access to finance, technology development and transfer, and capacity-building*." Similarly, the 2023 G20 intended to build skills by identifying gaps, developing international reference classification skills, and developing toolkits to help Member States: "*we welcome efforts to map global skill gaps and the development of the G20 policy priorities to address skill gaps globally, including through further strengthening our national statistical data, extending the coverage of the ILO and OECD Skills for Jobs Databases to G20 countries, as appropriate*."

Framework Element 5: Governance

Governance—the frameworks, institutions, processes, coordination, relationships, and integration across sectors and administrative levels, from global to local—is essential to SDG 2. Governance at the global level is complex, as countries, markets, nonstate actors, and intergovernmental institutions "*articulate collective interests on the global plane, establish rights and obligations, and mediate differences"* (Knight 2008). The analyzed global meetings acknowledged the need for multisectoral approaches and alignment with other global bodies, past declarations, or existing expert groups. Across commitment documents, horizontal coherence, which is alignment in actions and goals across different sectoral ministries, was more frequently noted as important compared to vertical coherence, which refers to coordination between national and subnational tiers of government (54 percent versus 37 percent). Moreover, 52 percent of the included documents recognized the importance of partnerships, while only 10 percent recognized the need to avoid or mitigate potential conflicts of interest.

Horizontal coherence

Commitment statements from meetings such as the UNHLPF, COP, WHA, WTO, GFFA, G20, and G7 supported addressing hunger, food security, and diet quality challenges through actions on ecosystems, environmental health, and biodiversity. Declarations also made commitments to addressing multiple social and health determinants (that is, nutrition, water, sanitation and health, noncommunicable diseases, social protection, and food security). Four meetings—the UNGA, GFFA, G20, and G7—also noted plans to align food security goals with human rights and the right to food. For example, the 2023 G20 Leader's Declaration stated:

> "*Progressive Realization of the Right to Adequate Food in the Context of National Food Security, adopted by the Council of the Food and Agriculture Organization of the United Nations in November 2004, represents a useful tool to promote the realization of the right to food for all, contribute to the achievement of food security, and thus provide an additional instrument in the attainment of internationally agreed development goals and to support national Governments in the implementation of food security and nutrition policies, programmes and legal frameworks." (G20 New Delhi Leaders' Declaration, 2023)*

The statements analyzed further aligned with the work of or past declarations from existing intergovernmental bodies and meetings—such as FAO, WHO, UNEP (United Nations Environment Programme), UNFSS, and WTO. These past declarations included the Addis Ababa Action Agenda for financing sustainable development for the 2030 Agenda, the Rome Declaration on Nutrition adopted at the Second International Conference on Nutrition (ICN2) that led to the UN Decade of Action on Nutrition, and the UNFCCC. The G20 in 2023 was especially forceful in underscoring that multilateralism needed to be "revitalized" to implement the 2030 Sustainable Development Agenda and that global governance needed to be more representative, effective, transparent, and accountable.

Beyond the rhetoric of supporting multisectoral approaches and aligning goals with the work conducted across different global declarations, bodies, and fora, few of the commitment statements expressed clarity on the means of ensuring the consistency of actions in this regard to address hunger, food security, and quality of diets. The WTO also committed to establishing a committee to *"examine how [a] decision could be made effective and operational"* pursuant to another existing agreement on agriculture. In another instance, the G7 expressed the importance of mobilizing funds and developing public-private partnerships to develop coherence in addressing infrastructure gaps and food security in least developed countries. However, other examples were scarce. One of the strongest expressions for horizontal coherence in the commitments analyzed came from the 2023 GFFA:

> "w*e highlight that policy coherence is essential to bring about transformative change. We therefore commit to better align our various policy instruments, including multilateral cooperation, bilateral agreements and autonomous measures. We will thus continue to review our policies and support programmes for agriculture and to realign them as needed, especially those currently contributing to environmental harm or distorting trade, to better address interlinkages, synergies and trade-offs between the SDGs.*" *(15th Berlin Agricultural Ministers' Conference Final Communique, GFFA, 2023)*

Vertical coherence

Vertical coherence—the clarity and consistency of communication and actions across levels from global to local—was less mentioned compared to horizontal coherence. Some of the commitments from global meetings discussed the connection between their global nature, the national actions of Member States, and the reality on the ground, especially in terms of rural infrastructure and agriculture. Engagement across these levels to promote health and sustainable local, regional, and global food supply chains was acknowledged in some of the commitments of the UNHLPF, WHA, GFFA, and G7. The commitment statements also discussed countries' responsibilities to develop their own national plans and nationally determined priority actions based on the commitments. For example, the 2015 UNGA acknowledged:

> "*the essential role of national parliaments through their enactment of legislation and adoption of budgets and their role in ensuring accountability for the effective implementation of our commitments." (Resolution 70/1. Transforming our world: the 2030 Agenda for Sustainable Development, UNGA, 2015)*

As with horizontal coherence, the GFFA provided one of the strongest statements on vertical coherence in its declarations where the connections, roles, and actions between levels was more clearly acknowledged. The Conference's 2015 declaration discussed the need to:

> "*strengthen rural areas' capabilities and self-government by establishing functioning institutions that support bottom-up and participative planning…We are well aware that, embedded within a coherent policy framework, we need to use different solutions to reach this goal, namely solutions that are adapted to regional, national and local needs, options and conditions and that take full advantage of the economic, social and eco-logical opportunities that bioeconomy offers." (7th Berlin Agriculture Ministers' Summit, GFFA Communique, 2015)*

Recognition of partnerships

The commitments analyzed widely expressed support for collaboration and partnership across global bodies, governments, civil society, the private sector, academia and women, youth, and farmers. Partnerships with Indigenous groups were less mentioned in commitments but emerged in more recent years in relation to discussions about climate change actions and adaptations. Partnerships were discussed in terms of working together to conduct policy formulation and implementation, and the implementation of actions in agriculture, health, and food security—especially in the face of climate change and future pandemics. The WHA specifically "*encourages non-State actors in official relations with WHO to*

engage with countries in the implementation of actions consistent with the global strategy and plan of action on public health, innovation and intellectual property" (75th World Health Assembly Resolutions and Decisions, WHO, 2022). The promotion of international research alliances, including with institutions such the CGIAR and IFPRI, for food and agricultural research on climate-adapted crops, seed varieties, and livestock breeds was also expressed on several occasions in global meetings.

Role of the private sector

Although some of the analyzed statements expressed that the private sector played a role in realizing commitments related to SDG 2, their specific roles or how they could partner with other actors was not well specified. The GFFA and G7 commitments went further than most other meetings. Declarations from these events specified how the private sector could play a role in enhancing investments in R&D, rural infrastructure, and food systems and food value chains. Multilateral development banks, private finance, and philanthropists were also called upon to support innovation, piloting, and prototyping of new knowledge in G7 declarations.

Acknowledgement of conflict of interest

Lastly, only four types of meetings in our sample recognized conflicts of interest and trade-offs related to SDG 2 that must be managed to enable the full operationalization and impact of the commitments being made. These convenings were the UNGA, WTO, GFFA, and G20. The statements acknowledging conflicts of interest recognized the different needs, vulnerabilities, and circumstances of Member States or countries, and that States have sovereignty over their economic activities and management of natural resources. Most of the statements on trade-offs focused on the international trade of food. Specifically, the WTO (2015) recognized trade-related trade-offs that must be managed between countries, stating "*state subsidies and state exporting entities must have minimal trade distorting effects for other state members,"* including least developed and net food-importing developing countries. There were no mentions of conflicts of interests or trade-offs to be managed regarding corporate industries or private actors' interests.

Framework Element 6: Financing Scale-Up

Most global fora broadly discussed financing of actions to address SDG 2, with inconsistent modes of financing and little detailed costing provided within and across declarations. That is, 68.5 percent of the analyzed commitment documents alluded to the importance of financing scale-up, with 52.0 percent identifying a mode of financing to support scale-up and 18.9 percent identifying specific costing for it. IFAD commitment statements were notably unique in this regard, with higher scores on average than any other meeting due to the inclusion of very specific costing estimates.

Mention of financing

Commitment statements tended to mention financing to address SDG 2 among several other elements that are required for impact. This was exemplified by the WTO, which stated: "*the importance of targeted and sustainable financial, technical, and capacity building assistance programmes to support the developing country Members, in particular (LMICs), to implement their agreements, to adjust to the reform process, and to benefit from opportunities presented." (Ministerial Conference 12 Outcome Document: Nairobi Ministerial Declaration, WTO Ministerial Conferences, 2015).*

Modes of financing

Many declarations from UN meetings involved calling for actions by multilateral development banks and financial institutions to address development challenges and debt distress, along with additional foreign direct investment and ODA by developed countries for LMICs. The WHA and G20 meetings also reaffirmed commitments made at the 2015 UNGA on the Addis Ababa Action Agenda of the Third International Conference on Financing for Development.

The UNHPF 2022 Ministerial declaration specifically reported that climate financing targets were not being achieved by developed countries. Since 2015, shifts in COP declarations occurred toward better recognition of the need to mobilize international financing mechanisms to implement actions, including Green Climate and Health Funds:

> *"Encouraged the continued involvement of constituted bodies and financing entities in the Koronivia joint work on agriculture, highlighting the potential for creating interlinkages that lead to enhanced action and improvements in implementation… Welcomes the participation of representatives of constituted bodies, the operating entities of the Financial Mechanism, the Adaptation Fund, the Special Climate Change Fund, the Least Developed Countries Fund and observer organizations in workshops under the Koronivia joint work on agriculture." (Report of the Conference of Parties on its twenty-seventh session, UNFCCC, 2022)*

The IFAD, GFFA, G20, and G7 commitments consistently conveyed several specific modes of financing. Modes included responsible public and private investment, defined through agreed-upon principles; increased coordination between Finance and Health Ministries; investment in micro, small, and medium enterprises; inclusive business financing and innovation; domestic resource mobilization; strengthened debt relief mechanisms; the role of multilateral development banks (for example, the African Development Bank); and support for financial institutions proven to help achieve SDG 2, *"particularly with respect to the poorest countries, such as the Global Agriculture and Food Security Program (GAFSP) and those provided by the International Fund for Agricultural Development (IFAD)" (GFFA, 2017)*. IFAD additionally detailed the nature of funding contributions and pathways to mobilize additional resources, for example, through borrowing and co-financing.

Costing and financial amounts

The UNHLPF, WHA, IFAD, G20, and G7 meetings provided examples of clear costing commitments to SDG 2. For example the 2022 G7 Leaders' Communique articulated: *"We commit to an additional USD 4.5 billion to protect the most vulnerable from hunger and malnutrition, amounting to a total of over USD 14 billion as our joint commitment to global food security this year."* The 2023 G7 Leaders' Communique additionally commented that: *"we have exceeded our joint commitment of $14 billion to the global food security announced at the 2022 G7 Elmau Summit, we will continue to provide assistance in the food and nutrition related sectors to vulnerable countries and regions affected by the current food security crisis, in particular in Africa and the Middle East… We reaffirm that our financial system is resilient, supported by the financial regulatory reforms implemented after the 2008 global financial crisis."* Commitment statements stemming from the IFAD council sessions predominantly focused on detailing the levels of replenishment required for the following year.

Nonetheless, few commitment statements from all global meetings included considerations of how costing and financial amounts will be obtained through new sources, for example, by repurposing existing agricultural funds.

Framework Element 7: Accountability

Monitoring, evaluation, learning, and accountability are all important to understand how information is used for learning or informing future decisions and commitments. The importance of accountability and monitoring was identified in 74 percent of the included documents. To a far lesser extent, 9 percent of commitment documents identified any noncompliance consequences and 45 percent identified actors responsible for enacting monitoring, tracking, and/or consequences.

Although all the different types of global events analyzed mentioned accountability in some form, references were often vague. It was not always clear whether accountability was intended for SDG 2 or how monitoring could be feasibly conducted. For example, modalities of tracking and monitoring commitments within the documents were often not described or consisted of "*reporting on progress."*

Member States or convening Secretariats themselves were often cited as those accountable for progress and no consequences of inaction were identified. Many statements highlighted that lack of data was a key challenge that hindered the ability of Member States to conduct monitoring and evaluation or accountability.

The lack of clarity on accountability within the analyzed commitments may be explained by the nature and conceptualization of global meetings and the SDG framework. We turn to this issue in the Discussion section.

Monitoring and tracking over time

All types of global meetings included in our analysis mentioned the need to monitor commitments being made and to report on progress. This was often stated in general for all commitments made in declarations with only a few events specifying monitoring on topics related to SDG 2 such as maternal, infant, and young child nutrition, agriculture, and soil and land management. Most of the global meetings mentioned at least one modality of monitoring progress and tracking accountability. The most mentioned modality was usually annual or biennial reports that review declarations' strategies and action plans. Some meetings (WHA, WTO, GFFA, G20, and G7) mentioned using monitoring frameworks or information systems to guide their monitoring and evaluation.

The Agricultural Market Information System (AMIS) is an example of a monitoring information system that was mentioned often in global meetings such as the WTO, GFFA, G7, and G20. AMIS was instated to monitor *"global food supplies (focusing on wheat, maize, rice and soybeans)…to coordinate policy action in times of market uncertainty"* (*AMIS, 2023*). At the 2023 G20, a commitment was made to strengthen the Group on Earth Observations Global Agricultural Monitoring (GEOGLAM). Both AMIS and GEOGLAM are mechanisms that were established by and report to the G20. Using a results-based framework was mentioned only in WHA decisions and resolutions. The results framework, developed to guide WHO programming, was first mentioned as an aspiration in 2019 and then reflected as an annual reporting tool used to track progress in statements from 2021 and 2023.

Most of the global events recognized the need for better information systems with quality data to allow for any monitoring. Multiple commitment statements acknowledged that many countries face challenges getting the data they need and setting up quality information systems or databases to collate said data. As such, several global events expressed the need to develop capacities for data availability and the ability to monitor goals. *"We commit to strengthen our national statistical capacities to address the gaps in data on the Sustainable Development Goals in order to allow countries to provide high - quality, timely, reliable, disaggregated data and statistics and to fully integrate the Sustainable Development Goals in our monitoring and reporting systems,"* states the 2023 UNHLPF.

Responsibility for monitoring

Most commitment statements identified Member States as the responsible entity for accountability and monitoring of the commitments within their countries. Over several years, the G7 reiterated this sentiment in their commitment statements: *"We remain committed to holding ourselves accountable for the promises we have made in an open and transparent way (G7, 2015)."* Very few cases exist where declarations or resolutions identified a specific entity or individual responsible for leveraging or enacting consequences on commitments. These cases usually involved the WHA, which delegated responsibility for monitoring to institutions related to the decision-making body such as the WHO, the WHO's International Agency for Research on Cancer (IARC), or the WHO's Director General. The UNGA at times identified a specific rapporteur for its resolutions and the WTO identified the Committee on Agriculture as the reviewer of declarations made in certain decisions. IFAD meetings also noted the role of the Governing Council and President in responsibly reporting on IFAD's resources.

Consequences for inaction

Notably, there was seldom any mention across global meetings of consequences for inaction. While the WTO mentioned the role of international trade law, the consequences of noncompliance with these laws were rarely identified. This may not be surprising given the institutional setup of these global fora, where members are equal but commitments risk being forgotten or sidelined by new crises and priorities.

Box 2 describes how progress on global nutrition targets has been tracked through the Global Nutrition Report, which launched the Nutrition Accountability Framework in 2021 to address the challenges associated with monitoring and accountability. However, here again, few consequences are imposed on pledging countries or organizations that do not fulfill initial pledges.

Box 2: Case of Nutrition for Growth (N4G) Commitments

The Nutrition for Growth (N4G) is a global summit with a strong focus on making pledges for actions in nutrition. N4G specifically focuses on increasing political and financial commitments that contribute to meeting the SDGs and the World Health Assembly's global nutrition targets. The event was first organized in 2013 in the United Kingdom, where over 100 stakeholders committed to decrease malnutrition and increase access to nutrition interventions for pregnant women and children. The event also saw financial commitments of over US$20 billion toward nutrition-specific and nutrition-sensitive programming. The N4G global event has reoccurred in Milan (2017) and Tokyo (2021), where governments, donors, private sector, and civil society all made additional political and financial commitments to end malnutrition. The 2021 summit also added cross-cutting themes of data-driven accountability and innovations in nutrition financing.

Similar to the UNFSS, the N4G is not a global governance platform that involves negotiations. Both events bring together governments, donors and development agencies, the private sector, and civil society and provide space for all participants to choose the commitments they are willing to make toward global challenges, specifically focusing on all SDGs, including hunger and malnutrition for the UNFSS and malnutrition in all its forms for the N4G. For example, the 2021 N4G global event galvanized a total of 396 new nutrition commitments from over 180 stakeholders and 78 countries (Tokyo Compact on N4G, 2021).

A challenge with commitments made through the N4G summit is how wide and variable the commitments can be across all the different actors, such as commitments made by countries, international development agencies, and donors, and how to track progress on these commitments. Given the wide variety of commitments, it can be difficult to clearly identify alignment of the N4G commitments with those agreed to through global governance platforms such as the WHA nutrition targets.

The Global Nutrition Report (GNR), an annual report that tracks progress on global nutrition targets, was established from commitments made during the 2013 N4G. An analysis by the GNR of 2013 and 2017 N4G commitments showed that only 36 percent of N4G goals aligned with the WHA global nutrition targets, few focused on diet-related goals, and no commitments aligned with diet-related noncommunicable disease goals (Global Nutrition Report, 2021). Most of the commitments made during these events were also not easily measurable to assess progress and accountability, except for financial commitments. Progress reporting rates were also a challenge. And lastly, no central platform exists to register, collate, and assess progress of commitments across different stakeholders.

In 2021, the GNR launched the Nutrition Accountability Framework (NAF) to address the challenges related to monitoring and accountability of N4G commitments. The NAF is termed as the "first global public platform for committing to and monitoring nutrition action, using comprehensive and transparent approached" (Global Nutrition Report, 2022). All 2021 N4G commitments, whether made by governments, donors, academic institutions, or civil society organizations, are registered in the NAF platform, which classes commitments through a nutrition action classification system. This system is intended to help identify the type of actions taken through the commitments made and identify where there may be gaps. The NAF platform also consists of a system that allows actors to develop commitments and goals that are SMART (specific, measurable, achievable, relevant, time-bound). Stakeholders are invited to self-report on progress made on their commitments annually through the NAF and the GNR reports on the progress of these commitments through the NAF Commitment Tracker.

VI. Discussion

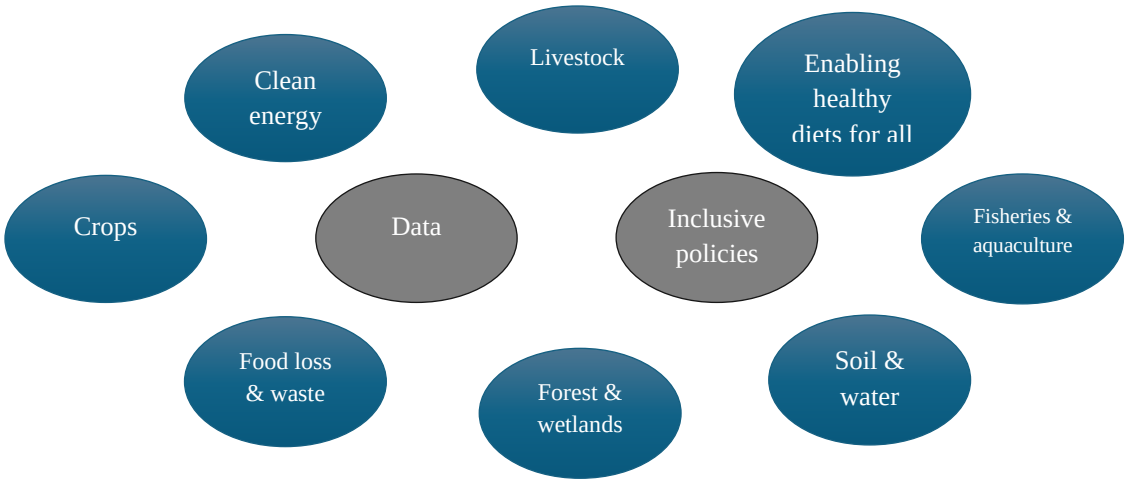
Summary of findings

Our analysis of 107 intergovernmental declarations stemming from nine global fora seeking to address hunger, food insecurity, and healthy diets since 2015 found that stated intentions to solve the global food security and hunger challenge have become more pronounced at global meetings over time, especially in the wake of diverse crises. At the same time, we find that the intent to act is not consistently matched by commitments to specific actions that could help accelerate reductions in hunger. Many commitment statements lack specificity regarding what and how policy interventions should be scaled up for greater action on SDG 2 or the ways to enhance different stakeholders' capacities to implement such interventions. While horizontal coherence was mentioned across the majority of global fora, it was only present in approximately half of the commitment statements, with even less recognition of the necessity for vertical coherence from global to local levels. Furthermore, while increased financing is often recognized as a priority to reach SDG 2, few commitments in global fora offer insight on the amount of financing needed. Despite global efforts that convey the importance of accountability and monitoring, usually by way of progress reports, we find few consequences for governments that do not act on commitments made in global fora.

On the first framework element—stating a vision and goals—we note that while visions are increasingly aligned with the SDGs, framing differences arise according to the forum and over time. This is particularly true with respect to the non-UN fora, which can be more political and reflect the preferences of host countries or members. For instance, while recent G7 events identified the Ukraine war as part of the problem for rising food insecurity, the G20 hosted by India—a rising superpower keen to avoid geopolitical antagonisms—focused more on the need to make multilateralism more representative and on restructuring financial institutions to help the most socioeconomically disadvantaged people. Importantly, there was alignment between some of the scale-up actions identified in commitment statements and the SDG 2 means of implementation, especially 2A and 2B. As Vos and Martin (2024) extensively discuss in the companion paper to this research, this offers some promise about the possibility of leveraging greater investment in agricultural technology and research to enhance productivity, reversing the negligible investments in this area for LMICs noted earlier in this paper.

Commitment statements endorsed a variety of action plans and scale-up strategies but predominantly focused on coordinating mechanisms (for example, committees) to achieve progress rather than outlining a theory of change about how scaling would practically occur. A great deal of language focuses on "strengthening" particular institutions to scale up, without explicitly noting how that strengthening will manifest. The importance of financing actions to impact SDG 2 was also regularly recognized, with a major focus on multilateral development banks, public and private financing, and foreign assistance, and a lesser focus on clear costing targets and new avenues for resource mobilization. Without knowing how much investments will cost, how much money will be allocated by different actors to those investments, or forward-thinking approaches to resource mobilization—besides reference to repurposing agricultural subsidies and climate financing—actions remain relatively theoretical. Recognizing this, the UN used COP28, which resulted in the 2023 UAE Declaration on Sustainable Agriculture, Resilient Food Systems and Climate Action that was signed by more than 150 Member States, to launch FAO's Global Roadmap for Achieving SDG without Breaching the 1.5^0C Threshold (FAO 2023). This three-year Roadmap aims to support countries to immediately act across 10 priority areas and 120 evidence-based actions (Figure 5)—with data and inclusive policies intersecting all other policy action areas.

Figure 5: 10 priority action areas with 120 suggested actions outlined in FAO's "Global Roadmap for Achieving SDG2 without Breaching the 1.5^{0}C Threshold"



Source: Adapted from FAO (2023).

On governance, recognition is growing that horizontal coherence across existing initiatives and institutions is pivotal. But details on how to ensure this coherence and how to manage trade-offs are relatively scant. Vertical coherence is almost entirely missing, not too surprising given that such convenings bring together nation-states to discuss their cross-national commitments to each other. Although there was recognition that actions on hunger, food security, and healthy diets at local levels, especially in rural settings, are important, commitments did not articulate how to translate commitments from global or national levels to local levels. Nevertheless, it is notable given that agricultural and health functions that affect food security and malnutrition are being decentralized in many countries (Resnick 2022). Commitments to limit conflicts of interest among actors in the food system were almost completely absent; again, this likely reflects that such declarations aim to enhance areas of consensus rather than discordance.

Finally, with respect to accountability, the need for monitoring over time and willingness to be held responsible for actions is visible in the commitments but varies in nature. Several fora note the way in which they will assess and revisit their commitments, including annual tracking reports. Others highlight the importance of investing in data systems to monitor progress over time. Interestingly, however, and reflecting discussions earlier in this paper, several convenings have "outsourced" responsibility for meeting commitments to international organizations. In no assessed documents did delegations articulate any consequences for inaction on promised commitments, and although the role of international law was sometimes referenced by the WTO, enforcement is weak. The dominant focus on self-regulation and voluntary accountability mechanisms is somewhat concerning, as these have been shown to negatively impact the progress of public health policies with respect to healthy diets (Sharma, Teret, and Brownell 2010; Mozaffarian et al. 2018; Kelly et al. 2019).

The lack of clarity on accountability within the analyzed commitments may also be explained by the nature and conceptualization of global governance bodies and the SDG framework itself. The SDG Agenda refers to multiple objectives that should be addressed simultaneously by Member States without a clear mechanism for implementation or coordination. Accountability for specific SDGs may, therefore, not be individually specified by different commitments made at global meetings, especially when the intention of the Agenda for Sustainable Development was to foster national leadership and flexibility in decision-making.

Conclusions and recommendations

The 2015 SDG Agenda focused on defining global goals requiring joint action—a step-change in our thinking from the previous MDG agenda, which focused predominantly on poverty reduction goals for LMICs to pursue, with commitments by high-income countries to support them through aid, debt relief, and better market access (that is, trade). As such, our analysis is limited by this conceptual shift, which has arguably made it more difficult to track the potential impact of commitments and to hold governments accountable for the SDG Agenda. Indeed, although government policy actions are national responsibilities, the specific type of policies and policy priorities will vary by SDG focus area and by country. In reality, countries face different trade-offs between objectives and without coordinated governance bodies, national governments have struggled to commit to context-specific actions and pathways. In effect, we find that many of the framework elements required to impact nutrition remain unaddressed in global SDG 2 commitments.

Many of the global meetings included in our analysis are heterogenous in nature—each with different purposes, breadths, and operating systems. The findings across meetings, therefore, should be interpreted with this understanding. For example, the GFFA is explicitly focused on agriculture with close ties to SDG 2, and therefore scores the highest against our framework (Table 3). In comparison, the IFAD Council Sessions focus on rural financing and therefore have the highest average financing scores but lack results against the remaining indicators included in our analysis. These commitments should be interpreted alongside commitments made at meetings hosted by other UN agencies.

Notwithstanding the limitations noted above, our paper offers the only in-depth analysis to our knowledge of commitment making to address SDG 2 across diverse global fora. We find that expanded attention to SDG 2 in global fora likely reflects the durability of the challenge of hunger, food security, and healthy diets over time and how these outcomes are affected by their interaction with longstanding economic and environmental trends as well as unexpected crises. At the same time, it remains concerning that even in these fora where SDG 2 has received elevated attention, major limitations persist in relation to scaling, financing, and accountability.

This type of analysis is critical to ensure the legitimacy of global governance mechanisms—such as inter-governmental meetings and summits—for addressing pressing development challenges. Our findings have implications for the policy advocacy community and researchers focused on addressing hunger and food security, and for those engaged in catalyzing and supporting intergovernmental action on other SDGs. We identify several areas for further research that will be of interest to each of these actors.

First, with monitoring of progress to end hunger, achieve food security, and achieve healthy diets being largely voluntary and country-determined, research efforts are needed to continue to efficiently monitor commitments being made to SDG 2 at global, regional, national, and local levels, in a consistent and comprehensive way. Independent and publicly available data monitoring, potentially through an interactive digital or artificial intelligence-supported dashboard, could aid in propelling actions forward across all levels and all sectors. This work can capitalize on the commitment-making and tracking momentum that has stemmed from the UNFSS (Box 1) and can draw on models used by the Nutrition for Growth (N4G) meetings (Box 2), as well as the Compliance Simulator generated by the University of Toronto to examine progress on commitments made at G20 meetings.[11] In addition, scorecards of performance by country or institution based on State commitments could galvanize public pressure to translate rhetoric into actions (Kwon et al. 2022), such as the African Agriculture Transformation

[11] See https://g20-utoronto.shinyapps.io/compliance-tool/

Scorecards of the African Union's Comprehensive African Agriculture Development Program.[12] The data generated for this paper can provide a useful starting point for such commitment tracking.

Second, at a time of growing disappointment with multilateral structures and a movement to multistakeholder, bilateral, and regional arrangements, it is critical to further advance political economy and institutional analyses of how global governance for food systems could be made more effective for addressing the SDGs. Indeed, better understanding why national governments may not uphold their commitments in the wake of these global meetings—due to changes in political administrations, lack of bureaucratic capacity to implement, or contradictions with other national policy priorities—is a critical step to determining how these global fora need to be better designed to enhance compliance.

Third, the nature of the governance/design of the fora referring to hunger, food security, and nutrition has changed over the years. In every forum, the challenge of food insecurity and unaffordable diets is increasingly recognized. However, newer approaches to multilateralism—such as the UNFSS (see Box 1) and the Nutrition 4 Growth summit (see Box 2) are relying less on consensus-based outcome statements and more on encouraging countries to embark on ambitious but tailored national pathways toward a globally agreed-upon goal or set of goals. Nationally specified transformation pathways may help to increase accountability and monitoring by assessing the progress on actions specified and agreed to by countries. National pathways articulated by national governments along with key stakeholders, including civil society, can also help to identify gaps and challenges that remain to be addressed to achieve SDG goals. Although these newer approaches have been intentional in being inclusive and including the voices of civil society, Indigenous populations, and farmer and women's groups, they have also been criticized for opening up the potential for conflicts of interest with multistakeholder processes that create openings for industry, in particular, as well as other interests (Canfield, Anderson, and McMichael 2021). In addition, diverse national transformation pathways are likely to raise different types of demands for financing and technical support and require diverse modalities to provide effective support—where needed—to LMICs. Much remains to be learned, therefore, on the relationship between the nature of forum governance and the effectiveness of commitments made at the forum.

Overall, this paper underscores that even for a well-recognized and acknowledged global challenge for humanity—hunger and food insecurity—where impactful evidence-based solutions are at hand, issues are at play that prevent the unfolding of full-scale action, both in terms delivering actions and being held accountable for them. As progress toward reducing hunger and food insecurity has stalled or reversed over the last few years, governments are increasingly (re)committing to the global SDG 2 agenda. Yet real pathways to national action, supported by effective compliance-based global and national governance models, are essential to support genuine transformation for millions of people globally who are experiencing hunger and malnutrition.

References

Anderl, F., and Hißen, M. 2023. "How Trust Is Lost: The Food Systems Summit 2021 and the Delegitimation of UN Food Governance." *European Journal of International Relations*, May. https://doi.org/10.1177/13540661231173553.

Beintema, N. 2020. ASTI in Retrospect 04: Underinvestment in Agricultural Research. Washington, DC: International Food Policy Research Institute. https://www.asti.cgiar.org/publications/asti-in-retrospect-04-underinvestment

[12] See AU launches Africa Agriculture Transformation Scorecard (AATS) – a revolutionary new tool to drive agricultural productivity and development - tralac trade law centre

Biermann, F., Kanie, N., and Kim, R. E. 2017. "Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals." *Current Opinion in Environmental Sustainability*, 26–27 (June): 26–31. https://doi.org/10.1016/j.cosust.2017.01.010.

Bondarouk, E., and Mastenbroek, E. 2018. "Reconsidering EU Compliance: Implementation performance in the field of environmental policy." *Environmental Policy and Governance*, 28(1), 15–27.

Canfield, M, Anderson, D., and McMichael, P. 2021. "UN Food Systems Summit 2021: Dismantling Democracy and Resetting Corporate Control of Food Systems." *Frontiers in Sustainable Food Systems*, Vol. 5 (April). https://www.frontiersin.org/articles/10.3389/fsufs.2021.661552

Citro, F., Cuadrado-Ballesteros, B., and Bisogno, M. 2021. Explaining budget transparency through political factors. International Review of Administrative Sciences, 87(1), 115–134. https://doi.org/10.1177/0020852319847511

CoSAI (Commission on Sustainable Agriculture Intensification). 2021. Estimating the global investment gap in research and innovation for sustainable agriculture intensification in the Global South. Washington ,DC: IFPRI and CGIAR Research Program on Water, Land and Ecosystems. https://www.iwmi.cgiar.org/archive/cosai/sites/default/files/CoSAI_Investment%20Gap%20Study/index.pdf

Devarajan, S., Gill I. S., and Karakülah, K. 2021. "Debt, Growth and Stability in Africa: Speculative Calculations and Policy Responses." *Journal of African Economies*, 30 (Supplement_1): i74–102. https://doi.org/10.1093/jae/ejab022.

Diaz-Bonilla, E., McNamara, B., Swinnen, J., and Vos, R. 2023. "Financial Imperatives to Food System Transformation." *Nature Food*, June, 1–3.

Duncan, J. 2015. *Global Food Security Governance: Civil Society Engagement in the Reform.* London, UK: Routledge. https://www.routledge.com/Global-Food-Security-Governance-Civil-society-engagement-in-the-reformed/Duncan/p/book/9781138574861.

FAO (Food and Agriculture Organization of the United Nations). 2017. The Future of Food and Agriculture—Trends and Challenges. Rome. http://www.fao.org/3/a-i6583e.pdf.

FAO. 2022. The Future of Food and Agriculture—Drivers and triggers for transformation. Rome. http://www.fao.org/3/cc0959en/cc0959en.pdf

FAO. 2023. *Achieving SDG2 without breaching the 1.5°C threshold: A global roadmap.* www.fao.org/interactive/sdg2-roadmap/en/

FAO, IFAD, UNICEF, WFP, and WHO. 2017. *The State of Food Security and Nutrition in the World 2017: Building Resilience for Peace and Food Security.* https://www.fao.org/3/I7695e/I7695e.pdf

FAO, IFAD, UNICEF, WFP, and WHO. 2023. *The State of Food Security and Nutrition in the World 2023.* Urbanization, agrifood systems transformation and healthy diets across the rural–urban continuum. https://doi.org/10.4060/cc3017en.

Federal Ministry of Food and Agriculture. Germany. 2015. GFFA Communique: 7th Berlin Agriculture Ministers' Summit 2015. The growing demand for food, raw materials and energy: opportunities for agriculture, challenges for food security. https://www.eerstekamer.nl/overig/20150203/gffa_communique_7th_berlin/document

Federal Ministry of Food and Agriculture. Federal Republic of Germany. 2017. GFFA Communique: 9th Berlin Agriculture Ministers' Conference 2017. Agriculture and Water – Key to Feeding the World. https://scalingupnutrition.org/news/agriculture-ministers-focus-water-issues-global-forum-food-and-agriculture

Federal Ministry of Food and Agriculture. Federal Republic of Germany. 2021. 13th Berlin Agriculture Ministers' Conference Final Communique: How to feed the world in the times of pandemics and climate change? https://www.bmel.de/SharedDocs/Pressemitteilungen/EN/2021/termine-gffa.html

Federal Ministry of Food and Agriculture. Federal Republic of Germany. 2023. 15th Berlin Agriculture Ministers' Conference Final Communique: Food Systems Transformation – A worldwide Response to Multiple Crises. https://www.bmel.de/SharedDocs/Downloads/EN/_International-Affairs/gffa-2023-communique-en.pdf?__blob=publicationFile&v=6

Federspiel, F., Borghi, J., and Martinez-Alvarez, M. 2022. "Growing Debt Burden in Low- and Middle-Income Countries during COVID-19 May Constrain Health Financing." *Global Health Action*, 15(1), 2072461.

FSIN (Food Security Information Network). 2023. Global Report on Food Crises. Global Network Against Food Crises and Food Security Information Network. https://www.fsinplatform.org/

G7. 2015. Leaders Declaration G7 Summit: Think Ahead. Act Together. https://sustainabledevelopment.un.org/content/documents/7320LEADERS%20STATEMENT_FINAL_CLEAN.pdf

G7. 2017. *G7 Taormina Leaders' Communique*. http://www.g7.utoronto.ca/summit/2017taormina/communique.html

G7. 2023. *G7 Hiroshima Leaders' Communique*. https://www.g7hiroshima.go.jp/en/documents/

G20. 2023. *One Earth, One Family, One Future: G20 New Delhi Leaders Declaration*. https://www.mea.gov.in/Images/CPV/G20-New-Delhi-Leaders-Declaration.pdf

Gautam, M., Laborde, D., Mamun, A., Martin, W., Piñeiro, V., and Vos, R. 2022. Repurposing Agricultural Policies and Support: Options to Transform Agriculture and Food Systems to Better Serve the Health of People, Economies, and the Planet. Technical Report. Washington D.C.: World Bank and IFPRI https://doi.org/10.1596/36875.

Gillespie, S. 2001. "Strengthening Capacity to Improve Nutrition." No. 583-2016-39617. Washington, DC: International Food Policy Research Institute.

Gillespie, S., Menon, P., and Kennedy, A.L. 2015. Scaling up impact on nutrition: what will it take? *Adv* Nutrition, 6(4), 440–51. https://www.sciencedirect.com/science/article/pii/S2161831322009048?via%3Dihub

Glauber, J., and Laborde, D. 2023. "Repurposing food and agricultural policies to deliver affordable healthy diets, sustainably and inclusively: what is at stake?" Background paper for The State of Food Security and Nutrition in the World 2022. FAO Agricultural Development Economics Working Paper 22-05. Rome, FAO. https://doi.org/10.4060/cc4348en.

Glauber, J. and Laborde, D. eds. 2023. The Russia-Ukraine conflict and global food security. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/9780896294394

Glasgow, R.E., Green, L.W., Taylor, M.V., and Stange, K.C. 2012. An evidence integration triangle for aligning science with policy and practice. Am J Prev Med, 42(6), 646–54. https://www.ajpmonline.org/article/S0749-3797(12)00142-0/fulltext

Global Nutrition Report. 2021. "The State of Global Nutrition." Bristol, UK: Development Initiatives.

Global Nutrition Report. 2022. "Stronger Commitments for Greater Action." Bristol, UK: Development Initiatives, 2022.

Headey, D., and Hirvonen, K. 2023. "Higher Food Prices Can Reduce Poverty and Stimulate Growth in Food Production." *Nature Food*, 4(8), 699–706. https://doi.org/10.1038/s43016-023-00816-8.

Headey, D., Ruel, M., 2023. Food inflation and child undernutrition in low and middle income countries. Nature Communications 14, 5761. https://doi.org/10.1038/s41467-023-41543-9

Kelly B, Vandevijvere S, Ng S, et al. 2019. Global benchmarking of children's exposure to television advertising of unhealthy foods and beverages across 22 countries. *Obesity Reviews*, 20(S2): 116–128. https://doi.org/10.1111/obr.12840

Kingdon, J. 2011. Agendas. Alternatives, and Public Policies. Boston, MA: Longman.

Knight, Andy. "The United Nations." In Encyclopedia of Violence, Peace, & Conflict (Second Edition), 2008, pages 2203-2224. https://doi.org/10.1016/B978-012373985-8.00176-8.

Kwon J, Reeve E, Mann D, Swinburn B, Sacks G. 2022. Benchmarking for accountability on obesity prevention: evaluation of the Healthy Food Environment Policy Index (Food-EPI) in Australia (2016–2020). *Public Health Nutrition*, 25(2):488–497 https://www.cambridge.org/core/journals/public-health-nutrition/article/benchmarking-for-accountability-on-obesity-prevention-evaluation-of-the-healthy-food-environment-policy-index-foodepi-in-australia-20162020/2AC4C809F820E4A039A9C9C2DD7B689A

Laborde, D., Mamun, A., Martin, W., Piñeiro, V., and Vos, R. 2021. "Agricultural subsidies and global greenhouse gas emissions." *Nature Communications*, 12 (May 10). https://doi.org/10.1038/s41467-021-22703-1.

Nutrition for Growth. 2021. "Tokyo Compact on Global Nutrition for Growth Commitments.".

Martin, W., and Minot, N. 2022. "The Impacts of Price Insulation on World Wheat Markets during the 2022 Food Price Crisis." *Australian Journal of Agricultural and Resource Economics*, 66(4), 753–74. https://doi.org/10.1111/1467-8489.12498.

Mishra, A. 2022. "Summitry as a Tool of Diplomacy: The Case of the Forum on China-Africa Cooperation." New Delhi, India: Observer Research Foundation (ORF).

Mozaffarian D, Angell S Y, Lang T, Rivera J A. 2018. Role of government policy in nutrition—barriers to and opportunities for healthier eating. *British Medical Journal*, 361 :k2426 https://www.bmj.com/content/361/bmj.k2426

Murphy, H. and A. Kellow. 2013. "Forum Shopping in Global Governance: Understanding States, Business and NGOs in Multiple Arenas." *Global Policy* 4 (2): 139–49. https://doi.org/10.1111/j.1758-5899.2012.00195.x.

Pardey, P., Chan-Kang, C. and Dehmer, S. 2014. Global food and agricultural R&D spending, 1960–2009. InSTePP Report. Saint Paul, USA, University of Minnesota.

Pauw, K., Ecker, O., Thurlow, J., and Comstock, A.R. 2023. "Measuring Changes in Diet Deprivation: New Indicators and Methods." *Food Policy*, 117 (May): 102471. https://doi.org/10.1016/j.foodpol.2023.102471.

Potter, C., and R. Brough. 2004. "Systemic Capacity Building: A Hierarchy of Needs." *Health Policy and Planning* 19, no. 5: 336–345.

Resnick, D. 2022. "Does Accountability Undermine Service Delivery? The Impact of Devolving Agriculture in Ghana." *European Journal of Development Research*, 34(2), 1003–29. https://doi.org/10.1057/s41287-021-00408-x.

Sharma, L.L., Teret, S.P., and Brownell, K.D. 2010. "The food industry and self-regulation: standards to promote success and to avoid public health failures." *American Journal of Public Health*, 100(2):240–6. https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2009.160960

Shrimpton, R., R. Hughes, E. Recine, J.B. Mason, D. Sanders, G.C. Marks, and B. Margetts. 2014. "Nutrition Capacity Development: A Practice Framework." Public Health Nutrition 17, no. 3: 682–688.

Snilstveit, B., Oliver, S., and Vojtkova, M. 2012. "Narrative Approaches to Systematic Review and Synthesis of Evidence for International Development Policy and Practice." *Journal of Development Effectiveness*, 4(3), 409–29. https://doi.org/10.1080/19439342.2012.710641.

Torero, M. 2021. "Understanding Trade-offs and Synergies SDGs 1,2, 8, 17 and Others." Lecture, Food and Agriculture Organization of the United Nations, May.

United Nations Department of Economic and Social Affairs. 2023. The Sustainable Development Goals Report 2023: Special Edition. The Sustainable Development Goals Report.

United Nations Development Programme. 2009. "The UNDP Approach to Supporting Capacity Development."

United Nations Economic and Social Council. 2022. Ministerial declaration of the high-level segment of the 2022 session of the Economic and Social Council and the 2022 high-level political forum on sustainable development. https://hlpf.un.org/2022

United Nations Economic and Social Council. 2023. Political declaration of the high-level political forum on sustainable development convened under the auspices of the General Assembly. https://hlpf.un.org/

United Nations Food Systems Coordination Hub. 2022. "Compendium of Food Systems Coalitions." 2022.

United Nations Food System Summit. "Member State Dialogues Synthesis – Report 4." 2022.

United Nations Food Systems Summit 2021b. "Secretary-General's Chair Summary and Statement of Action on the UN Food Systems Summit." UN.org, accessed January 12, 2024, https://www.un.org/en/food-systems-summit/news/making-food-systems-work-people-planet-and-prosperity.

United Nations Framework Convention on Climate Change COP22. 2016. Report of the Conference of the Parties on its twenty-second session. https://unfccc.int/event/cop-22

United Nations Framework Convention on Climate Change COP27. 2022. Report of the Conference of Parties on its twenty-seventh session. https://unfccc.int/event/cop-27

United Nations Framework Convention on Climate Change COP28. 2023. United Arab of Emirates Declaration on Sustainable Agriculture, Resilient Food Systems and Climate Action. https://www.cop28.com/en/food-and-agriculture

United Nations General Assembly. 2015. Resolution 70/154. The right to food. https://digitallibrary.un.org/record/822633/files/A_RES_70_154-EN.pdf?ln=ar

United Nations General Assembly. 2015. Resolution 70/1. Transforming our world: the 2030 Agenda for Sustainable Development. https://sdgs.un.org/2030agenda

Vos, R. and Martin, W. 2024. SDGs and Food System Challenges: Global Trends and Scenarios towards 2030. IFPRI Discussion Paper 2237. Washington, DC: International Food Policy Research Institute.

Vos, R., Martin, W., and Resnick, D. 2022. "The political economy of reforming agricultural support policies." IFPRI Discussion Paper 2163. Washington, DC: International Food Policy Research Institute. https://doi.org/10.2499/p15738coll2.136545.

Wehner, J. and P. de Renzio. 2013. "Citizens, Legislators, and Executive Disclosure: The Political Determinants of Fiscal Transparency." *World Development* 41 (January): 96–108. https://doi.org/10.1016/j.worlddev.2012.06.005.

Woods, N. 2010. "Global Governance after the Financial Crisis: A New Multilateralism or the Last Gasp of the Great Powers?" *Global Policy*, 1(1), 51–63. https://doi.org/10.1111/j.1758-5899.2009.0013.x.

World Bank, IFPRI, and FOLU. 2021. “Food Finance Architecture: Financing a Healthy, Equitable and Sustainable Food System.” World Bank, International Food Policy Research Institute, and the Food and Land Use Coalition.

World Health Organization. 2022. Seventy-Fifth World Health Assembly Resolutions and Decisions. https://apps.who.int/gb/e/e_wha75.html

World Trade Organization. 2015. Ministerial Conference 12 Outcome Document: Nairobi Ministerial Declaration. https://www.wto.org/english/thewto_e/minist_e/mc12_e/documents_e.htm

Young, O. 2017. “Conceptualization: Goal Setting as a Strategy for Earth System Governance.” In Governing through Goals: Sustainable Development Goals as Governance Innovation, edited by N. Kanie and F. Biermann. Cambridge, MA: The MIT Press.

Appendix 1—Workshop consultations to discuss findings with global and regional food, nutrition, and development policy experts

Date	Consultation	Type	Location	Types of participants
September 21, 2023	Closed roundtable hosted at The Rockefeller Foundation around UNGA 2023	In-person	New York	Global agencies, diplomats, technical experts
December 2, 2023	Open panel session at Food Pavilion at COP28, hosted by IFPRI and The Rockefeller Foundation	Hybrid	Dubai	Open to attendees at COP28
December 6, 2023	Africa regional consultation, hosted by IFPRI	Virtual with presenting team in-person	Dubai and virtual	Representatives of regional bodies in Africa, researchers
February 2, 2024	South Asia regional consultation, hosted by ORF and IFPRI in South Asia	Hybrid	Delhi and virtual	Representatives of regional bodies in South Asia, researchers and technical stakeholders working on issues of food insecurity and nutrition

ALL IFPRI DISCUSSION PAPERS

All discussion papers are available **here.**

They can be downloaded free of charge.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
www.ifpri.org

IFPRI HEADQUARTERS

1201 Eye Street, NW
Washington, DC 20005 USA
Tel.: +1-202-862-5600
Fax: +1-202-862-5606
Email: ifpri@cgiar.org