6 *Drawing the Contours of Hidden Hunger as an Object of Governance*

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Introduction

In the shifting context of global policy-making, International Organizations (IOs) have become powerful sources of expert authority and central sites for the exercise of power in global governance. While we have a clear understanding of how IOs deploy expertise, there has been relatively little effort among legal scholarship and International Relations (IR) to critically examine the processes by which such institutions produce and validate knowledge claims about governance objects and, in doing so, authorize certain solutions as the only ones "viable." This chapter examines the way in which the World Health Organization (WHO), Food and Agriculture Organization (FAO), and United Nations Children's Fund (UNICEF) acted as central vehicles in defining the contours of "hidden hunger" as a "matter of fact" – or as a medicalized and economized object of governance. It shows how this problematization largely authorized the prioritization of short-term responses and easily measurable programs such as food fortification[1] and vitamin supplementation in Global South countries. Rather than addressing the underlying socio-economic determinants of the problem, such responses acted as political analgesics providing temporarily relief. In highlighting how IOs' "ways of seeing" are connected to the practice of governing, the chapter sheds light on the everyday politics of rule-making.

This chapter examines how IO's knowledge practices *stabilize certain "ways of seeing" and acting upon global governance objects*.

[1] The term food fortification broadly refers to the addition of one or more nutrients to a food whether or not they are normally contained in the food. See M. Lawrence, *Food Fortification: The Evidence, Ethics, and Politics of Adding Nutrients to Food*, (Oxford University Press, 2013).

Looking at how IOs delineate the contours of objects allows us to move beyond "problem-solving" perspectives, according to which institutions' main role is to enable global cooperation and find solutions to global challenges.[2] The work of IOs is profoundly political. They make certain issues knowable and governable and, in doing so, define the world in such a way as to confer authority on some categories, actions, and actors rather than others.[3] This is especially patent at a time when, in order to make claims valid across jurisdictions, IOs rely on the acquisition and deployment of certain forms of expertise.

International legal scholarship has largely focused on analyzing the formalistic and institutional dimensions of objects of governance, be they climate change, pollution, or health.[4] From such perspectives, objects of governance are exogenous entities to be addressed and regulated through laws, conventions, and standards. However, adhering strictly to a formalistic and legal account of objects fails to capture how given visions and ways of acting upon gain traction at the expense of others. For that, we need a more textured examination of the socio-political processes that shape such objects. I propose to do so by analyzing how IOs define objects as "matters of fact," to draw on Latour's term, and how, in turn, this problematization narrows down the possible range of policy solutions.[5] In contrast to "matters of concern," which are marked by dispute and situatedness, matters of fact appear as ahistorical realities. Nonetheless, matters of fact are just as political as matters of concern; the distinction lies in how institutions approach them and how they are publicly perceived.

Empirically, I focus on the field of global food governance, more particularly on the case of "hidden" hunger, which has been defined and addressed by the international community as a form of undernutrition primarily stemming from vitamin and mineral deficiency. Such forms of hunger are qualified as "hidden" because there are no visible warning signs, so that individuals who suffer from it are not often aware of it. I explore how hidden hunger was problematized

[2] See Quiroga-Villamarín and Mansouri's introduction to this volume.
[3] O. J. Sending, *The Politics of Expertise: Competing for Authority in Global Governance*, (University of Michigan Press, 2015).
[4] C. Ryngaert, I. F. Dekker, R. A. Wessel, and J. Wouters, *Judicial Decisions on the Law of International Organizations*, (Oxford University Press, 2016).
[5] B. Latour, 'Why has critique run out of steam? From matters of fact to matters of concern', *Critical Inquiry*, 30/2 (2004), 225–48.

as a medicalized problem stemming from "a deficit" of nutrient consumption in Global South countries. Despite being a complex socioeconomic and political issue directly linked to factors such as access to food, inequalities, and dominant agroindustrial models, efforts to address hidden hunger have predominantly relied on what I refer to as "political palliatives," such as food fortification and vitamin supplementation.[6] The chapter mainly focuses on the work of three particular agencies, also known as the bureaucratic machinery[7] of food and agriculture: the FAO, WHO, and UNICEF.[8] While the activities of these agencies were certainly key in mobilizing resources and bringing public attention, this chapter wants to highlight the politics inherent in their knowledge-making practices and highlight that ways of seeing problems always come at the expense of marginalizing others.

The remainder of the chapter proceeds as follows: The first section of the chapter discusses different perspectives that have scrutinized the work of IOs as machineries of social and political ordering. The second section of the chapter introduces the analytical framework of the paper, namely how IOs' problematization of objects of governance as "maters of fact" restricts the range of possible solutions and political interventions. Sections three to five delve into the empirics by unpacking how WHO, UNICEF, and the FAO delineated the contours of hidden hunger in highly exclusionary ways. On the one hand, they show how, through quantification techniques, laboratory exercises, and statistical instruments, IOs assembled a body of knowledge that defined hidden hunger in medicalized and economized terms, portraying it as an indisputable matter of fact. On the other hand, the empirical sections explore how this problematization marginalized some knowledge forms while simultaneously enabling short-term forms of political action, mainly targeting individuals in the Global South.

[6] For a detailed analysis of food fortification and vitamin supplementation policies as a "magic-bullets" and "techno-fixes" see J. N. Ruxin, 'Hunger, science, and politics: FAO, WHO, and UNICEF nutrition policies 1945–1978', (University of London, 1996); A. H. Kimura, *Hidden Hunger: Gender and the Politics of Smarter Foods*, (Cornell University Press, 2013).

[7] S. Ilcan and L. Phillips, 'Making food count: expert knowledge and global technologies of government', *Canadian Review of Sociology/Revue canadienne de sociologie*, 40/4 (2003), 441–61.

[8] For a historical analysis of WHO, UNICEF, and the FAO's involvement in nutritional policies see Ruxin, 'Hunger, science, and politics: FAO, WHO, and UNICEF nutrition policies 1945–1978'.

The article relies on an in-depth case study. Through immersion in details of the case, I explore the ways in which IOs produced and validated knowledge claims about hidden hunger as an object worthy of global collective attention with consequences for legal outcomes. This was done through an extensive textual analysis of policy documents, reports, and websites from these IOs, as well as of academic publications in nutrition and health journals. I also conducted semi-structured interviews with policy makers and statisticians from the WHO, FAO, and UNICEF, as well as from civil society organizations.

IOs as Machines for Social and Political Ordering

The discipline of IR and some strands of legal scholarship have treated international institutions as "solvers" of different problems, such as international cooperation and information asymmetries, among others.[9] In an attempt to reintroduce the "social" into the analysis, sociological-oriented scholarship has questioned some of these premises by exploring the ways in which IOs do politics.[10] These accounts are highly attentive to the role of IOs in shaping intersubjective understandings. Barnett and Finnemore, for example, highlight that IOs are autonomous actors that "both regulate and constitute the world."[11] Other accounts have highlighted the different ways in which IOs, as purposeful actors, assemble or mobilize knowledge to achieve certain

[9] M. Zürn, 'Democratic governance beyond the nation-state: the EU and other international institutions', *European Journal of International Relations*, 6/2 (2000), 183–221; R. O. Keohane, *After Hegemony*, (Princeton University Press, 1984); S. Park, *International Organisations and Global Problems: Theories and Explanations*, (Cambridge University Press, 2018).

[10] J. Ferguson, *The Anti-Politics Machine: 'Development', Depoliticization and Bureaucratic Power in Lesotho*, (Cambridge University Press, 1990); F. Petiteville, 'Les organisations internationales dépolitisent-elles les relations internationales?', *Gouvernement et action publique*, 5/3 (2016), 113–29; B. Müller, *The Gloss of Harmony: The Politics of Policy Making in Multilateral Organisations*, (Pluto Press, 2013); O. Nay, 'International organisations and the production of hegemonic knowledge: how the World Bank and the OECD helped invent the fragile state concept', *Third World Quarterly*, 35/2 (2014), 210–31; M. Louis and L. Maertens, *Why International Organizations Hate Politics: Depoliticizing the World*, (Taylor & Francis, 2021).

[11] M. N. Barnett and M. Finnemore, *Rules for the World: International Organizations in Global Politics*, (Cornell University Press, 2004).

goals such as expanding their mandate into new areas,[12] enacting depoliticization,[13] or becoming policy relevant actors in a given field.[14] Approaching IOs as real fields of ethnographic inquiry, scholars have conceptualized them as circuits of power "where normative frameworks are produced and globally diffused, resources are distributed and knowledge circulated through transnational expert networks."[15] Similar claims have been made by international legal scholars, who have examined IOs' activities and workings in their contingent and historically situated dynamics.[16]

Following this research tradition, this chapter explores a concrete aspect of the politics of IOs object-making: the knowledge-making practices that they set up in order to problematize objects of governance, and thus govern them. Following Foucauldian-inspired scholarship in international law and IR, I seek to understand how certain practices and modes of treatment are attributed to problems.[17] Yet, rather than focusing on how certain issues enter the domain of "thought," I am interested in exploring how, more concretely, IOs actively participate in exclusionary processes of social and political ordering in the field of global food policy.[18]

Studying how IOs participate in object-making in the domain of global food governance is of relevance to international law scholarship in two main ways. On the one hand, food governance is

[12] A. Littoz-Monnet, 'Expert knowledge as a strategic resource: international bureaucrats and the shaping of bioethical standards', *International Studies Quarterly*, 61/3 (2017), 584–95.

[13] Louis and Maertens, *Why International Organizations Hate Politics*.

[14] S. Grek, 'Governing by numbers: The PISA "effect" in Europe', *Journal of Education Policy*, 24/1 (2009), 23–37.

[15] Müller, *The Gloss of Harmony: The Politics of Policy Making in Multilateral Organisations*.

[16] T. E. Aalberts, 'A Foucauldian approach to international law. Descriptive thoughts for normative issues', *European Journal of International Law*, 19/4 (2008), 870–75; T. Aalberts and B. Golder, 'On the uses of Foucault for international law', *Leiden Journal of International Law*, 25/3 (2012), 603–8; D. Kennedy, 'Challenging expert rule: the politics of global governance', *Sydney Law Review*, 17/1 (2005), 5–28.

[17] Aalberts, 'A Foucauldian approach to international law'; N. Rose and P. Miller, *Governing the Present: Administering Economic, Social and Personal Life*, (John Wiley & Sons, 2013).

[18] J. Uribe, 'Excluding through inclusion: managerial practices in the era of multistakeholder governance', *Review of International Political Economy*, 24/1 (2024), 1–24.

an area that is treated as an appendix of trade regimes and where there is a high deference to expert knowledge. Analysis of "technical standards" and trade negotiations tends to overshadow the politics of norm-making.[19] As a result, international legal scholarship has often taken food governance standards at face value, ignoring the knowledge that underpins them.[20] On the other hand, thinking about object-making and its links to knowledge also makes it possible to understand that that "universal" definitions of dietary standards or notions such as hunger often rest in uncertain and elusive grounds, thus indicating that expertise is a space of instability and constant challenge.

IOs' Power: Knowing and Acting upon Objects of Governance

In global governance, where there is an absence of democratic forms of legitimation, the recourse to knowledge constitutes one of the most advanced sources of authority.[21] Governing, indeed, increasingly takes place "outside the arena of legislative deliberation and democratic decision making"[22] and relies on claims to expertise rather than those of collective identity value and interest.[23] The consolidation of evidence-based modes of decision-making, for example, attests to the fact that governing increasingly rests on claims of efficiency and instrumental rationality rather than those of collective identity value and interest.[24] This broader turn towards rationalized forms of governance and, more broadly, the scientization of politics is particularly pronounced in policy-making transcending nation states.

[19] See, however, A. Saab, 'An international law approach to food regime theory', *Leiden Journal of International Law*, 31/2 (2018), 251–65; A. Orford, 'Food security, free trade, and the battle for the state', *International Law and International Relations*, 11 (2015), 1.

[20] N. D. Fortin, *Food Regulation: Law, Science, Policy, and Practice*, (John Wiley & Sons, 2022).

[21] Barnett and Finnemore, *Rules for the World: International Organizations in Global Politics*; J.-P. Voß and R. Freeman (eds.), *Knowing Governance*, (Palgrave Macmillan UK, 2016).

[22] S. Randeria, 'Glocalization of law: environmental justice, World Bank, NGOs and the cunning state in India', *Current Sociology*, 51/3–4 (2003), 305–28, 29.

[23] Voß and Freeman (eds.), *Knowing Governance*.

[24] Voß and Freeman (eds.), *Knowing Governance*.

In this context, IOs solidify their authority by depicting objects of governance as exogenous entities that are knowable and actionable.[25] Through the production of global indicators, metrics, rankings, and datasets, or by hiring bodies of experts, IOs strive to insulate themselves from partisan squabbles and processes of political contestation.[26] This often leads some IOs to simplify complex social activities into simple "scores," economized "facts," or ratings.[27] This process resonates with what Latour has termed "matters of fact," which are entities that are presented as uncontestable truths, fostering a perception of naturalness and inevitability.[28] Problematizing issues such as pollution, crime, or migration as matters of "fact," detached from their socio-economic and political determinants, indeed allows IOs to act as powerful global governors.[29]

Representing social problems as matters of fact requires significant effort. It is indeed intrinsically related to the availability of technologies, infrastructures, and different instruments, which translate the complexities of economic, social, and political contexts into a stabilized reality capable of orienting action. However, despite their aura of universality, "*matters of fact*" are just one exclusionary particular way of defining and thinking about global objects. Attempts to scientize often result in the exclusion and erasure of subjects and of those voices that do not conform to logics of instrumental rationality.

Similarly, presenting objects as matters of fact is not devoid of political implications. In the following section, I show how such a problematization narrows down the scope of possible solutions, limiting them to approaches that align with standardizable rationales and quantifiable results. Responses to matters of facts often come in the form of technical fixes that are perceived as straightforward and easily implementable. Such responses become favored due to their perceived feasibility and their capacity to demonstrate measurable impact and "results." These responses, however, act as what I refer to as powerful

[25] B. B. Allan, 'Producing the climate: states, scientists, and the constitution of global governance objects', *International Organization*, 71/1 (2017), 131–62.
[26] Barnett and Finnemore, *Rules for the World: International Organizations in Global Politics*.
[27] C. Shore and S. Wright, 'Governing by numbers: audit culture, rankings and the new world order', *Social Anthropology*, 23/1 (2015), 22–28.
[28] Latour, 'Why has critique run out of steam?'.
[29] Louis and Maertens, *Why International Organizations Hate Politics*.

"political palliatives," which provide surface-level and temporary relief, while overlooking responses that address the social, political, and economic root causes of problems.

Problematizing Hidden Hunger as a Matter of Fact: Science and Economics

I focus on the case of hidden hunger to show how different UN agencies characterized hidden hunger as a "matter of fact," portraying it as a medicalized problem of nutrient deficiencies mainly in the Global South, to be solved through programs such as adding nutrients to food or delivering vitamin capsules. In a first step, I examine how IOs produced a "cartography of nutritional deficiencies,"[30] by amassing a body of biochemical and statistical knowledge produced through quantification processes. In doing so, IOs perpetuated Global-North–Global-South asymmetries, wherein countries in Africa, South America, and Asia are characterized by their "deficiencies" and framed as in need of "correction" and assistance.[31] In a second step, I show how such problematization of hidden hunger subtly authorized technical responses and short-term forms of political action that largely neglected the root causes of the problem.

Until the 1980s, hidden hunger did not garner significant global attention. The focus of global discourse in the field was primarily on what was termed the "protein era," characterized by a widespread belief that a "protein gap" was the primary cause of malnutrition and hunger worldwide. However, by the 1970s, it became evident that the deficiency in protein was not the predominant nutritional issue globally.[32] Consequently, there was a shift in focus towards the role of "micronutrients," or tiny substances and particles such as vitamins and minerals, which started receiving increasing attention from the international community.[33]

In fact, at the time, the connection between these tiny nutrients and health was primarily the subject of scientific and academic inquiry.

[30] J. L. Barona, *From Hunger to Malnutrition: The Political Economy of Scientific Knowledge in Europe, 1818–1960*, (Peter Lang, 2012).
[31] Kimura, *Hidden Hunger*.
[32] D. McLaren, 'The great protein fiasco', *The Lancet*, 304/7872 (1974), 93–96.
[33] R. D. Semba, 'The rise and fall of protein malnutrition in global health', *Annals of Nutrition and Metabolism*, 69/2 (2016), 79–88.

During this era, studies conducted on a national scale began to unveil the extent of "hidden hunger," its clinical manifestations and its ramifications for health.[34] However, in 1986, a publication by Alfred Sommer of an article on Vitamin A in the *Lancet* played a pivotal role in elevating what was considered solely a "health" issue into a matter of greater social and political significance. Sommer's study not only confirmed Vitamin A's role in severe clinical conditions, as previously documented, but also highlighted its correlation with elevated childhood mortality rates.[35]

Given the relevant and potential social implications of the topic, various UN agencies convened major international conferences to advance the understanding of the impacts of nutritional deficiencies and elevate political conversations. As early as in 1974, Sommer was invited to a WHO-sponsored meeting in Indonesia to discuss his work on Vitamin A. He was also in charge of writing the 1995 WHO report on Vitamin A deficiency and its consequences, and of chairing different scientific advisory committees at the WHO and UNICEF.[36]

The 1990 Summit of Children took the issue very seriously and promised the virtual elimination of Vitamin A deficiency by the year 2000.[37] After the summit, several conferences and summits were held. One significant event was the Conference on Ending Hidden Hunger in 1991, held in Montreal. The primary objective of this conference was to garner "political support at the highest level for ending hidden hunger."[38] A similar acknowledgment took place one year later, in 1992, at the first FAO/WHO International Conference on Nutrition

[34] N. Kretchmer, J. L. Beard, and S. Carlson, 'The role of nutrition in the development of normal cognition', *The American Journal of Clinical Nutrition*, 63/6 (1996), 997S–1001S.

[35] A. Sommer, E. Djunaedi, A. A. Loeden, I. Tarwotjo, K. West, R. Tilden, and L. Mele, 'Impact of vitamin A supplementation on childhood mortality: a randomised controlled community trial', *The Lancet*, 327/8491 (1986), 1169–73.

[36] A. Sommer, *Vitamin A Deficiency and Its Consequences: A field Guide to Detection and Control*, (WHO, 1995).

[37] N. Dalmiya and W. Schultink, 'Combating hidden hunger: the role of international agencies', *Food and Nutrition Bulletin*, 24/4_suppl_1 (2003), S69–77.

[38] E. Messer, 'Conference report: ending hidden hunger – a policy conference on micronutrient malnutrition', *Food and Nutrition Bulletin*, 14/1 (1992), 1–3.

in Rome, where it was recognized that hidden hunger was a "matter of major public health concern."[39]

However, much more than a shift in discourse, the construction of hidden hunger as an object of governance entailed the deployment of tools, instruments, and technologies to make it actionable. In the context of increasing awareness and interest, IOs started to produce and assemble a significant body of knowledge that served to delineate the object as an incontrovertible scientific fact. "Accurate" knowledge of the vitamin content of foods, food consumption at the household level, and anthropometric indicators of nutritional deficiencies were fundamental in that regard.[40]

At the time, the WHO expressed concerns about the incommensurability of hidden hunger. The UN agency pointed to a "lack of consistency" of existing nutrition standards, in particular due to a lack of homogenization of "methods of analysis and presentation of survey results."[41] Up until that point, nutrition surveys often employed diverse methods, reporting systems, and reference values.[42] A similar issue of incommensurability existed regarding food consumption data, which is also crucial for making the object of hidden hunger actionable. As pointed out in a WHO Bulletin: "data on global patterns of dietary habits, as well as differences by population characteristics are not well established."[43] Such discrepancies and lack of homogeneity in measures and methods was largely seen by IOs as an obstacle to validating knowledge about hidden hunger across jurisdictions.

In response to the perceived lack of uniformization, IOs undertook different activities to universalize standards on diets and food intake. In 1949, the FAO/WHO Expert Committee on Nutrition was established

[39] WHO and FAO, *International Conference on Nutrition: Final Report of the Conference*, (1992).

[40] Barona, *From Hunger to Malnutrition*.

[41] M. De Onis and M. Blössner, 'The World Health Organization global database on child growth and malnutrition: methodology and applications', *International Journal of Epidemiology*, 32/4 (2003), 518–26, 519.

[42] WHO, '*WHO Global Database on Child Growth and Malnutrition 2022*', (2022).

[43] S. Khatibzadeh, M. Saheb Kashaf, R. Micha, S. Fahimi, P. Shi, I. Elmadfa, S. Kalantarian, P. Wirojratana, M. Ezzati, J. Powles, and D. Mozaffarian, 'A global database of food and nutrient consumption', *Bulletin of the World Health Organization*, 94/12 (2016), 931–34.

to set references for nutritional politics and health standards.[44] Although the committee was set up to provide technical advice to FAO/WHO secretariat, it also played a key role in insulating these two UN agencies from the politics of their member countries. From the very beginning the Joint Expert Committee expressed its wish to introduce an international codex of analytical methods that would assist scientists to ensure the generation of "uniform and comparable" data regarding the vitamin content of foods and diets.[45] Nowadays, the overarching framework governing FAO/WHO stipulates that all experts chosen must demonstrate impartiality and objectivity in their assessment.[46] Furthermore, a core tenet guiding joint WHO/FAO expert committees on nutrition is the principle of "neutrality," with their guidance mandated to be grounded solely in scientific evidence.[47]

During the same period, the WHO launched efforts to assemble a Global Database on Child Growth and Malnutrition with the aim of collecting, standardizing, and sharing child anthropometric data (indicators typically pertain to individuals' height and weight). The FAO also launched its Global Database on Food Consumption to standardize the number and proportion of people in each country who consume "insufficient" dietary energy.[48] Although FAO had been publishing "World Food Surveys" and "Food Balance Sheets," there was a need to further "strengthen micronutrient surveillance capabilities and activities by devising indicators to monitor strategies for achieving national goals related to coverage, compliance and effectiveness in targeted populations."[49] Among the efforts to quantify food consumption and nutrient intake was UNICEF's Multiple Indicator Cluster Surveys (MICS), a set of surveys that provided "internationally comparable and statistical data" compiled in more than 200 indicators on children and women.[50] According to UNICEF, MICS has become

[44] Barona, *From Hunger to Malnutrition*.
[45] Barona, *From Hunger to Malnutrition*.
[46] FAO and WHO, *FAO/WHO Framework for the Provision of Scientific Advice on Food Safety and Nutrition*, (2007), 15.
[47] FAO, 'FAO global database on food consumption', (2022).
[48] FAO, 'FAO global database on food consumption'.
[49] WHO and FAO, *International Conference on Nutrition: Final Report of the Conference*.
[50] D. Rose, B. Luckett, and A. Mundorf, 'Diet Matters: Approaches and Indicators to Assess the Role of Agriculture in Nutrition', ICN2 Second International Conference in Nutrition, Rome PTM-ICN2, (FAO and WHO, 2013).

the "largest source of statistically sound and international comparable data on children and women worldwide."[51] By standardizing data collection, providing internationally comparable statistics, and strengthening surveillance capabilities to monitor strategies aimed at addressing malnutrition and dietary deficiencies globally, these initiatives were crucial in problematizing hidden hunger as something detached from specific social contexts.

Efforts to delineate hidden hunger as a matter of fact also involved the deployment of a wide array of technologies as well as the provision of training assistance, particularly in laboratory capacity to measure the recommended indicators.[52] In order to collect biochemical data on nutritional deficiencies, infrastructures such as laboratories that allow for the storage of specimens were essential. Similarly, the availability of instruments such as rapid test kits, used during face-to-face interviews in different household surveys, were key for "testing" the bioavailability and food composition.[53] Additionally, analyzing vitamins in bodily fluids was another assessment method, which employed a spectrum of physical, chemical, and biological testing techniques to evaluate foodstuffs and ascertain their physiological effects and nutritional value of foods as sources of vitamins for human consumption.[54]

A final aspect that contributed to consolidating hidden hunger as a matter of fact involved its redefinition as a measurable economic concern. The link between economic competitiveness and hidden hunger was operated through the publication of studies that highlighted the impacts of hidden hunger on cognitive functioning, work capacity, and productivity, largely echoing dominant assumptions about development at the time.[55] For micronutrient malnutrition to be quantified

[51] UNICEF, 'About MICS', (2022).
[52] D. J. Alnwick, 'Combating micronutrient deficiencies: problems and perspectives', *Proceedings of the Nutrition Society*, 57/1 (1998), 137–47.
[53] FAO, 'Dietary assessment: a resource guide to method selection and application in low resource settings', (2018).
[54] Barona, *From Hunger to Malnutrition*.
[55] S. Brooks, *Rice Biofortification: Lessons for Global Science and Development*, (Earthscan, 2010); R. Martorell, 'The nature of child malnutrition and its long-term implications', *Food and Nutrition Bulletin*, 20/3 (1999), 288–92; Z. A. Bhutta, R. A. Salam, and J. K. Das, 'Meeting the challenges of micronutrient malnutrition in the developing world', *British Medical Bulletin*, 106/1 (2013), 7–17; J. Bagriansky, N. Champa, K. Pak, S. Whitney, and

in economic terms, it needed to be turned into indicators that could be specified numerically. The most tangible exemplification of this "economized" definition of hidden hunger is known as the WHO disability-adjusted life year (DALY).[56] DALY is a time-based statistical measure that combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health, or years of healthy life lost due to disability.[57] The study identified malnutrition as "the risk factor responsible for the greatest loss of DALYs."[58]

Through the use of datasets, surveys, and numerical tools, IOs problematized hidden hunger in scientized and economized terms, or as an indisputable "matter of fact," that could be known through objective and universally applicable markers that could travel beyond nation states. Backed by estimates of validity and reliability, hidden hunger appeared thus as an objective reality.[59]

Omissions and Erasures

Problematizing hidden hunger as an exogenous object to be measured and apprehended through quantification is far from being a neutral exercise. As any "universalizing" attempt, it comes with its own erasures. A statistician working for UNICEF highlighted the significant challenges associated with collecting data on hidden hunger, especially in countries located in Africa, Asia, and certain parts of Latin America.[60] Due to the lack of available national surveys in these regions, statisticians tasked with modeling the data make inferences about these regions based on data from neighboring countries where such information is accessible. This is necessary to generate "reliable global estimates" that transcend national borders, despite the fact that

A. Laillou, 'The economic consequences of malnutrition in Cambodia, more than 400 million US dollar lost annually', *Asia Pacific Journal of Clinical Nutrition*, 23/4 (2014), 524–31.

[56] C. J. Murray and A. D. Lopez, 'Global mortality, disability, and the contribution of risk factors: Global Burden of Disease Study', *The Lancet*, 349/9063 (1997), 1436–42.

[57] 'Disability-adjusted life years (DALYs)', (2024).

[58] Murray and Lopez, 'Global mortality, disability, and the contribution of risk factors', 1440.

[59] Ilcan and Phillips, 'Making food count'.

[60] Interview with UNICEF statistician, November 2021.

data from Global South regions is excluded. On some other occasions, the problem does not come from the lack of data but from what IO staff refer to as "bad quality data" that countries, mainly from the Global South, provide to the IOs' secretariats.[61] As the UNICEF statistician added, in such scenarios, this data cannot be included in the statistical models as it does not fit the criteria for quality.[62] This statement shows that the numbers and data aggregated, mainly from the Global North, thus become the authoritative account of "the food problem" and of what the Global South "lacks." A peasant from a grassroots organization in Mexico also pointed out:

> They [international organizations] tell us that they are going to solve the problem of food and that we no longer need to think about what we are going to eat. I think the opposite: We need to think about what we want to eat and how to defend ourselves from what they want to impose on us. And it seems to me that this perpetuates this vision, about some "incapable" countries in which we must intervene, in Latin America, in Africa, in Asia, because in their countries these problems are supposedly solved. But then I tell them: you also created the idea that *you* have to help us and that it is only you who can "help" us.[63]

Additionally, defining hidden hunger as a matter of fact always entails drawing a sharp boundary between those with the capacity to diagnose, evaluate, and solve deficiencies and those who are the target of interventions. This echoes what Grotluschen and Buddeberg call "southering" – which means defining Global South countries in terms of what they lack while exposing them to a pronounced deficit perspective.[64] Within the dominant approach to hidden hunger people credentialed as experts such as IO staff and statisticians – and not the women who are responsible for feeding families or those who suffer from hunger – are the ones who "know" the problem and hence can prescribe solutions for the malnourished.[65] This narrow conception also evades a social view of hunger and malnutrition that would

[61] Ibid. [62] Ibid.
[63] Interview with member of a grassroots organization, September 2021.
[64] A. Grotlüschen and K. Buddeberg, 'PIAAC and the South: is southering the new othering? Global expansion of dominant discourses on adult literacy', *European Journal for Research on the Education and Learning of Adults*, 11/2 (2020), 167–81.
[65] Kimura, *Hidden Hunger*.

include macroeconomic and political issues of poverty, inequality, and marginality. For decades, agroecology movements, peasants, and grassroots organizations have emphasized the connections between industrial food production methods and the increasing levels of hunger worldwide.[66] While some of the most prominent multilateral institutions at the global level recognize the importance of such perspectives, they have largely remained at the margins.[67]

Therefore, addressing hidden hunger through a scientific account of "missing" nutrients evades a social view.[68] Hidden hunger, understood a matter of fact, de-roots food not only from its cultural richness and its sensual and practical dimensions but also from the broader contexts in which it is produced.[69]

Acting upon Hidden Hunger: Political Palliatives?

Nowadays hunger (including hidden hunger) is treated as a scientific matter, mainly concerned with diet quality and objectively measurable nutrient/caloric intake, a paradigm that historians have also referred to as "nutritionism".[70] When hunger is predominantly addressed by focusing on the nutrient content of food, only certain "magic bullet" solutions become viable.[71] Although there is a widespread consensus that acknowledges that interventions focusing on "food systems" could be long-term solutions to hidden hunger, those seems to have received the least attention in the past decades.[72] The rationale behind these asymmetries often stems from an argument about knowledge,

[66] J. Clapp, *Food*, (John Wiley & Sons, 2020); N. McKeon, *Food Security Governance: Empowering Communities, Regulating Corporations*, (Routledge, 2014); S. Prato and N. Bullard, 'Re-embedding Nutrition in Society, Nature and Politics', *Development*, 57/2 (2014), 129–34.

[67] M. Fakhri, H. Elver, and O. De Schutter, 'The UN Food Systems Summit: how not to respond to the urgency of reform', Inter Press Service (2021).

[68] Kimura, *Hidden Hunger*.

[69] G. Scrinis, 'On the ideology of nutritionism', *Gastronomica*, 8/1 (2008), 39–48.

[70] Scrinis, 'On the ideology of nutritionism'.

[71] Ruxin, 'Hunger, Science, and Politics: FAO, WHO, and UNICEF nutrition policies 1945–1978'.

[72] J. L. Villar, *Tackling Hidden Hunger: Putting Diet Diversification at the Centre*, (Third World Network, 2015). A. Littoz-Monnet and J. Uribe, 'Methods regimes in global health governance: the politics of evidence-making in global health', *International Political Sociology*, 2/17 (2023), 1–22.

attributing the marginalization of socio-economic interventions to the purported "lack" of data or evidence.[73]

Currently, food fortification or vitamin supplementation are the most celebrated way of addressing hidden hunger, despite the fact that many other longer-term strategies are also available.[74] For example, the World Bank has, in many iterations, emphasized the potential of food fortification, stating that "no other technology offers as large an opportunity to improve lives at such low cost and in such a short time."[75] Other influential actors of the global food and nutrition community, such as the Consultative Group for Agricultural Research and its "Micronutrients Project," have echoed the sentiment that such interventions are efficient as they have the advantage of treating "the symptoms rather than the underlying causes of micronutrient deficiencies."[76] Biofortification as a solution to the problem of hidden hunger, therefore, allows the international community to address malnutrition without having to completely rethink the real roots causes of hunger.

Over the past decades, IOs have undertaken numerous projects based on fortifying food with isolated nutrients. Under the "Brighter Futures" initiative, a program funded by the Gates Foundation, UNICEF has conducted large-scale fortification projects in several countries.[77] Similarly, the WHO has also provided extensive guidance to countries on the use of micronutrient powders, which are single-dose packets containing multiple vitamins and minerals that can be sprinkled onto semi-solid food. Such powders have been promoted as a "proven" strategy to combat this form of undernutrition.[78]

[73] M. T. Ruel and H. Alderman, 'Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition?', *The Lancet*, 382/9891 (2013), 536–51.

[74] R. Horton, 'Maternal and child undernutrition: an urgent opportunity', *The Lancet*, 371/9608 (2008), 179; Kimura, *Hidden Hunger*.

[75] The World Bank, *Enriching Lives: Overcoming Vitamin and Mineral Malnutrition in Developing Countries*, (1994).

[76] R. D. Graham, R. M. Welch, and H. E. Bouis, 'Addressing micronutrient malnutrition through enhancing the nutritional quality of staple foods: principles, perspectives and knowledge gaps', *Advances in Agronomy*, 70 (2001), 77–142.

[77] UNICEF, *Brighter Futures: Protecting Early Brain Development through Salt Iodization*, (2018).

[78] WHO, *WHO Guideline: Use of Multiple Micronutrient Powders for Point-of-Use Fortification of Foods Consumed by Infants and Young Children Aged 6–23 Months and Children Aged 2–12 Years*, (2016).

Other organizations working in close partnerships with IOs have also been established to conduct large-scale fortification programs in several countries. One of such initiative is the Micronutrient Initiative (later renamed Nutrition International), which since its inception in the 1992 Montreal Hidden Hunger summit has emphasized the provision of market-based interventions through the delivery of isolated nutrients such as vitamins and minerals.[79] According to its website, the organization works to "deliver the greatest nutrition impact at the lowest cost."[80] In 2008, Nutrition International supported the WHO Department of Nutrition for Health and Development in enhancing its capacity to provide "evidence-based" nutrition interventions.[81] For that purpose, Nutrition International facilitated the meetings of the WHO's Nutrition Guidance Expert Advisory Group and its activities related to fortification.[82] Similarly, Nutrition International was part of the "core group" that significantly influenced the policy-making process that resulted in the publication of one of the most important WHO/FAO fortification guidelines.[83]

While some of these programs have been key to addressing hunger and malnutrition, scholars argue that "top-down nutrient-specific" interventions alone do not "solve" the problem of hidden hunger, as they claim.[84] Some researchers have found that food fortification programs often tend to overestimate the magnitude of the problem in Global South countries. When such programs are implemented by IOs on a large scale, they also tend to ignore the eco-social specificities of countries as well as the socio-economic determinants of hunger and malnutrition.[85] In Colombia, for example, micronutrient powder supplementation was not the most adequate way of tackling

[79] Nutrition International, *Nutrition International Strategy 2018–2024*, (2018).
[80] Nutrition International, 'We make a difference because nutrition is the difference', (2023).
[81] WHO, 'First meeting of the WHO nutrition guidance expert advisory group (NUGAG)', (2010).
[82] WHO, 'First meeting of the WHO nutrition guidance expert advisory group (NUGAG)'.
[83] M. Lawrence, *Food Fortification: The Evidence, Ethics, and Politics of Adding Nutrients to Food*, (Oxford University Press, 2013).
[84] Lawrence, *Food fortification*.
[85] R. Priya, A. Kotwal, and I. Qadeer, 'Toward an ecosocial epidemiological approach to goiter and other iodine deficiency disorders: a case study of India's technocratic program for universal iodization of salt', *International Journal of Health Services*, 39/2 (2009), 343–62.

hidden hunger.[86] Another challenge is that, because fortified foods are more costly, they may be beyond the reach of people who are at the greatest risk of deficiencies and, instead, tend to most benefit the people who need them least.[87]

Despite the acknowledgment in recent years that food fortification and supplementation fail to address the root causes of hunger, the international community continues to portray them as some of the only "evidence-based" solutions. This was the case during the 2021 United Nations Foods Systems Summit, where "scaling up" biofortified crops was heralded as a "game-changing solution." The summit emphasized that, in order to deploy large-scale fortification programs, "market forces will be harnessed and leveraged" to ensure the success of this "cost-effective" intervention mostly in Africa, Asia, and Latin America.

The tendency to understand nutrition as a medical problem mainly stemming from a lack of nutrients consumption has several implications. On the one hand, when food is mainly seen as a chemical compound, it can easily be treated as a commodity that is sold and consumed, a frame that has largely served the commercial interests of industries based in Global North countries, which market food as a commodity delivering health promises.[88] At the global level, the agro-industrial and pharmaceutical complex have indeed largely benefited from this narrow meaning attributed to hunger and have used nutritional "deficits" as a goldmine offering ample market opportunities.[89]

More generally, such a reductive problematization of hidden hunger, and food in general, puts increasing pressure on individuals to take charge of their health.[90] Several programs are now being conducted in countries like Kenya, Ethiopia, or Bangladesh to address hidden hunger and malnutrition in children through the selling of

[86] A. Andrew, O. Attanasio, E. Fitzsimons, and M. Rubio-Codina, 'Why is multiple micronutrient powder ineffective at reducing anaemia among 12–24 month olds in Colombia? Evidence from a randomised controlled trial', *SSM-population Health*, 2 (2016), 95–104.

[87] M. Nestle, *Food Politics*, (University of California Press, 2013), 201.

[88] D. Stuckler and M. Nestle, 'Big food, food systems, and global health', *PLoS Medicine*, 9/6 (2012), e1001242.

[89] Prato and Bullard, 'Re-embedding Nutrition in Society, Nature and Politics'.

[90] M. Durocher, 'Biomedicalized food culture: a critical analysis at the intersection of "healthy" food, bodies and health', *Critical Dietetics*, 5/1 (2020), 23–33.

"Sprinkles," a manufactured package of micronutrients delivered through markets.[91] When hunger is construed as an individual concern, with all attention directed towards the consumer phase of the issue, the responsibility for "solving" it falls upon individuals. Through the purchase of nutrient-enriched food, or vitamins, individuals are tasked with bearing the responsibility of addressing unprecedented levels of global hunger.

Conclusion

In this chapter, I explored the ways in which different UN agencies, the WHO, the FAO, and UNICEF have problematized hidden hunger as an indisputable "matter of fact." By assembling a significant body of biochemical knowledge about malnutrition these institutions gave the object an aura of naturalness and objectivity. On the one hand, through data aggregation, surveys, and technologies, hidden hunger was defined as a problem stemming from a "deficit" in nutrient consumption in Global South countries. On the other hand, hidden hunger was defined by UN agencies in a highly economized way, placing emphasis on its measurable impact on economic competitiveness and the productivity of nations.

However, akin to any universalizing endeavor, this way of approaching hunger was not only exclusionary but also restricted the spectrum of possible responses and policy options. The chapter elucidated how the dominant problematization of hidden hunger as a problem of missing nutrients has largely authorized and validated short-term political actions, such as food fortification and vitamin supplementation. These responses functioned more as political palliatives than as transformative solutions addressing the root causes of hunger such as inequality, trade regimes, lack of access, environmental degradation, and industrial agriculture.

This chapter has highlighted that the ways in which IOs know and address problems is therefore never functional. Producing knowledge about a given issue and stressing how to "best" approach it is always

[91] R. Holla and L. Menon, 'Philanthrocapitalism and corporate social responsibility: do they really empower civil society?', in P. Maiti (ed.), *Corporate Social Responsibility: Critiques, Policies and Strategies*, (Sharada Publishing House, 2010).

an exclusionary practice that prioritizes certain voices at the expense of others. This brings a subtle but profound change in the ways in which we think about IOs' daily work and their power to shape governance practices. As this chapter has emphasized, it is by studying knowledge-making processes behind global problems that one can better understand who has authority to govern and why, and how boundaries and hierarchies are established, maintained, and potentially transformed.