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Mainstreaming Nutrition in National Policy Agendas: Successes, Challenges, and Emergent Opportunities

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Building momentum to scale up nutrition

Asma Lateef, David Beckmann, David Nabarro, Meera Shekar, Anna Taylor and Gill Walt

Just over a year ago, more than a hundred entities, from national governments, the United Nations, civil society organizations, bilateral development agencies, the World Bank, academia, foundations and the private sector NGOs and academic institutions endorsed *A Framework for Action to Scale Up Nutrition (SUN)* [1]. The Framework was the result of the work of a multi-stake holder group that worked intensively between 2009–2010. The Framework, which was published in this journal last year, highlighted the unsatisfactory progress towards the first Millennium Development Goal, specifically the hunger and malnutrition target. It noted the lost opportunity to make progress, given the renewed focus on food and nutrition security and the 2007–2008 global food price crisis. It cited evidence on the long-term and irreversible impact of undernutrition both in terms of infant and child mortality and for children who survive early childhood malnutrition. Most importantly, it emphasized the availability of evidence-based, cost-effective interventions to address undernutrition, and it provided estimates of what it will cost to scale up these interventions.

The collaborative process that began in 2009 with the development of the *Framework* is evolving into a movement that is both stimulated and reinforced by political interest in nutrition among leaders of national governments and development partners alike. The G8 Tokayo statement in 2008 followed by the L'Aquila Joint Statement on Global Food Security in 2009 emphasized the importance of improving nutrition as part of efforts to tackle food insecurity. In July 2010, nutrition was recognized as essential to improving maternal and child health in the G8 Summit's Muskoka Initiative on Maternal and Child Health, and dialogue is continuing on the need to keep nutrition as a strong focus for the 2011 G20 dialogue currently underway.

The SUN process itself was designed as a strategic tool for change in the global nutrition system (**figure 1**). It is based on a series of technical reports [2–4] followed by a careful estimate of what it will cost to scale up in the highest-burden countries [5]. This strong technical grounding provided the base for seeking wider social and political support for the agenda, and the agenda has now transformed into a movement that is making the space for mainstreaming nutrition as part of a wider global development agenda. The papers included in this special issue of the *Food and Nutrition Bulletin*, based as they are on a systematic study of country accomplishments, challenges and strategies for advancing nutrition agendas, provide some timely guidance for the implementation of these unprecedented global initiatives at country level.

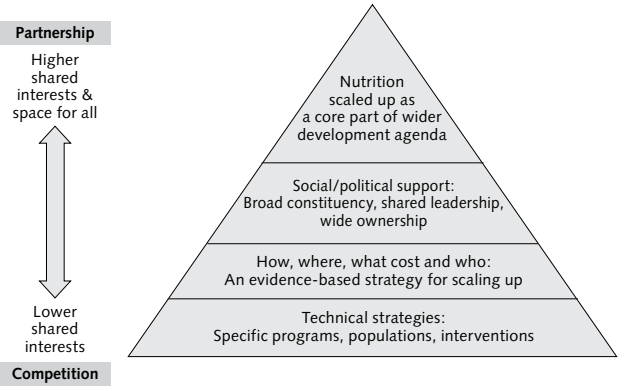

FIG. 1. The SUN development process: a strategic tool for unifying, enlarging and engaging wider interest in nutrition from multiple sectors

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In a further development, in 2010, the *Road Map for Scaling up Nutrition* [6] was produced by a multistakeholder group, under the coordination of the UN Special Representative on Food Security and Nutrition. It translates the Framework for Action into a succinct set of principles and direction for increased support for countries as they scale up efforts to tackle undernutrition across a range of sectors. The Road Map anticipates that there will be (a) multistakeholder platforms within countries participating in the effort to Scale Up Nutrition, and that they will become increasingly important as a means to ensure joint efforts and a shared responsibility for results, (b) improved sharing of experiences between countries and regions, (c) joint action by different stakeholders to encourage advocacy, (d) a major effort to stimulate relevant research, (e) harmonized policy guidance, (f) better support for monitoring of progress, (g) better-aligned assistance from development partners, (h) stronger governance and coordination of intergovernmental action, (i) support for individuals as they become leaders for nutrition and, vitally, (j) a long-term commitment by national governments.

The Road Map was launched during the United Nations Summit on the Millennium Development Goals on September 21, 2010 in New York. U.S. Secretary of State Hillary Rodham Clinton and then Irish Foreign Minister Micheál Martin launched the "1,000 Days: Change a Life, Change the Future Call to Action" to draw attention to the irreversible impact of maternal and child undernutrition during the 1,000 day critical window of opportunity, from pregnancy to the age of 2. It emphasized the priority actions and interventions needed to scale up nutrition over the next 1,000 days. This is a time-bound, results-oriented effort to implement the SUN Road Map.

These key documents also have been released at the IFPRI conference in New Delhi on Leveraging Agriculture for Improving Nutrition and Health in February 2011; and at the upcoming G8 Summit in France. These events and others planned in the future are raising awareness, understanding and political momentum at the global level. In addition, the growing interest in Scaling Up Nutrition on the part of developing countries was evident during side events at the IFPRI Conference. The commitment to scale up nutrition and a willingness to coordinate efforts has been further affirmed at a series of donor meetings since September 2010, in the form of a Joint Donor Statement [7].

In 2011 the Road Map is being translated into action with a view to helping countries affected by undernutrition achieve long-term reduction in under-nutrition and realize the first Millennium Development Goal. At least 18 "early riser" countries have already indicated their intentions to scale up nutrition. Groups of stakeholders are being encouraged to provide support in a coordinated way—working together to support country-led actions. The support effort is being guided by six inter-linked "Task Forces" under the stewardship of a "Transition Team." In each country, one or two donors are being requested to coordinate actions at country level to reduce transaction costs for countries, in line with the Paris and Accra principles for aid-effectiveness, and to provide coordinated support to these "early riser" countries. The aim is to start demonstrating impact in these countries within three years.

These actions are promising. Tight budgetary times in donor countries and for national governments call for a broad set of voices and actors speaking up about the urgency and importance of scaling up nutrition interventions, especially in the first 1,000 days. To this end, in June 2011, Bread for the World and Concern Worldwide will host a meeting to organize a voice for civil society in order to maintain and build on the political momentum. It will highlight the progress made nine months after the launch of the 1,000 Days Call to Action and the SUN Roadmap, as well as some of the challenges to realizing scaled-up efforts and proposed solutions. The meeting will help develop a common assessment of progress to date in scaling up nutrition at the country-level. This includes the work of the SUN Transition Team and Task Forces as well as the plans being drawn up in the "early riser" countries. It will help sustain political commitment and energy to address the issue of maternal and child malnutrition, bolster and reinvigorate champions of this issue and helping recruit new champions. The meeting will also help develop a shared advocacy agenda and strategy for the planned follow up at the UN General Assembly and the G20 Summit, including a focus on financing to mobilize the additional resources needed to scale up nutrition, estimated at about $10 billion annually.

Improving the international response to undernutrition, however, is not sufficient for reducing the global burden of undernutrition. It has to be followed by practical action and high-level political commitment at the country level which delivers demonstrable results. The series of case studies and analysis of institutional, organizational and resource challenges and policy solutions that follow in this special supplement of the *Food and Nutrition Bulletin* provide a body of evidence and knowledge that will be very useful as SUN is operationalized at country-level. The deliberate focus on decision-making processes and strategies in specific settings is particularly useful in demonstrating the need for attention on implementation. Putting policy into practice is often wrongly perceived to be simple and resolved with clear policy and good technical interventions. These case studies show how deceptive such thinking is, and how important context is to political processes. The papers offer important lessons for what needs to be done for effective practice in nutrition at country level. They also underline the need for research that takes a contextualized policy analysis approach

and focuses on the processes that facilitate or impede implementation.

More specifically, while underscoring the importance of country ownership and multistakeholder platforms already proposed in the SUN Road Map, these papers highlight the need to strengthen in-country strategic capacity for the collaborative leadership and management of these platforms; the need to integrate evidence-based interventions with sociopolitical and implementation realities when defining national strategies; the need to build deep and broad system commitment for nutrition as distinct from transient political attention; and the need for all actors in the national nutrition system to prioritize the long-term interests of the national nutrition agenda over particular sectoral or organizational interests. These papers demonstrate that some countries have made progress in these areas, but much more remains to be done, and all of these requirements fit comfortably within the principles embodied in the SUN Framework and Road Map.

In short, the international nutrition community has accumulated extensive evidence concerning the burden, consequences and effective interventions related to undernutrition; countries and their partners have acquired extensive knowledge and experience concerning the management of multistakeholder platforms and the capacities needed for scaling up; and global momentum is building for a renewed effort to translate these assets into large-scale improvements in the nutrition of high-burden countries. The coming years will be crucial for expanding and sustaining the commitment, the capacities, and the coordination for these efforts to succeed. There are important roles in this process for each of the readers of the *Food and Nutrition Bulletin*.

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Global nutrition: What should change?

Alexander Müller and Denise C. Coitinho

Commentary

On 14 December 2010, low- and middle-income country representatives convened by the United Nations System Standing Committee on Nutrition (UNSCN) met to share their experiences and insights on efforts, challenges, and opportunities to scale up nutrition effectively. Representatives from the governments of Brazil, China, India, Lao PDR, Mozambique, Nepal, Tanzania, and Uganda discussed processes and challenges for sustaining high-level political commitment, for institutional strengthening, for building country leadership and management capacity, and for creating multistakeholder platforms at the country level. They proposed how best the global players could support in-country efforts.

These discussions are not new, but they were energized by the current momentum built by the Scaling Up Nutrition (SUN) Framework and Road Map and facilitated by David Pelletier and the findings of the Mainstreaming Nutrition Initiative, presented in this Supplement [1–6].

The government representatives agreed on several basic elements that need to be put in place urgently to enable countries to scale up their efforts in implementing specific nutrition interventions and making development policies nutrition-sensitive.

Refreshingly, country representatives with their wealth of experience in hands-on nutrition programming brought up new important issues, adding to the usual call for the global players to speak in one voice and to provide additional financial resources.

Very encouraging elements mentioned included the following:

- There is an urgent need for new and innovative approaches for strategic capacity development, especially in the fields of leadership, management, monitoring, and accountability. Country representatives urged the international assistance community to move beyond training in their capacity-building programs and efforts and to support active learning and learning-by-doing processes. Equally important was found to be institutional capacity development and the capitalization of local cultural, social, and political resources.
- There is a need to put in place mechanisms to interconnect countries in a global platform or forum with clear established objectives and outcomes, bringing together nutrition actors with government representatives at its core. Referred to by several participants as one effective mechanism for developing capacities through empowering country players, such a forum was considered essential to ensure a space where national nutrition managers could engage in supranational issues.
- Informal arrangements were considered by all as not enough. The country representatives agreed that a legal and binding framework is required for nutrition, with a clearly defined institutional home for multisectoral coordination and programming at the country level. Many good examples were mentioned. Without a national structure at the appropriate level, the government representatives felt that the whole national nutrition system was less sustainable and implementation from the national to the community level would be weakened. They also identified some key structural gaps that need strengthening, such as the effective use of information for decision-making, and highlighted that such a forum could help in achieving that.
- The country representatives called for the global community to practice what it preaches and also to set up groundbreaking and long-lasting global governance mechanisms for nutrition that are inclusive and bring together multiple stakeholders.

One of the most important consensus points among

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the country representatives was that the approach is important. A good process was felt to be more likely to generate good outcomes. Remarkably, the country representatives called for truly participatory national as well as global processes, with adequate information-sharing mechanisms and able to build relationships in order to generate buy-in. They also highlighted the importance of investing significant time in building trust so that processes to tackle key problems and set priorities would be more robust and generate better results. Once again, the country representatives called for innovative ways to develop endogenous capacities able to generate the right skill set for the in-country managers responsible for moving country processes. Finally, they requested that the global community brainstorm with them on how best to engage the business sector in in-country efforts to improve nutrition, under the leadership of governments, and to achieve convergence of interests while managing conflicts of interest, either real or perceived.

In full alignment with what the government representatives said, this series of papers brings to light some key themes that need to be urgently tackled if nutrition is to be seriously scaled up. Menon et al. [5] highlight the crucial importance of including the sociopolitical domain, which is often neglected, in addition to the traditional epidemiologic and operational domains in strategic approaches to support countries scaling up nutrition. The REACH progress report shows that a neutral facilitator seemed to have helped to improve governance and management mechanisms in Mauritania and Lao PDR [6]. Pelletier et al. [1] identified structural factors that shape the nutrition agenda and the strategic actions on the part of the mid-level actors that can influence them.

Overall, the country experiences brilliantly documented and analyzed by Hoey and Pelletier [2, 3] and Hill et al. [4] through the Mainstreaming Nutrition Initiative (MNI) show that multistakeholder platforms often have not been able to translate political windows of opportunity into coherent national nutrition strategies and operational plans, partially due to the inability of key stakeholders to agree on priority problems, interventions, delivery mechanisms, roles and responsibilities, and leadership. According to the MNI, this is a reflection of the weak strategic, managerial, and technical capacities on the ground. The authors of the articles in this Supplement call for the strengthening of strategic capacities at the national level to deal with these issues more effectively, in addition to the usual focus on strengthening technical and delivery capacities. Again, this is very much in line with the perceptions and requests for assistance of the government representatives convened in Rome on 14 December. Finally, the Supplement articles highlight the importance of the process by which stakeholders are engaged. The authors concluded that the process is indeed crucial for fostering country consensus, country ownership, and long-term commitment to the resultant agenda. The country representatives strongly endorsed this conclusion.

What will be the game changer to achieve the new nutrition agenda?

Despite the solid and knowledgeable way in which country representatives articulated needs for accelerating action in nutrition, the very relevant insights on how to address such needs presented in this Supplement and elsewhere, and the encouraging new developments in global nutrition with the rapid rise of the SUN movement, delivering results will demand some important changes in global nutrition to shape up a new era of partnership, power-sharing, and equality.

A real and sustainable movement for scaling up nutrition should nurture and be nurtured by a broad-based multilateral partnership that has low-income and middle-income countries at its core and brings together key nutrition stakeholders—donors, civil society, private sector, UN agencies, and academia—as partners working in alignment and entirely focusing on supporting national priorities and strategies. This partnership needs to be inclusive and offer a welcoming space to all of those wanting to participate. It should be results-focused and fully recognize the cross-cutting nature of nutrition, adopting a multisectoral approach. Moreover, mechanisms need to be put in place to hold partners accountable for delivering on their responsibilities effectively. Such new partnership can be the game changer.

During the initial stages of SUN (2008-10), the mobilization of global stakeholders around a common cause and goal was given priority and loose arrangements among players that have initiated it and are behind it (among which the UNSCN Chair and Secretariat are proudly counted in) predominated. However, the SUN movement needs to expand beyond this "transition phase" with a clearer and sustainable anchor and facilitate an inclusive multistakeholder platform globally, as proposed in the SUN Road Map itself, as one of the first steps for effective progress at the country level. We are hopeful that this will happen before mid-2011.

It is important to admit that part of the problem, and possibly its solution, rests in the UNSCN itself. Mandated by the United Nations Economic and Social Council (ECOSOC) to be "a point of convergence in harmonizing nutrition policies and activities and providing initiative in the development and harmonization of concepts, policies, strategies and programmes in response to nutritional needs of countries" [7], UNSCN has gradually lost its capacity to perform this function and is undergoing a substantial reform process. Key nutrition stakeholders, especially government

representatives, have been called for a frank and open debate on whether UNSCN should be revitalized and, if so, how to revitalize it.

The answer has been strongly positive, and senior executives of four UN agencies—the World Health Organization (WHO), the World Food Programme (WFP), UNICEF, and the Food and Agriculture Organization (FAO)—responsible for providing over 85% of the core budget of UNSCN have established the "Group of Four," which has been working on the reform. They are looking at ways to assure that a new governance structure of UNSCN will not only strengthen UN coordination in nutrition but also promote a broader dialogue and partnership with other key stakeholders and constituencies.

Never during the last decades has nutrition been so high on the political agenda. It is a moral imperative that the global nutrition community build on this momentum to support countries to drastically reduce undernutrition among the most vulnerable while also addressing new challenges, such as the impact of climate change on nutrition, obesity, and diet-related chronic diseases. The challenge of political commitment, however, is how to sustain it and translate it into accountability.

Will the current momentum for nutrition flourish or is it likely to become yet another example of a step in the right direction but not big and bold enough to be sustainable? Will it deliver or be followed by failed promises? Will the global nutrition community members be able to hold each other accountable for collective achievements and results this time around?

In conclusion, the global nutrition community needs to be united now to move forward in several complementary work streams: focusing on strengthening the existing in-country capacities and the skills needed to strategically lead and manage all the areas required to the scaling up of nutrition actions; establish and facilitate effective multistakeholder platforms under government leadership; and standing behind a reformed governance arrangement for global nutrition able to set up a broad-based and inclusive partnership to deliver support to meet countries' expectations.

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The nutrition policy process: The role of strategic capacity in advancing national nutrition agendas

David L. Pelletier, Purnima Menon, Tien Ngo, Edward A. Frongillo, and Dominic Frongillo

Abstract

Undernutrition is the single largest contributor to the burden of disease in developing countries and has documented effects on social and economic development, yet progress in reducing undernutrition remains slow. This paper identifies the range of factors that have influenced the nutrition agenda in developing countries, in order to inform the implementation of three major global initiatives related to undernutrition. Data sources include interviews with nutrition practitioners at the national and international level, written accounts from six African countries, and observations of the policy process in five countries. Data were thematically coded to identify recurrent factors that facilitated or inhibited progress in addressing undernutrition. The data reveal the following: First, societal conditions and catalytic events pose a variety of challenges and opportunities to enlarge and shape the nutrition agenda. Some countries have been successful in using such opportunities, while others have been less successful and there have been some unintended consequences. Second, disagreements over interventions and strategies are an almost universal feature of the nutrition policy process, occur primarily among mid-level actors rather than among politicians or senior administrators, and are primarily the product of structural factors such as organizational mandates, interests, and differences in professional perspectives. Third, many of these structural factors can be molded, aligned, and/or circumvented through strategic action on the part of the mid-level actors to strengthen movement on the nutrition agenda. This evidence that strategic action can redirect and/or overcome the effects of structural factors has important implications for future efforts to advance the nutrition agenda.

Key words: Agenda-setting, disagreements, nutrition policy, policy formulation, strategic capacity

Introduction

Undernutrition is the single largest contributor to the global burden of disease, accounting for 10% of disability-adjusted life-years (DALYs) lost in the general population and 35% among children under 5 years of age [1]. This is roughly two to four times greater than the global burden due to pneumonia, HIV/AIDS, diarrhea, malaria, and tuberculosis in the general population (i.e., people of all ages) [2]. In addition to its pronounced effects on morbidity and mortality, undernutrition has documented effects on cognitive development, educational outcomes, work capacity, and gross domestic product [3]. The full implementation of proven, direct interventions could reduce the mortality and disability due to undernutrition by about 25% [4]. In a global review of solutions to the world's most pressing problems (the Copenhagen Consensus), nutrition interventions occupied five of the top nine actions available to the global community [5]. Despite this evidence, progress in reducing undernutrition remains slow, and financing from the international community has not been on a par with that seen for other global health problems [3, 6].

In contrast to the past, there now are three major global initiatives being planned, all of which include attention to nutrition: the Obama administration's Global Health Initiative [7], the Global Food Security Initiative [8], and a Global Nutrition Action Plan [9]. These initiatives are unprecedented in terms of their scale and potential impact on nutrition, and all three of them signal the intention to foster country ownership

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and broad stakeholder engagement in policy development and implementation. This emphasis on country ownership and broad stakeholder engagement is consistent with the principles articulated in the Paris Declaration [10].

The interest in implementing these principles is an encouraging development, given the fragmentation of effort and disharmony that has been seen in the past [11], but to date there has been relatively little integrative analysis of the political and institutional dynamics associated with the development of nutrition policy in developing countries. Most of the prior work dates from the 1970s and 1980s and consists of descriptive case studies, expert-based recommendations for nutrition policies and programs, and analysis of the reasons for the failure of multisectoral nutrition planning [12–16]. Most of these earlier reports did not employ an explicit framework of the policy process, and they refer to conditions quite different from today, with donors, international nongovernmental organizations (NGOs), and civil society playing a much greater role today than previously [17].

The purpose of this paper is to identify the range of factors that have influenced the nutrition policy process in developing countries in more recent decades and draw lessons from these experiences to guide the implementation of the three global initiatives described above. The ultimate goal is to understand how countries and their external partners might be most effective in advancing the nutrition agenda, which, in this context, refers to generating the level and type of attention and resources needed to sustainably improve the nutritional status of populations, using the UNICEF conceptual framework as a guide [18]. The present study focuses on broad themes emerging from a cross-country analysis, while a series of companion papers provides a more detailed analysis in three countries [19–21].

Methods

Study design and conceptual frameworks

The present study uses grounded theory methods to identify recurrent features of the nutrition policy process across multiple cases [22]. Grounded theory is a qualitative research method that seeks to identify key concepts and/or their causal relations based on accounts of a phenomenon, using a potentially diverse range of interviews, documents, participant observations, and sources of data and insight. The method does not apply a priori formal theories to the collection and interpretation of data, a process that tends to overprescribe what is sought. Rather, data collection and interpretation are guided by a more general conceptual framework and the constant search for new concepts or recurrent dynamics in the data.

The general conceptual framework used in this study is based on the policy sciences [23]. That framework encompasses the full range of decision-related processes involved in policy (i.e., research, analysis, advocacy, policy choices, implementation, evaluation, and termination), a finite set of social processes that, in various combinations, influence each of these decision processes (i.e., participants, perspectives, interests, situations, strategies, assets/resources, and the outcomes and effects of these interactions), and a consideration of the broader trends and conditions within the country. The ways in which these social processes affect the decision processes are highly contextual and must be understood in those terms. The framework provides a stable but generic set of concepts and categories to guide the collection and interpretation of data in these diverse contexts. A major advantage of the framework is to ensure that a broad lens is applied to the policy process, as opposed to focusing exclusively on one phase (e.g., agenda-setting) or on the political dynamics (e.g., actor interests and strategies) to the neglect of broader conditions and events (e.g., political regime change, drought, economic crisis). Thus, the present paper attends to a wide range of factors that affect agenda-setting, in keeping with prior work policy [24–27]. But it also attends to the somewhat distinct social, contextual, and institutional dynamics that influence all phases of the policy process.

Data sources and methods

This paper draws on data from several sources. Interviews were conducted, mostly by telephone, with nutrition practitioners at the national level in Ethiopia, Senegal, Uganda, the Philippines, Thailand, and Vietnam. These countries were chosen because of prior knowledge that nutrition had received significant attention. Interviews were also conducted with practitioners and researchers working at the international level (the World Bank, UNICEF, the Pan American Health Organization, the Academy for Educational Development, the International Food Policy Research Institute, Helen Keller International, the Institute for Nutrition and Food Technology [INTA, Chile], and the Institute for Nutrition Research [IIN, Peru]). These practitioners were chosen because they were known to have extensive country experience and were accessible. Written accounts of the nutrition policy process in six African countries (Benin, Burkina Faso, Kenya, Mali, Mauritania, and Tanzania) were developed during a week-long workshop with country practitioners. These are the countries that chose to attend the workshop. Prolonged engagement and observations of the policy process in five countries (Bangladesh, Bolivia, Guatemala, Peru, and Vietnam), which also were chosen because of prior knowledge that significant nutrition activity was taking

place, were conducted as part of the Mainstreaming Nutrition Initiative (MNI) [28]. In addition, other countries referenced in the interviews are Malawi, Madagascar, Uganda, Guatemala, Haiti, and Peru.

Accounts of the nutrition policy process were elicited by three methods. In one method, 18 respondents from 12 countries were asked to provide a general timeline of key events in the national nutrition agenda in recent decades, followed by a more detailed reflection on the roles and interactions of specific actors and institutions in some of these key events. In the second method, six respondents from donors or NGOs were asked to comment on the basis of their country experiences on the types of institutional, political, and other issues that arise when deciding on interventions and delivery mechanisms in national nutrition policy-making. In the third method, nationals from six African countries collaborated at a workshop with nutrition staff from an international agency to develop written accounts of how the nutrition agenda has developed in recent decades and the factors responsible for the changes in focus, commitment, and performance over time.

The data from a sample of these sources were examined by the first author (D.P.) to identify a provisional set of themes, with eight broad themes emerging: beginnings and expansion, informal structures and processes, formal structures and processes, donor roles and behaviors, nutritionists' behaviors, points of contention, societal conditions, and strategies and tactics. The full range of sources were then coded in greater detail by a coauthor (D.F.) using these eight themes. The passages pertaining to each theme were then aggregated and reviewed in detail by the first author (D.P.) and coauthors (E.A.F., P.M., T.N.). This final process led to the five major themes presented in this paper.

The trustworthiness of the findings in this study is enhanced through the use of multiple data sources (the three sources described above, combined with the participant observations from the five observed countries), deep immersion in the text, iterative coding, and categorization, the involvement of two coders and several coauthors at different stages in the process, and the use of a small number of thematic categories (five) for organizing the findings. It is recognized a priori that the policy process is highly contextual, complex, and contingent [23, 29–31], so that the causal relations or relative importance of factors within and among thematic categories cannot be specified in advance or generalized to all cases. Thus, the methods used in this study are chosen for the express purpose of identifying recurrent themes across a range of cases, complemented by more in-depth investigations in particular countries [19–21].

This research was approved by Cornell University's Institutional Review Board. Oral consent for interviews was obtained from all research participants.

Results

The five major themes in the nutrition policy process identified in the coded data were societal conditions, catalytic events, points of contention, structural factors, and strategies, and tactics (**tables 1** and **2**).

Societal conditions and catalytic events

These two themes represent factors that have created opportunities and challenges to the national nutrition agenda and are discussed together because they have similar effects on the policy process. Societal conditions refer to events and processes that tend to persist for many years and affect many aspects of the development agenda in a country, with direct or indirect effects on the nutrition agenda. Catalytic events typically are shorter in duration, are more closely related to the nutrition agenda itself, and sometimes are created by actors in the national nutrition system in the normal course of nutrition research, testing interventions, piloting or implementing nutrition programs, responding to crises, and conducting policy dialogue. Societal conditions and catalytic events have posed opportunities for advancing the nutrition agenda by focusing attention on conditions closely related to food security and nutrition (e.g., drought in Tanzania, Ethiopia, and Kenya; basic needs development and primary healthcare in Thailand; social inclusion in Bolivia and Guatemala); by creating a larger policy discourse within which nutrition can be strategically framed by nutrition actors (e.g., currency devaluation in Senegal, results-based budgeting in Peru); by creating political opportunities for advancing the nutrition agenda (e.g., the election of President Evo Morales in Bolivia and President Alan Garcia in Peru); and by creating venues for policy discussions where nutrition actors can seek a seat at the table and position nutrition within the larger policy issues of the day (e.g., discussions of Millennium Development Goals [MDGs] in many countries; the HIV pandemic in Kenya, Uganda, and Malawi). The catalytic events have the advantage of being more closely related to nutrition (e.g., famine in Ethiopia, national nutrition survey in Thailand), are more readily created or influenced by nutrition actors (e.g., publicizing a model community-based program in Thailand, attendance of policy makers at the International Conference on Nutrition in 1992, re-estimating malnutrition prevalence based on international standards in Vietnam), and have been used successfully in many countries to advance the nutrition agenda, but they may not command the same level or duration of attention as the broader factors included under societal conditions.

Catalyzing a focus on food

Whereas societal conditions and catalytic events both have presented opportunities for the nutrition agenda, the country experiences also reveal they sometimes have created serious challenges. The most common example is when a drought, complex emergency, economic downturn, war, right-to-food movement, or other event stimulates food distribution by the government and/or its partners as part of its response. In many cases, this has led to the institutionalization of food distribution (often encouraged by food aid donors and NGOs), the delegation of responsibility for nutrition to a Ministry of Agriculture rather than the Ministry of Health or the Prime Minister's Office, and/or the reinforcement of the tendency for policy makers to associate malnutrition with lack of food. All of these outcomes tend to orient the nutrition policy agenda toward food distribution, food access, and agriculture. This can be useful for enhancing food and economic security in countries with food-insecure and/or agriculturally based populations, but often it has made it difficult to create a more balanced agenda that also addresses the care, feeding, and health status of infants and young children (**box 1**). Such dynamics have been evident in Bolivia, Chile, Guatemala, Mexico, Peru, Senegal, Tanzania, Ethiopia, Vietnam, and many other countries not included in this study.

The current Prime Minister's and politicians' priority is distributing food so that they can be re-elected. Technically we think it is irrelevant and do not follow that strategy. Yet, they do not see it as effective to train women in behavior change communications. (Country nutrition coordinator)

BOX 1. The food bias in nutrition policy

The tendency to conflate malnutrition with lack of food is one of the most common and persistent features of the nutrition policy process [3, 32]. In recognition of this and other misconceptions about the nature of malnutrition, in 1991 UNICEF promoted a unifying conceptual framework that stressed the importance of household food security, health services and a healthy environment, and the proper care and feeding of young children as the three underlying causal factors [18]. The framework stressed that each of these is necessary for optimal child growth and nutrition but that no one of them is sufficient by itself. The framework has been widely cited and embraced in principle but typically not put into practice because of persistent differences in organizational, sectoral, and disciplinary perspectives and interests [33, 34]. The frequency with which societal conditions and catalytic events were seen to trigger food-related responses in the present study is further evidence for the persistence of these biases.

Every time, the country tried to put a feeding program into project documents and we had to erase it. (Donor agency).

This distinction between nutrition and food security is not always made and…is actually quite important when you are planning these institutional bodies. So it [nutrition] was assigned to the Ministry of Agriculture primarily because of the food security elements of improved nutrition. (International researcher and consultant to countries)

Other ways in which societal conditions and catalytic events have affected the nutrition agenda are by narrowing the nutrition agenda through the international community's focus on micronutrients (e.g., Tanzania, the Philippines, Burkina Faso), the erosion of support for successful nutrition programs due to health sector reform (e.g., the Iringa model in Tanzania), struggles over the institutional home for nutrition due to party politics (e.g., Senegal, Peru, Ethiopia), or simply the neglect of nutrition due to more pressing priorities. The catalytic events, which are more under the control of the nutrition community, appear more able to foster a balanced approach to nutrition policy, although the reported narrowing of the nutrition agenda onto micronutrients in several countries illustrates that these also can introduce biases of their own:

And so with their efforts, the micronutrient policy and programs were rapidly put in place and protein–calorie undernutrition kind of got swept under the rug, even if our National Nutrition Service continued to show that underweight was still a problem and that there was mostly energy deficiency still existing in our children and in our pregnant and lactating women. But those things were overshadowed by the flurry of activities and attention given to micronutrients.

Points of contention

One of the most prominent themes in these data relates to disagreements over strategies and interventions, complicated by politics among the actors. Such points of contention were evident in virtually all 20 countries in this study. They can arise over the entire range of potential interventions and strategies, depending on which are under consideration in a given country (**table 1**).

A striking feature of these disagreements is that they take place primarily within and among mid-level actors in the national nutrition system, rather than among politicians or at high administrative levels. They occur in countries with high levels as well as low levels of political commitment to nutrition, in countries with very high burdens of malnutrition and with relatively low burdens, and over interventions

that have been judged to be "right actions" as well as "wrong actions" by international experts evaluating the available evidence. The language used in the data sources clearly indicates that these disagreements are fundamentally about divergent institutional perspectives and interests rather than scientific debates based on effectiveness, cost-effectiveness, sustainability, or other considerations.

The big question now is, will the remaining nutrition actors be able to overcome their sectoral fears, consolidate their interests, and have enough voice left to be heard during the Poverty Reduction Strategy Credit discussions in order to get nutrition back on the agenda? (Government nutrition actor)

The donors and NGOs basically could not get their act together because they were all arguing for their own special interests or their own view of how things ought to be handled for nutrition. (International researcher and consultant to countries)

The NGOs are playing a very critical role now. They are, themselves, at odds with one another in many respects, and that makes the situation a little more confusing. That's true for [all three countries]. But in fact they are the only "virtual" government that is effective. (International NGO)

As noted also in relation to societal conditions and catalytic events (above), the role of food insecurity, food distribution, and food-based approaches is a theme in many of these disagreements. Disagreements about the distribution of food supplements were noted in 14 of the 26 interviews.

Structural factors

As in the earlier period of multisectoral nutrition planning, a major challenge has been to secure effective institutional arrangements for promoting and coordinating a multisectoral approach to nutrition (**table 1**):

Multisectoral committee? It is fragmented. It was in the strategy that the Ministry of Health should have the implementation role and be coordinated by the prime minister. However, the prime minister does not have a coordinating power or mandate to coordinate the ministries. (Country nutrition actor)

There is no doubt that nutrition action has experienced growing support and attention from the Ministry of Health and its external partners.... The original idea behind the creation of [a nutrition structure in the Ministry of Health] was to strengthen the multisectoral management of nutrition. In reality, by sitting in the Ministry of Health, it has no authority over and beyond the health sector. Yet, there is a need for an institution like this, which coordinates the multisectoral dimensions of nutrition and promotes nutrition on the national agenda over and beyond the health sector. (Country nutrition actor)

I have observed in other countries that I work with... that they also have a nutrition council, but it didn't work. But I believe that in (my country) at that time, I think this National Nutrition Committee, at the beginning, was very helpful. But it's not just because of the committee. But it's because of the individual.... The reason it worked well before is that there were good individuals in there and also there was a lot happening" (University professor in developing country).

More so than in previous decades, however, these coordination problems are further complicated by the decentralization taking place in most countries:

The lack of a centralized government that spent the whole time saying they were going to decentralize, but it never happens. Then you will see the local level with very little resources in financial and even human resources, and in contrast with the central level that always is spending a lot of money in, you know, ambulances and things that are more related to the political purpose. (International agency in-country)

Strategies and tactics

One of the most insightful and valuable themes to emerge from these data relates to the wide variety of strategies and tactics used by various nutrition actors to address, overcome, or circumvent the many obstacles and complications described in the first four themes. These tend to cluster in three overlapping categories (**table 2**). Molding and adapting to institutions refers primarily to strategies used to deal with the structural factors described above; planning and agenda formation refers to strategies used specifically to seek agreement on a common agenda; and leadership and strategic capacity refers to some personal, interpersonal, and tactical considerations involved in forming and advancing the agenda. Although the boundaries between these subthemes are quite fuzzy, they begin to reveal a body of craft knowledge with considerable practical utility.

The following quotes illustrate some strategies used to form agreement on a common agenda despite the existence of structural barriers, institutional interests, and points of contention:

[In both countries] we managed to get donors to agree and have the government lead that coordination.... We used that, to say to government OK you want a program, that is fine, but we want to have a consensus about approaches among donors, you have to have a policy and plan, so work on that. This implies the donors, over time, were willing. There was a lot of choosing and discussion. (Donor agency)

TABLE 1. Major themes in the nutrition policy process[a]

Societal conditions (long wavelength)	Catalytic events (short wavelength)	Points of contention (turbulence)	Structural factors (obstacles and channeling factors)
Natural crises War, civil unrest Economic downturns Sector reforms Structural adjustment Political restructuring and transitions, socialist periods Social movements Decentralization International trade transitions Oil/gas/mining transitions Poverty focus in national policy Polio outbreak, HIV pandemic Party struggles over nutrition programs International micronutrient focus, regional salt iodization initiatives Right-to-food movements Results-based budgeting Prevailing narratives on food security and nutrition in the international arena	Food-related crises Complex emergencies Nutrition surveys Small-scale demonstrations and intervention studies Positive experiences with salt iodization or vitamin A supplementation Windows via sector reform or policy dialogues National or international summits or conferences Visits by high-profile external actors Nutrition in the MDGs *Lancet* series launch and advocacy	Relative importance of and technical disagreements on: broad-based food distribution programs, targeted supplementary feeding programs, food security and agriculture, vitamin A and micronutrient supplements, food-based approaches, fortification, displacement of protein–energy malnutrition by micronutrient focus, growth-monitoring and promotion programs, multisectoral focus, nutrition in antipoverty programs, vertical vs. integrated delivery, recuperative feeding, RUTF, children under two, children under five, school-feeding programs, maternal nutrition, private sector involvement, food distribution in HIV programs Shifting focus to chronic disease, relevance of international norms and evidence-based recommendations in local contexts, mistrust of donor and NGO motives, agendas and tactics Leadership, coordination, and credit-claiming disputes at national and subnational levels	Institutional landscape at national level, including: designated lead institutions, coordinating institutions, and implementing institutions (e.g., Prime Minister's Office, Multisectoral Nutrition Coordinating Committee, and Ministries of Planning, Health, Agriculture, Women and Development, Economics and Finance) Divergent perspectives, interests, and power relations within and among the government actors, donors, and NGOs Fragmented, short-term, and shifting donor funding and action agendas Difficulty for government to align donor agendas Lack of credibility of nutrition sections in government Insular tendencies or narrow perspectives of nutrition staff Limited commitment or accountability for nutrition within sectors Limited authority and budget control of coordinating structures Challenges of decentralization, including unclear roles and responsibilities, increased autonomy subnationally, limited awareness, commitment, capacity, and resources subnationally Disruptions to the agenda due to elections, bureaucratic reorganization, turnover in donor staff, and difficult personalities

MDGs, Millennium Development Goals; NGO, nongovernmental organization; RUTF, ready-to-use therapeutic food
a. The fifth theme, Strategies and Tactics, is described in **table 2**.

NGOs got together and sort of formed a networking organization or an alliance. They agreed to put their logo on all the national program reports rather than trying to claim ownership for themselves, and things like that. So there was a period when there were a lot of fairly large NGO-run programs, and they wanted to make it one national program, and they managed to get their act together to do that. (International NGO)

They had a lot of disagreements but they always went ahead with one voice. They sat behind closed doors and didn't get out, but then they put on a good face when they came out and had one recommendation. (Donor agency)

TABLE 2. Sub-themes related to strategies and tactics

Molding and adapting to institutions Bolster and support promising nutrition units; form working groups under one overall coordinating committee; help lesser units lead and compensate for ineffective coordinating structures; assign lead roles where good people are located rather than bureaucratic considerations alone; foster strategic alliances across diverse organizations with an active core group to make things happen; get allies inserted into strategic positions in government; use technical and politically independent institutions for long-term agenda work; involve Ministry of Economy and Finance and Prime Minister's Office as allies; build relationships with key ministries and actors; find roles for each actor; exploit complementary strengths of various donors, non-governmental organizations, academics, and other actors; use soft touch with decentralized actors rather than mandates; develop memoranda of understanding with local government on only a few activities initially; take advantage of political, bureaucratic, or staff transitions that create unexpected opportunities and chemistry for alignment.
Planning and agenda formation Develop a coherent government-owned plan to bring donors in line and coordinate sector roles; engage implementing organizations in developing operational plans; seek resource pooling to foster ownership and commitment; frame a "National Program" rather than "World Bank Project" to foster broader buy-in; plan from community and local government then upwards; pursue and evaluate parallel actions for a few years rather than destructive in-fighting; pursue one or two objectives initially if needed to avoid paralysis through analysis; form a group and a safe space (with neutral facilitation if necessary) for information sharing, relationship building, strategizing, and consensus-seeking; create, support, or strengthen an effective (bureaucratic) focal point or coordinating structure.
Leadership and strategic capacity Build leadership, strategic capacity, and confidence in a national team; negotiate, discuss tradeoffs, and compromise rather than fighting government; identify allies and opponents through regular dialogue and interaction; argue behind closed doors and come out with a common voice; fill policy and implementation void with external projects that catalyze not displace; use village tours, videos, profiles, and other powerful methods with policy makers and shapers to get concrete, grounded and to see the big picture; have concrete examples, anecdotes, and stories at fingertips when needed; use external actors as catalysts for change, agenda consolidation and/or consensus seeking; strategically stimulate and use small but visible accomplishments; seek allies who can think and work outside the box; use national meetings strategically to advance the agenda; strategically frame the issues to fit prevailing policy environment; seek international allies to legitimize the agenda; envision and pursue a 10- to 15-year strategic agenda; work outside and beyond official mandates and job descriptions to get the job done.

MEF, Ministry of Economy and Finance; NGO, nongovernmental organization; PM, Prime Minister's Office

These quotes reveal some strategies that have proven useful in aligning the implementation of diverse actors, building ownership, and ensuring sustainability in commitment over time:

> *For the national—the first part of the process—the development of national guidelines, one thing that was really helpful in many of the countries, was establishing a technical working group.… The establishment of these technical working groups helped to sort of rally some commitment, some ownership, for the national guideline process.… And in some countries, that working group and that momentum continued beyond national guidelines, where they were able to then help with implementation, and in others, less so. (International NGO)*

> *It is important to apply modern management practices. In [my country], most traditional management is not working well. We try to have a strategic plan, action plan-oriented, staff evaluations, and progress review of our action plans. These things are not very common in the current administration in [my country]. We have set up our vision, mission statement, core values, and try to apply them. (Country nutrition actor)*

Although it is not mentioned in many sources, there has been some experience using strategies to forge a more constructive working relationship between donors and government actors:

> *All of us, going in and saying this is wrong and you should do this. You are doing food supplementation, no, do growth promotion. We really went against them instead of working with them. We have lost a lot of goodwill and opportunities that way. We have been more successful with whatever opportunities came up. Education and schools, OK let us work with them. Let us see which has the best effect. Go ahead and take the risk for 2 years and see effects, then maybe they will see. (Donor agency)*

> *It is again like what you do with governments. You do not shut them out; you do not tell them they are doing the wrong thing. You just try to work with them. It's negotiations and tradeoffs and trying to find a consensus. (Donor agency)*

Finally, there has been a wide variety of strategies used to strengthen commitment within government, some of which are illustrated here:

Another internal factor: influential nutritionists who led the change in thinking and actions. In the first era, Dr.… and Dr.… played an important role.… In my position, I have access with the prime minister. The former prime minister who stepped down last month, he was my classmate. You can see him and he can support you. (Country nutrition actor)

External factors such as advocacy by international partners are very important.… A few years ago, a progress report on MDGs was submitted to UNDP [United Nations Development Programme] and [a famous international development expert] sent feedback that the report is lacking nutrition. A consultant was sent to support [us]. At the beginning, the committee decided to start a working group for nutrition since it was said from abroad that nutrition is very important and that it supports the MDGs, and they accepted it. (Country nutrition actor)

What really works is showing results quickly. So politicians can start using it. If they can have examples of results, this would work and they would catch on to it. (Country nutrition actor)

The nutrition policy process: Dynamic, emergent, and contingent

Although the five themes described above are rich in breadth, they reveal only fragmented segments of actual policy process when viewed over long periods of time. In contrast, the country stories upon which these fragments are based reveal the dynamic, contingent, and episodic manner in which the nutrition agenda evolves in a given country; the variety of opportunities missed, squandered, or only partially seized; the occasional role of serendipity; and, most importantly, the role of human intentionality, interactions, and strategic behavior. **Box 2** provides an illustration of some of these dynamics in the form of a composite case, and some companion papers provide further illustration [19–21]. The trajectory, events, conditions, agenda outcomes, and other factors illustrated in these cases represent only a few of the many possible combinations, but the dynamic, emergent, and contingent nature of these cases is typical of the stories that were told in many of the countries in the present study.

Discussion and implications

This paper set out to identify the range of factors that have influenced the nutrition policy process in developing countries in more recent decades and to draw lessons from these experiences to guide the implementation of the three global initiatives described above.

Key findings

This study has identified five major clusters of factors that affect the evolution of the national nutrition agenda in developing countries: societal conditions; catalytic events; structural factors; points of contention; and the behaviors, strategies, and tactics of nutrition actors. Although the relative importance of these factors and the specific issues within each category vary across country settings, they are sufficiently broad and nonprescriptive to be relevant in all countries.

The study has three major findings in relation to these factors. First, societal conditions and catalytic events pose a wide variety of potential challenges and opportunities to enlarge and shape the nutrition agenda. The accounts analyzed here suggest that some countries have been successful on some occasions in using such opportunities, while others have been less successful. As documented in previous studies, a key factor appears to be the existence of one or several policy entrepreneurs who can successfully create and/or seize opportunities and manage the challenges [25, 31, 35, 36]. An important contribution of this study lies in documenting that these conditions and catalysts may take many forms and that some factors (such as drought or food price shocks) can create policy windows for certain actions at one point in time (e.g., distribution of food aid) that may become points of contention at a later point in time. This possibility is not revealed in studies that restrict their focus to agenda-setting alone [24–27, 31].

The second finding is that disagreements over interventions and strategies appear to be an almost universal feature of the nutrition policy process. These points of contention tend to occur primarily among the technical and managerial actors within and among government, donor, and nongovernmental organizations, rather than among politicians or senior administrators, and they appear to be based largely on diversity in institutional perspectives and interests rather than strictly technical disagreements over the strength of evidence supporting different interventions or strategies. This study confirms the previous finding that the ability to achieve cohesion or consensus within a policy community has an important influence on agenda-setting [36] and further demonstrates the importance of this factor during policy formulation and implementation.

Although the language in these interviews tends to implicate divergent institutional perspectives and interests (rather than scientific disagreement) as the cause of these policy disagreements, this does not imply that scientific evidence is irrelevant in these debates and/or is not in dispute. To the contrary, participant observation in several of these countries revealed that the claims about evidence are themselves intertwined with professional and institutional perspectives and interests [19, 20, 28]. This is consistent with the broader

BOX 2. The messy reality of the nutrition policy process: A composite case

Esperanda is typical of many African countries: 12 million people, 30% urban population, a gross domestic product of US$250 per capita, chronic and seasonal food insecurity, three distinct agroecologic zones, high rates of infectious disease, and generally weak health infrastructure. In 2005, mortality among children under 5 years of age was 180 per 1000, maternal mortality was 2,000 per 100,000, stunting prevalence was 45%, wasting prevalence was 6%, and anemia and vitamin A deficiency were highly prevalent among women and children.

Throughout the 1970s, malnutrition was never high on the agenda of the government or major donors, although the country conducted routine growth monitoring in health facilities and had accumulated some experience with community-based home gardening, poultry, and nutrition education programs. An economic crisis in 1987 led to a sharp rise in food prices in urban areas and led the government to initiate a supplementary feeding program in health facilities, primary schools, and NGO-led community programs in some districts and to strengthen nutrition rehabilitation clinics throughout the country. It also created a Food Security Unit (FSU) in the prime minister's office to oversee the design and management of the food distribution programs by the Ministries of Health and Education.

By the time the economic crisis waned in 1989, several international NGOs had broadened their community programs based on the successful experiences in Iringa, Tanzania, to focus on improving the care and feeding of young children rather than food distribution alone. The Ministry of Health began to promote similar approaches through its support of village health councils and its system of volunteer community health workers in its outreach from health facilities. Meanwhile, the new country directors of UNICEF and the World Health Organization urged that the FSU be broadened to include nutrition in its mandate as the Food Security and Nutrition Unit (FSNU). This unit was never effective, however, because it was marginalized from and had no authority over the implementing agencies, and the director was not able to develop effective informal working relationships. In 1990, the US Agency for International Development initiated a national breastfeeding promotion program, and the World Bank began discussions with government concerning a nutrition component in its health sector loan. By 1995 the country had several nutrition initiatives under way. For the next 10 years, however, the Ministry of Health and larger donors moved away from efforts to address chronic undernutrition because of the new focus on micronutrients in donor agendas, the inability of the Ministry of Health to administer any more than 40% of the World Bank loan, the lack of convincing evaluation results, and the conflict among donors, the Ministry of Health, and NGOs regarding the harmonizing of their community-based strategies.

During the next 10 years (i.e., during the micronutrient decade, led by donors and the international community), enterprising managers from two NGOs formed a coalition of international and national NGOs to share experiences, harmonize messages, document their impact, and ultimately harmonize strategies for community-based nutrition programs. By 2005 this coalition had 27 members and had developed good rapport with staff in the Ministry of Health, the FSNU, and new staff from several key donors. As a result of this informal coordination, a unified National Nutrition Strategy was created, financing was obtained from several donors, and capacity-building and evaluation were given serious attention for the first time. Although the program was unified in certain of its core objectives and elements (including greatly expanded and sustainable coverage of micronutrients via community-based platforms), each of the partners was able to use its own implementation strategies, and the responsibility (and credit) for the program was shared among the implementing partners. The coalition, now known as the Strategic Alliance for Nutrition and supported by a core group of three well-regarded members, continues to function in 2010. It fulfills the ongoing tasks of coordination, sharing experiences, strategizing to meet new challenges, and broadening commitment for nutrition at the national and subnational levels. Among the challenges is the loss of some highly committed staff from several key donor and government agencies and the need to build relationships with their less committed and less cooperative replacements.

NGO, nongovernmental organization

literature on knowledge utilization in the policy process [30, 37, 38].

The third key finding relates to the role of structural factors. These factors are found to have a major influence on the formation and implementation of the nutrition agenda, and they shape the unconstructive behavior and power relations among many actors involved in the policy process. The most notable finding here, however, is that many of these structural factors can be molded, aligned, and/or circumvented through strategic action on the part of the mid-level actors, especially nonstate actors, to strengthen commitment, coherence, consensus, and/or coordination in relation to the nutrition agenda. These tasks are easier to accomplish when institutional arrangements for leadership, coordination, and implementation are favorable (as in Thailand in the 1980s), but this appears to be the exception rather than the general rule. The more common pattern, as shown here and in previous work [39], is for institutional arrangements and other structural factors to impede progress in forming and implementing a coherent nutrition agenda. When progress has been made, it tends to be the result of the strategic efforts of one or many actors to alter some

of the key structural factors and/or work within or around them. Indeed, even the case of Thailand noted above bears this out, in that the favorable institutional arrangements in that case also were the result of strategic efforts by key individuals [40]. This evidence that strategic action (agency, intentionality, informal power) can, to varying degrees and in varying circumstances, redirect and/or overcome the effects of structural factors (formal structures and traditional power relations) has important implications for future efforts to advance the nutrition agenda, as discussed below.

Policy implications

The accounts of the policy process analyzed in this paper have a number of implications for future efforts to improve nutrition. First, they suggest that the ability to mobilize a wide variety of strategies and tactics, as shown in **table 2**, plays a crucial role in strengthening commitment, coherence, consensus, and/or coordination in relation to the nutrition agenda. This ability, here termed *strategic capacity*, includes the human and institutional capacity to build commitment and consensus toward a long-term strategy, broker agreements and resolve conflicts, respond to recurring challenges and opportunities, build relationships among nutrition actors, undertake strategic communications with varied audiences, and other tasks. At the individual level, this includes socially attuned leadership, management, and communication, negotiation, and conflict management skills, documented elsewhere [41]. At the institutional level, it includes formal and/or informal venues and practices for nutrition actors and others to exchange information, discuss common concerns, strategize, coordinate efforts, build relationships, seek consensus, resolve conflicts, and sustain momentum [29, 42]. In some of the countries studied here, these individual and institutional capacities were in evidence and played a key role in advancing the nutrition agenda; in most of the countries, they either were not present or were not effective in overcoming the particular structural factors at work in those settings. A major contribution of this paper is in conceptualizing strategic capacity and bringing it to the attention of the global nutrition community. The strengthening of these capacities appears to be a priority for the future, especially as the three global initiatives move toward implementation [7–9].

Finally, the observation from this study that the disagreements and conflicts among nutrition actors primarily are a function of divergent institutional perspectives and interests, rather than strictly technical disagreements about the evidence supporting various interventions, has important implications for strategies to enhance cohesion and consensus. This suggests that efforts to resolve these disagreements strictly through appeals for evidence-based decision-making, or by reference to the technical norms produced by the World Health Organization, the *Lancet* Series, or other authoritative sources, will be insufficient [43]. Although evidence can be helpful to resolve disagreements in some cases, an extensive literature demonstrates that interest-based conflicts seldom can be resolved by appeals to evidence, in part because the evidence base on most complex policy problems is fragmentary and contestable, and may or may not be relevant to the local context [44–46]. In such cases, a more productive strategy would be to employ systematic procedures for negotiation and conflict resolution, which are explicitly designed to integrate scientific evidence, contextual knowledge, and stakeholder values, interests, and beliefs [47]. This is an important component of the agenda noted above for strengthening individual and institutional strategic capacities.

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Bolivia's multisectoral Zero Malnutrition Program: Insights on commitment, collaboration, and capacities

Lesli Hoey and David L. Pelletier

Abstract

A number of multilateral and bilateral food security and nutrition initiatives have been launched in the wake of the 2008 food crisis, many with the explicit intention of fostering country ownership, multisectoral action, and harmonization among international partners. These bear some resemblance to the failed multisectoral nutrition planning initiatives that followed the 1974 world food crisis, raising the question of whether the current initiatives are doomed to experience the same fate. This paper explores these questions in one country by focusing on the policy sustainability of Bolivia's Zero Malnutrition Program (ZM), a multisectoral initiative that appeared at its initiation to be buttressed by political support and strengthened by design features that differed in important ways from similar efforts of the 1970s. Retrospective and prospective data collected through an action research and grounded methodology revealed, however, that the real struggle in Bolivia came after *ZM was launched. ZM champions made undeniable progress in the first 2 years of the program with health-sector interventions, but they underestimated the challenges of building and sustaining the commitment of high-level political leaders, mid-level bureaucrats, and local-level implementers in the majority of other sectors. These initial experiences from Bolivia hold important lessons for several global initiatives to scale up nutrition actions, which are being launched in great haste and so far have given scant attention to strategies for managing the nutrition policy process and strengthening the capacities for implementation.*

Key words: Bolivia, implementation, multisectoral, nutrition, planning, policy

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Introduction

For many decades, nutrition supporters have tended to work at the margins, in an ad hoc and fragmented fashion, waiting as "patient revolutionaries" [1] for the chance to influence national and international agendas. They had an opportunity in the 1970s, bolstered by the world food crisis and the enchantment with centralized planning at the time that led international partners to establish multisectoral nutrition planning units in 26 developing countries [2]. The initiative collapsed, however, after only a few years [3], returning the field back to a position of "nutrition isolationism" [4].

Some 40 years later, the global nutrition community has another window of opportunity, thanks to a number of converging trends. These include the global embrace of the Millennium Development Goals (MDGs), the accumulation and greater awareness of an impressive body of evidence concerning the importance of malnutrition and its role in the MDGs [5–7], an unprecedented increase in attention and resources for global health [8, 9], and the global food crisis of 2008, among others. Reflecting these trends, the aid community has launched major initiatives over the past 3 years to increase global investment in nutrition and to support unified national strategies, including the Framework for Action for Scaling up Nutrition [10], the High Level Task Force on the Global Food Security Crisis [11], and the US Government Health Initiative [12] and Feed the Future [13] programs. At national levels, 34 Alliances Against Hunger [14] have been formed since 2003 to carry out national hunger reduction strategies. Among these, Latin American governments have been particularly noticeable, forming multisectoral food and nutrition policy councils and launching national programs such as Brazil's Zero Hunger, Bolivia's Zero Malnutrition, Nicaragua's Zero Hunger, and other efforts with significant nutrition focuses in Honduras, Mexico, Colombia, Ecuador, and Guatemala [15, 16]. A common theme in these global and national initiatives is the need for greater alignment among international partners in support

of country-owned, country-led strategies, in keeping with the Paris Declaration and the Accra Agenda [17].

What experiences are emerging from this new generation of multisectoral efforts to reduce undernutrition? Are these initiatives doomed to repeat the mistakes of history, or are the conditions, actors, and strategies we see today more conducive to success? Most importantly, will the initiatives survive this time long enough to have an impact? This paper explores these questions in one country by focusing on Bolivia's Zero Malnutrition (ZM) Program, a multisectoral initiative that appeared at its initiation to be buttressed by political support and strengthened by design features that differed in important ways from efforts of the 1970s. Instead of an externally induced planning exercise focused on a top-down model, as seen in the 1970s, the Bolivian case was initiated by long-time Bolivian nutrition champions who imagined ZM, mobilized significant sources of funding, and attempted to institute a participatory, collaborative planning and implementation model throughout all levels of government. Most importantly, ZM attracted the highest level of political attention when President Evo Morales agreed to make malnutrition reduction a core goal of the 2006–10 Bolivian Development Plan and personally launched ZM in July 2007. However, true to arguments of policy sustainability scholars and the experiences in Peru and Guatemala during the same period [18], the real struggle in Bolivia came *after* ZM was launched. The lessons Bolivia's case offers are particularly timely, as current initiatives that seek to scale up nutrition actions are being launched with very little discussion of how to manage the nutrition policy process [19] and how to strengthen the capacities for implementation [20–22].

Lessons from theory and experience

Patashnik [23] suggests that policies either become "entrenched" as intended, or experience "erosion," "reconfiguration," or "reversal," depending on the degree to which interest group preferences remain *stable* and *unified* and *diverse* groups invest in the policy over time. Against this frame, analysis of 1970s nutrition planning efforts suggests that the advocates' major weakness was Patashnik's second criterion: underestimating the challenge of and differentiated approaches necessary for generating sustained support for nutrition issues and collective action across diverse groups: high-level political leaders, intrasectoral mid-level bureaucrats, and local-level actors. We draw on broader policy science literature regarding these three factors in our attempt to understand the degree to which Bolivia's experience is avoiding or repeating the 1970s failures.

High-level commitment

Scholars argue that a principal problem of the 1970s efforts was that nutrition planners were "politically presumptuous" [3]. Based on a rational planning paradigm, they assumed that identifying nutrition problems with more precision would be enough to compel governments to respond [24, 25] and that political leaders, "once suitably enlightened," would agree "with equal ardor" [3] to invest in a "formidable amount of bureaucratic engineering" to coordinate multiple ministries around a master nutrition plan. Advocates essentially mistook "some" interest in reducing malnutrition for "high-priority commitment," instead of seeing it for what it was: "limited, tentative and conditional" [25–27].

As policy scientists have found, initial attention at higher levels can make a reform easier to pass, but not easier to sustain [23]. Unfortunately for nutrition advocates, the most prevalent form of malnutrition—stunting—tends to be invisible to policymakers, a chronic "affliction of the real 'silent majority' in the world" [26], particularly women, children, and the poor. It therefore "lacks drama" or the political incentives to induce a response [28–31]. Even if high-level policymakers offer initial support, it may be out of "blame avoidance" when social policies are in the public eye [23].

Mid-level bureaucratic commitment

Nutrition planners of the 1970s were similarly naïve about what would be required to orchestrate "a well-coordinated plan of attack" [3]. Ironically, any programs that did emerge were "piecemeal…(and) disconnected precisely because no minister or ministry was able to develop substantial interest or exercise real authority" [32]. Scholars describe how political leaders often set up multisectoral councils to assuage external pressures [27, 33]. Councils quickly became a "facile facade as a substitute for action" [34], ending "in a state of operational coma" [29], plagued by high turnover, the lack of full time high-status directors, unclear methods and reasons for functioning, and no accountability or follow-up [26, 27, 29]. Nutrition advocates also failed to realize that part of the act of planning involved a "process of conflict resolution, or at least of conflict deflection" [26]. Tensions existed between sectors, between international agencies, and even *within* organizations [34]. Planners were blind to the way they threatened sectoral agencies, professional disciplines, and traditional power bases [35]. Even in cases where food and nutrition secretariats were established within the Ministry of Health, staff could not "hold their own" to coordinate others, especially other nutritionists who saw multisectoral planning units as "trespassing" on their turf [32].

Studies of policy sustainability underscore how, commonly, collaborative efforts are fraught more with challenges than with synergy. Withholding resources and causing implementation delays can be especially useful if it allows policy elites to remain uncommitted to actions while receiving praise for a "glowing plan" [36, 37]. Paradoxically, sectors willing to give up power to make the types of changes necessary to collaborate are often those that need the least reform [23]. Others have found that the types of sectoral divisions that 1970s critics observed can be sparked by unique professional cultures, incompatible legal and procedural structures, or loyalties to clashing interest groups and mandates [38, 39]. A multisectoral council can also reach a state of "operational coma" if delegates disagree about how to interpret a policy directive, have simultaneous responsibilities that demand time and attention, or have little power over or access to budgets to push their proposals forward [39]. In the meantime, if goals are not operationalized in the early days of a new policy initiative, opposing interests may establish precedents, habits, and procedures that eventually undermine a policy's central goal or "official doctrine" [40].

Local-level commitment

Nutrition planners in the 1970s also underestimated the complexity of implementation, politically and operationally. First, they approached implementation as an orderly, technical procedure, "not as an inherently pluralistic, often conflictual process that is uncertain, even precarious, yet dynamic and potentially creative" [3]. Viewing malnourished populations as passive "objects of manipulation" [3, 25], planners overlooked community power structures and local decision-making processes or priorities [25, 26]. Policy research shows instead that "street level bureaucrats" [41] have a considerable influence on the direction of policies, particularly in today's highly decentralized governance context [42–44]. As with political leaders, advocates who attempt to build bottom-up pressure for malnutrition policies are at a particular disadvantage, since nutrition policies are unlikely to have "visibility" (when populations see or experience clear outcomes of a policy) or "traceability" (when they can identify politicians as accountable for these outcomes) [45, 46]. Especially in resource-poor settings, studies of decentralization show that publics are inclined to demand projects that attend to immediate, concrete needs (e.g., plazas, new school buildings, roads, etc.), not issues like malnutrition that appear too abstract or long-term to resolve [47, 48].

Furthermore, 1970s nutrition planners assumed the implementer's job was straightforward, not requiring special training or skills [34]. They dreamed up complicated programmatic features that placed "extraordinary loads on very weak institutions," with ambitious goals, long chains of causality, sophisticated methodologies, novel technologies, and untested, complex organizational forms requiring multiple decision points [3]. The reality in low-income countries is that local capacity to respond to malnutrition, or any local need, is highly variable and often weakest where interventions are needed most. Staff operate under varying distances to higher-level administrative units, population densities, levels of social solidarity or inequality, historical legacies, and political priorities [44, 49, 50]. Implementation research describes how actors at various "veto points" along an implementation pathway, from national to local, may not fulfill their roles for lack of incentives, sanctions [51], skills, knowledge, resources, or higher-level support [49, 52–54]

Methods

Bolivia's Zero Malnutrition Program was one of several country studies in the Mainstreaming Nutrition Initiative (MNI), an effort to learn from country experiences about how to advance and sustain nutrition on the national policy agenda. The World Bank-funded MNI and the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) administered and implemented activities in Bolivia through subcontracts with Cornell University and Plan International-Bolivia. The synthesis of findings across other country experiences has been published elsewhere [18].

Bolivia became an MNI partner after national ZM coordinators within the Ministry of Health invited an MNI staff member to observe ZM, document its progress, and provide feedback. Data collection was both retrospective, covering ZM's initial conception and launching in 2006, and prospective, as we observed the policy process as it unfolded throughout 2007 and 2008. We used an action research and grounded methodology, including *participant observation* of ZM planning, training, and evaluation meetings at all levels, including living for 6 months in Betanzos, one of the municipalities targeted for phase I of the program, which ZM coordinators selected as the "illustrative municipality" to observe local barriers to and facilitators of implementation; *semistructured interviews* with 50 key informants from donor agencies, UN organizations, nongovernmental organizations (NGOs), ministries, and government and civil society groups; and a *comparative study* of implementation progress in phase I municipalities. This last study involved interviews with staff from the nine departmental health offices, collection of secondary data, and case studies of a purposive sample of 10 municipalities in three of Bolivia's nine departments (involving interviews, focus groups, and a survey conducted with 158 actors: elected officials [22%]; public sector directors in education, health, justice, and agriculture [53%]; and community-based

health leaders [25%]).

This research was approved by Cornell University's Institutional Review Board. Oral consent was obtained from all research participants for interviews, focus groups, and surveys.

Results

Bolivian policymakers became interested in nutrition as early as 1945, when the Ministry of Health commissioned the first national study of the nutrition habits of Bolivian miners [55]. Since then, private and public institutions have implemented a variety of studies, trainings, regulations, and programs. The 1980s and early 1990s were particularly active years, when multiple interventions decreased chronic malnutrition in children under 5 years of age from 43% in 1981 to 27% in 1994, nearly eliminated iodine deficiency, and doubled exclusive breastfeeding rates [56]. Progress in reducing chronic malnutrition leveled off after 1994 (**fig. 1**), however, and remained concentrated in highland regions and among the poorest quintile, both at 42% [57].

After years of fragmented, health-based nutrition efforts, several medical doctors began considering ways they might achieve better coordination and a more comprehensive approach. In 2003, they convinced First Lady de Lozada to launch Food and Nutrition Councils at the national (Consejo Nacional de Alimentación y Nutrición [CONAN]) and departmental (Consejo Departamental de Alimentación y Nutrición [CODAN]) levels [58]. The CONAN met for more than a year, and CODAN initiated food and nutrition plans in two of Bolivia's nine departments. These initial efforts ended by 2005, however, faced with no budget and regulatory conflicts between the Ministry of Health and the Ministry of Agriculture [57].

The fleeting power of high-level commitment

In 2006, a number of forces coalesced to move forward the idea of a multisectoral nutrition policy. The election of Evo Morales and the appointment of a key nutrition advocate as Minister of Health especially encouraged advocates. Morales' larger mandate to reduce poverty and inequality aligned with a malnutrition-focused health platform that the minister and a small number of advocates elevated to a prominent place on the National Development Plan.

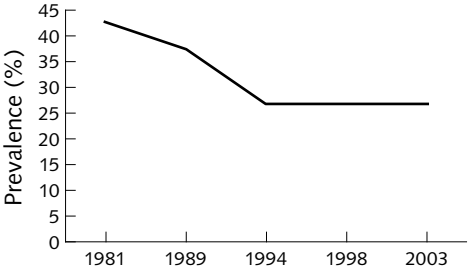

FIG. 1. Rate of chronic malnutrition (height-for-age, Z score <–2) among Bolivian children under 5 years of age
Source: Bolivia Health and Demographic Surveys, 1981–2003

Morales' initial commitment and his public launch of ZM made it appear that nutrition advocates were destined to succeed. The reality, however, was that Morales' pledge was tentative and more symbolic than action-bound. Advocates had hoped the launch would occur as early as 2006, but needed time to assuage Morales' apprehensions about the political implications of not reaching the goal of "zero" malnutrition by 2010. They were surprised in July of 2007 when they were suddenly told to prepare for the public launch the next day, an apparent move to take advantage of a politically opportune moment: the public was concerned about the rising cost of flour, Andean Region Ministers of Health (REMSSA) from the Technical Committee for Malnutrition Eradication were meeting in Bolivia, and the World Bank had agreed to sign a loan that had long been under negotiation for a major micronutrient initiative.

Morales subsequently participated in a public signing of another major donor contribution to ZM a year later in July 2008, but he was otherwise uninvolved in steps that affected the policy's formulation or implementation. He never mentioned ZM in public speeches or personally asked about its progress in cabinet meetings with ministers, as the minister of health recounted. Lower-level ministry staff received no directives from the Ministry of the Presidency reminding them of the importance of ZM or inquiring about their ZM activities. Most importantly, the president, presiding over the CONAN, never appointed a proxy chair or called ministers to a meeting. Most CONAN delegates and administrators explained the president's lack of attention was due to his preoccupation with heated regional movements for "autonomy," a recall vote in August 2008, and protests that became increasingly violent around the development of a new constitution, eventually approved by referendum in January 2009.

Confronting the challenge of collaboration

During ZM's first 2 years, delegates in the technical arm of the National Food and Nutrition Council (ct-CONAN) devoted considerable amounts of time—including monthly or more frequent meetings and several weeks of travel—to develop an integrated plan, launch concrete actions, and increase ZM commitment. By the end of 2008, however, the institutional structure ZM coordinators were trying to solidify (i.e., councils at the national, departmental, and municipal levels—CONAN, CODAN, and Municipal Food and

Nutrition Councils (COMAN) was being threatened by outside groups, as was hope for a comprehensive plan or concrete actions, with the notable exception of the Ministry of Health.

The national collaborative process

Early on, the ct-CONAN claimed a number of accomplishments. They secured over US$28 million in donor commitments, identified nearly half of Bolivian municipalities as phase I (52) or phase II (114) target municipalities according to their level of food insecurity and malnutrition, and held workshops in seven of the nine departments to promote the formation of CODAN, COMAN, and municipal nutrition action plans [58, 59]. As time went on, however, these initial successes appeared too shallow. The closest the ct-CONAN came to producing an integrated plan was a set of leaflets explaining ZM's goals and listing general activities each ministry already performed that loosely contributed to nutrition. These promotional flyers, however, lacked details regarding specific activities, timelines, administrative systems, detailed budgets, and more. By the end of 2008, ct-CONAN meetings were occurring "as needed," and no more attempts were made to finish the plan. The council's lack of tangible output at all government levels, discussed below, was especially trying. As one delegate admitted, "We're getting tired." Donors contributing to a ZM basket fund eventually grew frustrated and hired a consultant in 2008 to begin establishing their own multisectoral, operational plan. Other groups also saw opportunities to push their parallel agendas, such as a network of food security NGOs designing a Human Rights to Adequate Food Law that nearly replaced the food and nutrition councils with "food security" councils until ZM coordinators quickly negotiated.

Concrete actions led by national ministries

As **table 1** shows, the Ministry of Health made the most progress in designing and implementing initiatives specifically intended to reduce stunting in children under the age of two. Although other ministries, particularly the Ministry of Education, had some programs in place or in the planning phase, these tended not to focus directly on stunting (e.g., reducing illiteracy, improving school attendance through meal programs, etc.), were programs already in place and not specifically motivated by ZM (programs to increase family food security and income), or were "ministry" programs in name only (e.g., so-called Ministry of Water and Sanitation projects and the Ministry of Justice expansion of preschool programs were funded, envisioned, and led by UNICEF). Furthermore, few of these initial ZM initiatives required collaboration across sectors, including collective priorities, common indicators, and coordinated programs. Interviews in July 2008, a year and a half after ct-CONAN began mobilizing support, also revealed that the majority of non-health-sector ministers and mid-level administrators were unaware that ZM existed, were confused about why their sector should be involved, and sometimes actively dismissed ZM-related interventions proposed by ZM delegates or donors.

Ct-CONAN delegates across these sectors explained that they were unsure how to convince other staff in their ministries to coordinate with other sectors, add, expand, or retarget activities devoted to malnutrition reduction, or hold their sectors responsible to nutrition-centric indicators. The high turnover of ministers, administrators, and ZM delegates complicated the task of following through on tentative commitments or keeping higher-level supervisors informed. They also described how it was more difficult to launch ZM initiatives in ministries that had little administrative infrastructure at lower levels. The Ministry of Agriculture, for instance, has been without an extension system since the structural adjustments of the1980s, unlike the Ministries of Education and Health, which continue to have operational units to carry out directives at the departmental, municipal, and village levels.

Vertical structures may have contributed to the progress made in health and education, but other factors were equally critical. CONAN delegates believed that their colleague in the Ministry of Education, for instance, as his ministry's conflict mediator, was equipped with savvy political skills to continuously maintain direct communication and sell his ideas to the ministers of education, regardless of how often they changed. The Ministry of Health was at an even greater advantage from the start, with two of ZM's key designers as internal staff—the Minister of Health and the ct-CONAN chair. Gaining and maintaining a foothold in the Ministry of Health, however, also required constant political maneuvering. The minister and the ct-CONAN chair, along with the new Nutrition Unit director, were forced at first to operate nutrition interventions on volunteer labor and had to negotiate to keep nutrition activities at the top of Ministry of Health priorities after staff in the Planning Ministry downgraded their initial budget requests. They quickly tripled the Nutrition Unit staff base from 5 to 15 between 2006 and early 2008, when they eventually secured a line item of 2 million Bolivianos (US$250,000) from the government's general revenues. As the staff described, this government funding was "unprecedented" and allowed ZM champions to leverage such support symbolically to motivate other actions within the Ministry of Health and the aid community. The ct-CONAN chair secured multimillion-dollar donations specifically for health-based ZM interventions, and by 2008, several Ministry of Health initiatives had reached half or more of the phase I municipalities (**table 1**).

Rather than securing nutrition's priority position in the health sector, however, these initial successes

TABLE 1. Implementation stage of ZM interventions by CONAN operational ministries by 2008

Ministry	Initiatives	Status
Health	Micronutrient initiatives (food fortification and supplements) Training staff in IMCI-nut Acute malnutrition treatment units Ministry-based Nutrition Unit (new Ministry of Health department)	In more than 50% of phase I municipalities
	Universal provision of complementary food for children 6 months to 2 years old (Nutribebe) Nutrition promotion and prevention centers staffed by multidisciplinary teams (UNI)	In 50% or less than phase I municipalities
	Maternal and child health conditional cash transfer program Complementary food made with locally produced foods	Limited implementation or pilot
	Nutrition IEC campaigns Enforcement of the Breastfeeding Promotion and Commercialization Substitutes Law	Planning phase
Education	Illiteracy campaigns	In more than 50% of all municipalities
	Expanded school meal program School Meal Program Unit[a] Integration of nutrition in follow-up literacy programs New K-12 nutrition-focused curricula	Planning phase
Agriculture	CRIAR[b]	In more than 50% of phase I municipalities
Water and sanitation	Potable water, sanitation, and irrigation projects[c]	Planning phase
Justice	Improved or expanded preschool programs[c]	Planning phase
Micro-enterprise	Small-scale food marketing projects Ministry-based Nutrition Unit	Under discussion

CONAN, National Food and Nutrition Council; CRIAR, Creation of Rural Food Initiatives; IEC, information, education, and communication; IMCI-nut, Nutrition-Based Integrated Management of Childhood Illness; UNI, Integrated Nutrition Unit; ZM, Zero Malnutrition Program

a. Although school meal programs do not directly focus on chronic malnutrition of children under two, ZM advocates promoted these as contributing to broader ZM goals.

b. CRIAR was created in 2006 as part of a package of initiatives referred to as the "Rural, Agrarian and Forestry Revolution," part of the 2006–10 National Development Plan to reverse land, food security, and rural development inequalities [64]. Staff in the Ministry of Agriculture noted that by mid-2008, 32 ZM municipalities had a CRIAR project in at least one community, focused on family food security or small-scale export (the program, therefore, was limited in its reach, not exclusively focused on ZM target regions, and did not coordinate with other ZM initiatives).

c. These interventions were being led, funded, and managed by UNICEF, with ministry support, but were too preliminary to have any detailed plans.

generated internal tensions as health staff outside the Nutrition Unit became "jealous," wondering "why ZM gets all the funding." As the Ministry of Health underwent changes in ministers in early 2008, rumors spread that the now visible and resource-rich Nutrition Unit was being forced to accept patronage or politically motivated hires (despite ZM advocates' attempts to "professionalize" the Nutrition Unit through credential-based hires). Tension was especially high with another Ministry of Health unit promoting Family, Community, and Intercultural Health (SAFCI)—a community-based health model that promoted the replacement of ZM food and nutrition councils with multilevel, "multisectoral" SAFCI Health Councils. Interactions with health-based NGOs also varied. Although some NGOs and UN advisors were routinely consulted about ZM nutrition interventions, others felt their views were often excluded. While these tensions were not fully "resolved" by the end of 2008, the core group of ZM leaders continued negotiating with SAFCI designers and eventually hired some of their greatest NGO critics to design particular ZM interventions.

Local-level activity

Although Ministry of Health-led interventions were well under way in many ZM municipalities, few local governments were cofinancing, authorizing, or managing other ZM initiatives that required significant local-level involvement. Our comparison of 10 phase I

municipalities revealed that the issue was primarily a lack of awareness about ZM and weak governance capacity.

One year into the program, local actors were receiving little information and unclear directives about ZM initiatives, resources, and procedures or their roles and responsibilities. Public authorities, staff in different sectors, and community leaders knew about the ZM-promoted complementary food Nutribebe in only 6 of the 10 municipalities, for instance, whereas they could describe other ZM initiatives in only 3. When officials had heard of Nutribebe, they were confused about how and where to purchase it. Municipal Food and Nutrition Councils (COMAN) formed but never functioned or quickly became obsolete, confused about their roles. Even nutritionists sent to work in municipal UNIs (Integrated Nutrition Units—the Ministry of Health's principal operational arm for ZM interventions) were unsure of their responsibilities (see **box 1**).

Regardless of their awareness of ZM as a national policy, more than 76% of local actors surveyed knew that malnutrition affected a large number of local children and that the problem, left unresolved, could impact the future of their municipality. Most agreed, however, that there was a major gap between actual local spending priorities focused on infrastructure and their preferred budget allocation, which would instead focus on the quality of health services, food security, and potable water and sanitation systems* (**fig. 2**). Over 73% believed that the most important reason for this gap—and the most obvious explanation for why COMAN typically failed—was related to varied capacity issues (**table 2**). For many municipalities, the key issue was a lack of resources and poor fundraising skills, while others had the funds but had poorly trained or insufficient numbers of staff or confronted cumbersome bureaucracy and policies inappropriate for their geographical contexts. NGOs or local administrators were able to carry out projects in some municipalities but often lacked the follow-up, effective training, or time spans needed to be effective. Some municipal officials also spoke of projects that unintentionally contributed to a debilitating "handout" mentality, reducing the willingness of community members to utilize programs, volunteer, serve on committees, pay dues to maintain services, or pool resources with other communities. For other municipalities, funds, staffing, and project designs had no bearing, because the residents themselves did not demand nutrition and

BOX 1. Additional details about the lack of ZM awareness

By order of the governor in one department, at least 16 COMANs had formed by May of 2007, but the staff of the departmental health offices, the NGOs, and the municipalities did not know how the COMANs should function or what actions to take, which eventually resulted in their termination. Across phase I municipalities, 14 COMANs existed as of July of 2008, but the degree to which these were all "active" was unclear. In one municipality where a COMAN had been meeting for 5 months, for instance, a focus group of health volunteers from diverse communities did not know the COMAN existed or what ZM was. Even an active COMAN member admitted, "We outside of health don't know what's going on. What's IMCI? What's the CODAN? I don't want to ask, because I assume everyone else knows or they'll think I'm stupid. We need to understand." For the same reason, most CODANs formed and then stopped meeting within a year.

Other concrete ZM actions were similarly affected by communication failures and lack of higher-level administrative support. More than half of the phase I municipalities (52%) that had budgeted for the ZM complementary food, Nutribebe, by mid-2008 had taken no further action months later. Many mayors and council members—who approved the use of state-level funds allocated for purchasing the product—were confused about where to get Nutribebe, how to distribute it, and how to comply with spending regulations. Similarly, half of the phase I municipalities (21) had some form of UNI—a space to operate, furniture, nutrition promotion materials, and at least one nutritionist on staff. Most health staff found UNI guidelines to be unrealistic for many settings, however, such as industrial-size ovens in sparsely populated rural settings or strict building requirements in locations with little space or funding. Many remote rural areas visited by the authors were also having difficulty attracting psychologists, pediatricians, and even nutritionists to the UNIs, professionals in demand in higher-paying urban clinics. One external review also found that there was confusion about the purpose of UNIs, some being run as acute malnutrition rehabilitation centers, not as preventive, education-focused centers as they were intended. Even nutritionists hired to run UNIs were confused, as one explained: "They haven't told me anything. They told me, you're going to go to this municipality with Zero Malnutrition. You define your activity plan, your roles, and your job manual. When I arrived, I asked, 'What do I do?' Before coming, we (other nutritionists) asked for a small workshop about the program. They didn't provide it, so we went to the Internet."

CODAN, Departmental Food and Nutrition Council; COMAN, Municipal Food and Nutrition Councils; IMCI, Integrated Management of Childhood Illness; NGO, nongovernmental organization; UNI, Integrated Nutrition Unit; ZM, Zero Malnutrition Program

* According to Bolivia Vice-Ministry of Decentralization 2007 budget data, these perceptions of spending patterns reflected budget patterns between 2003 and 2006 that show phase I municipalities spending an average of only 19% of their budgets on a combination of basic services, housing, health, education, agriculture, and social protection; the rest either went unspent, was used for administrative costs, or was used for infrastructure projects.

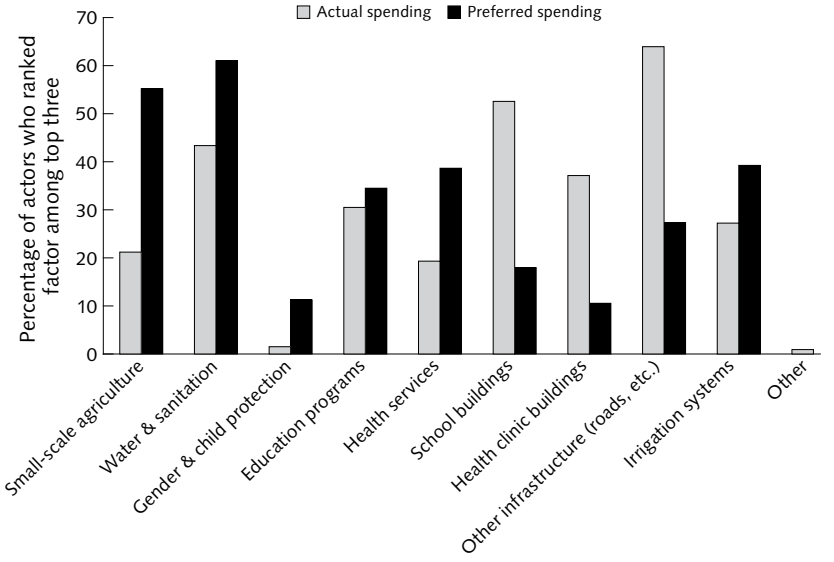

FIG. 2. Perceptions of actual vs. preferred municipal spending (n = 150 respondents, 10 municipalities)

TABLE 2. Factors that weaken municipal capacity to invest in human development

	ZM phase I municipality									
Factor	1	2	3	4	5	6	7	8	9	10
Limited funding	x	x	x	x	x	x	x	x	x	x
Passive fundraising				x		x	x		x	x
Poorly trained staff	x			x	x	x	x		x	x
Understaffing	x			x		x	x	x		x
Municipal and departmental bureaucracy		x		x		x		x	x	x
National government bureaucracy	x	x		x	x	x		x		x
Projects with little impact	x	x		x	x	x		x	x	x
Creation of a "handout" mentality	x					x	x	x		x
Policies not based on local realities	x	x		x		x		x		x
Lack of demand for social policies		x		x		x	x	x	x	x

ZM, Zero Malnutrition Program
Source: Comparative municipal case study conducted by the authors, semistructured interviews, n = 158.

other social policies during state-required participatory planning, limiting officials' mandates for pursuing these investments.

In response to these initial setbacks, by the end of 2008 ZM coordinators were strategizing about how to motivate more cross-sectoral coordination at the national level, improve initiatives already in place, and increase municipal government involvement. They were thinking about how to re-energize the ct-CONAN, designing a mass communication campaign, hiring more departmental ZM coordinators and nutritionists, holding yearly ZM review workshops that progressively involved more local-level implementers, piloting the development of a version of Nutribebe using local products, planning an advocacy campaign around a study of the economic impact of malnutrition, developing a community-based monitoring strategy to encourage health staff to learn about and respond to local nutrition perceptions and practices, collaborating with the Federation of Councilwomen through leadership trainings and learning exchanges to Brazil and Peru, initiating a program with a grassroots women's group to train nutrition awareness "facilitators," and considering a cash incentive program to reward municipalities for implementing ZM initiatives and demonstrating results.

Discussion

As this study suggests, ZM advocates were passionately committed from the start; the "zero" in ZM signifies their high confidence that a major change was possible. Based on Patashnik's typology of policy sustainability [23], advocates in the health sector demonstrated skill in maneuvering politics to "entrench" many nutrition initiatives in that sector, by building a stable "regime" of supporters, nurturing existing support, suppressing or incorporating opposition, and motivating substantial investments from the national government as well as diverse donors, UN agencies, NGOs, and even market actors. Along the way, ZM advocates were fortunate to involve a delegate from the Ministry of Education who was equally swept up by the challenge to improve nutrition while also being capable of generating the type of commitment needed to advance nutrition-based interventions in that sector.

Viewed from a policy sciences framework [60], this maneuvering to a certain degree allowed ZM actors both to secure the "invocation" stage of policy implementation (setting up decision-making units, launching regulations, securing resources, etc.) and to initiate the "application" stage for particular interventions (routinizing the administration of services). This last step, which was necessary for translating national policies into local actions, however, appeared more possible when ZM actors had control over inputs, decisions, training, and staffing. When action required broader partnerships with other sectors or local-level actors, ZM champions were at a loss about how to motivate attention, staff time, and problem-solving efforts.

Similar to 1970s advocates, ZM champions were either unaware of the need for or unable to ensure continued, even symbolic, high-level political attention for issues of nutrition; the initial presidential endorsement and insertion of ZM in the National Plan was not sufficient to form a stable coalition of nutrition advocates or to engender significant action across sectors at all levels (**table 3**). This lack of presidential pressure was compounded by the fact that most ct-CONAN delegates did not have the same strategic understanding or ability as those in the Ministry of Health or Ministry of Education to shift bureaucratic processes, incentives, or priorities. These are elements of "strategic capacity" identified elsewhere as an important target for strengthening in nutrition policy communities [18, 61]. Meanwhile, at the local level, it was clear that universal directives demanding "action" would do little in sectors where there was little institutional infrastructure or when existing local actors were burdened by cumbersome bureaucracy, policies inappropriate for their contexts, a base of largely unskilled staff, clashing public priorities, and numerous other capacity issues, even if local leaders wanted to do something.

Conclusions and policy implications

Two years into an ambitious program is too soon to clearly determine whether it will materialize as envisioned. At the time, however, Bolivia's Zero Malnutrition Program was moving in the direction of 1970s efforts, toward "nutrition isolationism" [4] rather than the integrated approach ZM advocates envisioned. The changes ZM was catalyzing, however, remain significant, including the wider conversation it sparked around national nutrition and the impetus it appeared to be creating for one of the boldest health sector reforms Bolivia has probably experienced, reconfiguring much of the Ministry of Health around nutrition and uniting the majority of donors, UN agencies, and (over time) NGOs in a common effort. The health sector still requires much work to sustain, deepen, widen, and improve upon its progress at local levels, but there can be no doubt that ZM has laid that foundation.

The verdict on other sector contributions remains unclear. Although ZM champions were frustrated at the end of 2008, they continued to feel optimistic that slowly they would be able to inspire multisectoral actions at all levels. At the very least, the initial setbacks experienced in the ct-CONAN, CODAN, and COMAN created a learning laboratory of sorts. Although many sector delegates came and went, they took with them increased awareness of nutrition, while ZM leaders began considering ways they might proactively anticipate or prevent additional setbacks.

These experiences suggest a need to find and/or support more well-respected, stable nutrition champions inside other sectors, as in the Ministry of Health and eventually in the Ministry of Education; ensure that political champions exercise effective oversight over ministries and continue to signal the importance of nutrition to all actors in the system; leverage additional "windows of opportunity" [62] for nutrition outside the health sector, such as Bolivia's growing Human Rights to Food movement; recognize, as ZM coordinators did by the end of 2008, the full extent of local-level issues that impede implementation, which can undermine success regardless of how much attention or funding the issue gets at national levels; and facilitate collective priority setting and provide practical but context-sensitive guidance on the concrete actions each sector can take to address malnutrition. These lessons are especially relevant for the various multilateral [11] and bilateral [13] initiatives being launched in the wake of the 2008 food crisis. Finally, the Bolivia case highlights the need for further research on policy implementation processes and for the development and testing of tools and protocols for identifying and resolving implementation bottlenecks in specific contexts and at different levels of government [63].

TABLE 3. Summary of comparison across theory, 1970s experience, and the Bolivia case

Policy science lesson	What happened in the 1970s	What happened in Bolivia
High-level commitment		
Chronic malnutrition is among those long-existing, hidden issues that tend to induce little action from political leaders; initial policymaker commitment wanes if an issue is not a visible crisis or if pressure does not continue	Identifying the malnutrition problem with more data got attention, but was not enough to sustain policymakers' commitment to coordinate ministries and ensure implementation	Malnutrition indicators and well-positioned nutrition advocates convinced a social-equity-minded president to officially endorse ZM, but his involvement in ensuring effective action did not go further
Mid-level bureaucrat commitment		
Collaboration challenged by professional cultures, incompatible administrative systems, clashing mandates and interests, competing responsibilities, different interpretations of policies, lack of power in own sectors Causing implementation delays can be politically useful to receive praise for a "glowing plan"	Councils plagued by high turnover, no full-time high-status director, unclear methods or reasons for functioning, no accountability No agency had sufficient interest or authority to compel other sectors to act	After identifying target municipalities and mobilizing the formation of decentralized councils, the ct-CONAN stopped meeting or working on an operational plan Higher-level policy actors were unaware and unsupportive High turnover of delegates and supervisors and poor administrative structures complicated some sectoral contributions
Sectors willing to give up power to collaborate often need the least reform	Nutrition was eventually relegated back to the health sector	Only the Ministry of Health and the Ministry of Education implemented or planned concrete actions, probably because champions were politically savvy, respected, and persistent and secured initial key investments (e.g., the Ministry of Health Nutrition Unit)
If goals are not operationalized early on, rival interests can undermine the original intention	Rivalries between sectors, between international agencies, and *within* organizations, even the Ministry of Health, prevented collaboration	Both failure (CONAN) and successes (Ministry of Health) generated rivalries that ZM champions had to manage and deflect
Local-level commitment		
Front-line implementers and other local actors exert considerable influence on the direction of policies	Did not align with local power structures or with decision-making processes and priorities	Externally imposed COMAN and CODAN structures did not survive long due to confusion over functions, expectations, interests, etc.
Local capacity to respond to needs is highly variable based on distance to capitals, population characteristics, local politics, and staff knowledge, skills, motivation, resources, and administrative support	Designed complicated programmatic features without considering the capacity of nutrition policy implementers	Initiatives dependent primarily on Ministry of Health funding and staff spread quickly to priority ZM municipalities, but others requiring partnerships with local governments were challenged by a lack of higher-level support and a diverse mix of capacity constraints
Malnutrition policies lack "visibility" and "traceability" among the broader public Publics are likely to demand projects that attend to immediate, concrete needs in decentralized settings	Approached implementation as a technical process, overlooking the need to build understanding, support, and demand Few initiatives led to large-scale implementation	Much confusion and lack of awareness about ZM led to delays or inaction. Local leaders reported that the public did not demand social policies but rather were focused more on infrastructure needs

CODAN, Departmental Food and Nutrition Council; COMAN, Municipal Food and Nutrition Council; CONAN, Comite Tecnico—Technical Committee—National Food and Nutrition Council, ct-CONAN, technical arm of CONAN; ZM, Zero Malnutrition Program

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The management of conflict in nutrition policy formulation: Choosing growth-monitoring indicators in the context of dual burden

Lesli Hoey and David L. Pelletier

Abstract

We argue in this paper that a shared desire to find a solution to malnutrition and agreement at a broad level concerning priority, evidence-based interventions are important but not sufficient conditions for effective policy development. This paper illustrates this point, and draws out general implications, through a detailed analysis of a case in which conflict emerged when committed nutrition policy actors began discussing the details of program design and implementation. The case involves one country's effort to select "the best" anthropometric indicator for use in its national child growth-monitoring program. In this case the interested parties approached this deceptively simple decision for different reasons, using different sources and standards of evidence and focusing their attention on opposite, but equally critical, operational considerations, while being heavily influenced by global, national, and interorganizational events and relationships. We suggest that actors seeking to translate political commitment for nutrition into effective action should recognize the technical and sociopolitical complexity of seemingly simple decisions related to intervention design and employ more systematic, intentional, and inclusive decision-making procedures. Without attention to such practical matters, the current window of opportunity to reduce malnutrition on a global scale may quickly close.

Key words: Decision-making, evidence-based, formulation, nutrition, policy

Introduction

The opportunity to dramatically reduce malnutrition on a global scale has never been greater. In the past 3 years, bilateral and multilateral donors, development agencies, nongovernmental organizations (NGOs), academics, and private foundations have been uniting around a common global nutrition agenda to scale up interventions and support the development of "country-owned" policies [1–3]. The range of available evidence-based interventions [4] is also unprecedented in the history of nutrition. We argue in this paper, however, that a shared desire to find a solution to malnutrition and agreement at a broad level concerning priority, evidence-based interventions are important but not sufficient conditions for effective policy development. When committed nutrition actors begin to discuss the details of policy design and implementation and the relative emphasis to place on various strategies, difficult fissures in the consensus tend to emerge, as in other policy domains [5–7]. The key factor then becomes the extent and manner in which the actors resolve their differences.

Consistent with deliberative planning research [8–10], the case study profiled here speaks less about the traditional evidence and theories being used today *in* nutrition planning—the content of the interventions—and more about theories *of* nutrition planning—*who* is involved (and not) in setting nutrition policy and *how* nutrition planning is accomplished (or not). It chronicles efforts in one Central American country to establish a uniform approach for child growth monitoring as part of their national nutrition program. By all accounts, the decision should have been simple to make, set in a political context with broad support for moving forward an aggressive nutrition agenda. This is the case currently in many Latin American countries, where numerous large-scale nutrition-based programs are being launched along with the formation of interagency and multisectoral food and nutrition councils [11]. The more complicated dynamic that emerged in this case reveals the challenges that a number of other countries have likely faced or will face as they too adopt the recently launched World Health Organization (WHO) growth standards and seek to respond

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appropriately to the growing dual-burden problem [12, 13]. The case also provides a broader window into the difficulties nutrition advocates will confront as they attempt to agree upon other nutrition policy interventions (see **box 1**), unless more effective strategies can be used to facilitate future decisions at the policy formulation (design) phase [14].

BOX 1. Other nutrition policy decisions that generate conflict

- » Direct interventions vs. multisectoral strategies
- » Ready-to-use therapeutic foods (RUTFs) at the community level
- » Focus on overnutrition vs. undernutrition
- » Role of the private sector
- » Universal vs. targeted distribution of fortified complementary foods to young children
- » Food supplements for pregnant women
- » Mass distribution of high-dose vitamin A capsules in low-burden countries
- » Genetically modified foods (e.g., Golden Rice)

Background

Growth monitoring today is accepted as "an intrinsic part of pediatric care around the world" [15]. In a recent WHO survey, 154 of 178 (88%) Ministries of Health across both developed and developing countries reported that they monitor child growth [15]. The logic behind the practice is that "monitoring growth by plotting a child's weight at regular intervals and comparing the pattern of growth to reference curves of healthy children… provides an early warning signal and a trigger for early action," along with population-based data to inform national nutrition priorities [16].

The standards used to develop growth-monitoring protocols and the types of indicators used, however, vary widely and have been shifting. In 2004, 99 of 154 (68%) Ministries of Health were using the 1970s WHO/National Center for Health Statistics (NCHS) growth curves, while others were using standards that were locally derived, population-specific, or developed by Harvard and Tanner [15]. Nearly all (97%) focused on weight-for-age indicators (to diagnose undernutrition), while 41% tracked height-for-age (stunting) and 23% tracked weight-for-height (wasting) [15]. As concerns grew globally about increasing obesity rates and technical deficiencies in the NCHS standards [13], WHO revised the growth standards in 2006 [17] and began promoting greater use of height or length measures to differentiate more clearly between stunting, wasting, and overweight [15]. By 2008, 75 countries had adopted the new standards and 60 more were in the process [18].

To ease this transition, WHO suggested that countries decide "the purpose of growth assessment and guidelines for when and how to intervene," identify "the indicator and cutoff with the best balance of sensitivity and specificity," and launch "intensive training programs" [15]. This is technically sound advice but hardly begins to address the complicated decisions governments and aid communities must wrestle with, as illustrated in the following case.

Methods

The policy formulation process profiled here was selected as part of a broader multicountry study of conflict, commitment building, and consensus related to nutrition policy-making [14, 19]. Local nutrition advocates suggested the present growth-monitoring conflict as a good case study and identified eight key participants involved in the decision. Four actors are referred to as the *Ministry of Health team* (including three Ministry of Health staff and one UN partner). Four participants on the other side of the debate are referred to as the NGO actors, differentiated at times as *NGO network* staff or *LNR* (Latin American Nutrition Recovery, an international NGO) staff.

Telephone interviews were conducted in 2010 several months after the decision period, which lasted from 2006, when ideas about changing the growth-monitoring policy emerged, to early 2010, when the final decision was being implemented. Interviews were conducted in Spanish, lasted 60 to 90 minutes, and followed a semistructured, pretested interview guide. They were recorded, transcribed, and then coded into broad, preselected topic areas (noted below) before being analyzed further using open-ended coding. The more detailed coding across these topic areas was then compared across actors, to identify commonalities and areas of disagreement.

Interviews focused on actors' perspectives on the communications, dynamics, and agendas that shaped the decision-making process and outcome, including factors related to the actors and their organizations (i.e., the perceived salience of nutrition issues; their interests, values, and organizational agendas; opposing views and rationales; and sociopolitical relations), the processes employed (or not) in making the decision over time (i.e., formalized or ad hoc communication mechanisms, key events, unrepresented parties, actors' influence on the process or decision, and how conflicting views were resolved or not), and the variety of outcomes that emerged (i.e., effects of the decision on each party, institution, and their policy or program development, and lessons learned). When details were unclear, information was gathered through additional interviews with key informants external to these discussions or from published studies.

This research was exempted by the Cornell University

Institutional Review Board, as respondents participated in their official capacities and were not asked to share personal information. Nevertheless, all participants orally consented to be interviewed and recorded, with the exception of one actor from the Ministry of Health team and one from the NGO network, who agreed to be interviewed but not recorded. Identifying information has also been concealed to maintain anonymity.

Results

At face value, the arguments in this case appeared to be simply about the best "indicators" or the best "technique" to use in a national growth-monitoring program. The Ministry of Health team planned to reorient the entire health sector toward monitoring height or length,* largely eliminating the use of weight-for-age indicators. NGO actors, on the other hand, were proposing the adoption of "minimum expected weight gain" (MEWG) [20].

With one proposal focused on height and the other on weight, what one Ministry of Health actor called "white and black, water and oil," the discussion eventually reached an impasse and was resolved only when shifts in political power tipped the decision in favor of the approach preferred by the Ministry of Health (see timeline in **table 1**). Whether the Ministry of Health and NGO arguments were actually incongruent is unclear, however, because the decision-making process never allowed the actors to look for points of agreement or to find ways to negotiate their differences. Had they discussed the more complex interests behind each side's technical arguments, they might have realized that each side was moved by different trends in the *broader context*; concerned about opposite, but equally valid, *operational concerns*; backed by equally relevant but distinct *sources and standards of evidence*; and influenced differently by *historical and ongoing politics*. In the event, however, these disparate considerations and influences were never clearly articulated and distinguished. The following account describes how these influences manifested themselves, as well as the longer-term effects of the decision-making process.

Broader context

As **table 2** indicates, Ministry of Health actors were moved to act because of their concern that the country was beginning to simultaneously face an issue of both under- and overnutrition, a "dual burden" affecting many countries across Latin America and globally [12, 13], as the lead Ministry of Health actor explained:

> *I had done a study on the nutrition transition, reviewing the Demographic and Health Survey (DHS) data, which showed that the weight-for-age indicator was causing obesity, and that this indicator doesn't reflect well the nutritional situation for the country. Therefore, if you use these indicators (weight-for-age), you don't use the correct interventions.… I started to really study the issue.…The entire system was using weight. Everyone had a different perspective than me.*

NGO actors, on the other hand, acknowledged that obesity was rising but were less concerned because they believed nutrition interventions could not stimulate obesity in children under 2 years of age. They were worried more about the continuing chronic undernutrition problem, an issue they felt was being sidelined by the Ministry of Health "hospital-focused" proposal.

Sources and standards of evidence

The focus on height-for-age on the Ministry of Health side stemmed from multiple sources: the team's experience as clinicians treating malnutrition in hospital settings, findings from the lead Ministry of Health actor's study, another national-scale study by the Pan American Health Organization (PAHO), and a similar, global concern with obesity found in the academic literature, international expert opinion, and the new WHO growth standards. Ministry of Health actors believed these were the highest authoritative sources they should consult to develop a sound growth-monitoring program:

> *To change things, you really need to be sure of what you are going to do.… In devising the national nutrition program, we had to delineate interventions. We had to search for data which said what the problem was.… I consulted with people I have confidence in from other countries.… Several people on the team searched the literature, bibliographies, etc.… A PAHO study showed that 30% of children in our country with normal weight had short stature before 1 year of age. This type of evidence began to appear from every side. Then came the new WHO tables (showing) shorter children are thinner.*

Not surprisingly, Ministry of Health actors discounted the potential value of MEWG as a tool for reducing undernutrition by critiquing the quality of the evidence—what they saw as a few outdated,

* Specifically, the Ministry of Health proposal was to continue monitoring weight-for-age, but only for infants under 2 months of age, and height-for-age and weight-for-height thereafter. The plan was for community health promoters (where available) to take height measurements at months 6, 12, and 18, not for a diagnosis but to "plant images of height" and visibly show communities that "a good nutritional state is reflected in good linear growth," not in "getting fat." Promoters would be advised to refer children they believed to be at risk of stunting or wasting to clinics. Health staff would take measurements any time a child visited a clinic, but not on any regular schedule.

self-serving, contradictory, and poorly conducted studies.

Conversely, NGO actors argued, "There's a group of intellectual consultants in the Ministry of Health that focus on the up-to-date international literature, but they're decontextualized from the reality of the countryside in their own country." They noted how "the major complaint of many of our institutions is that we haven't gathered first the experience that already existed," such as the lessons NGOs had learned from adapting MEWG locally. As one NGO actor explained, "Counseling through women from the community who used MEWG, who aren't professionals…we can demonstrate that this has had success. That's what convinces me."

Operational concerns

Concerned as they were with national-level trends, the Ministry of Health team focused on the strategic decisions they believed were necessary to initiate at scale efforts to dramatically improve nutrition outcomes and change cultural "paradigms" that tend to equate greater weight with better health. To do this, they believed they were considering "every angle":

> *I believe that the team here (Ministry of Health) is strong in nutrition and that the NGO network team is not—they don't know. We work from the third tier hospitals down to the community. We have people who have clinical and public health experience. In a discussion, we can show all angles. I think it wasn't a very equal level discussion. The main person coordinating the NGO network program only shows a single angle.… We're developing a national program, not a project. If you develop a project, MEWG could work, but if you are developing a national program, you have to design everything up to the highest level. You can't have one thing here, and a different thing there.… If a mother sees the results of MEWG, what do the NGOs*

TABLE 1. Timeline of events in the development of a GM strategy

Date	Policy developments	Societal, science, and political events
1980s	Title II NGOs introduce GM (based on weight-for-age)	IMF-led structural adjustment; aid increases as poverty rises; NGOs favored to manage aid Launch of the National Nutrition Agency Chronic malnutrition drops by 40% to 30%
1990s	Title II NGO funding ends; most NGOs stop GM; public health workers conduct GM intermittently	Media, society, and government criticize NGOs World Bank seen as *the* health sector, top-down USAID gains reputation of not coordinating with and often undermining the government Government undergoes decentralization Nutrition Agency politicized, loses funding. Nutrition "policy" reduced to one project
2006	MOH analysis of DHS data finds high prevalence of overweight and stagnant chronic malnutrition rates MOH formation of IMCI working group World Bank suggests MEWG; MOH and NGO IMCI group members agree to oppose MEWG because there is little evidence of its effectiveness and it appears confusing for mothers and staff Title II midterm evaluation shows no chronic malnutrition reduction. USAID requires NGOs to try MEWG	WHO launches new growth curves and promotes integrating height measures
2007	UN agency conducts analysis: shows stunting underestimated when only weight-for-age used NGO network visits Title II MEWG sites in this and other countries—begins to change mind about MEWG MOH Director of Infant Mortality supports MEWG after visiting foreign sites with NGO staff NGO network obtains US$16 million from USAID for MEWG project	Election of new president on a platform where malnutrition reduction is prominent

continued

TABLE 1. Timeline of events in the development of a GM strategy *(continued)*

Date	Policy developments	Societal, science, and political events
Early 2008	Title II evaluation shows reduction in chronic malnutrition.	Start of new national administration
	NGOs convinced staff can implement MEWG and believe MEWG strategies effectively motivate caregivers to adopt new child care practices	MOH Director of Infant Mortality leaves; lead MOH team member hired to head national nutrition policy
	MOH Nutrition Unit operates using volunteers, with no budget and only one UN-run micronutrient project	
	NGO network and Title II NGO staff ask to join IMCI working group	
	Group reconsiders using MEWG	
Late 2008	Rumors that USAID and Title II NGOs plan to "spread MEWG across the country" without MOH approval	USAID–national government tension grows
	NGO network and IMCI group members criticize national nutrition policy as top-down and vertical in UN report	USAID political decision (unrelated to MOH) costs NGO network program a year
	MOH team reverses decision to integrate MEWG	
	NGO staff try to get MOH approval to use MEWG (but do not); NGO network project experiences further delay	
2009	NGO staff indicate receiving "notes" from MOH stating "in no uncertain terms" that MEWG could not be used	President endorses national nutrition policy. Donors commit over US$20 million. Line item from national budget dedicated to Nutrition Unit
	Title II and NGO network staff left out of MOH meetings	MOH Minister and Nutrition Director initiate steps to "professionalize" MOH. Hire 15 staff
	USAID requires NGO network to comply with MOH policy	Government launches external aid oversight unit
	MOH begins training field staff in new IMCI approach	
2010	MOH asks NGO network to design community IMCI	Title II USAID funding cycle ends

DHS, Demographic and Health Survey; GM, growth monitoring; IMCI, Integrated Management of Childhood Illness; IMF, International Monetary Fund; MEWG, minimum expected weight gain; MOH, Ministry of Health; NGO, nongovernmental organization; USAID, US Agency for International Development; WHO, World Health Organization

propose so that she not be confused when she arrives at the health clinic?

The "single angle" NGOs emphasized was one they felt Ministry of Health actors were ignoring—the many implementation issues the NGOs believed were addressed by the MEWG approach: the regularity of monitoring, the accuracy of diagnoses, the effectiveness of preventive care messages, and issues of rural household trust in and access to health clinics. As LNR staff explained:

Ministry of Health actors have practical arguments regarding how to implement MEWG, like that materials are expensive, it's complicated, etc. But I'd like to see.… If the Ministry of Health had piloted a height-for-age focus, they would have realized that this is not operationally feasible for the rural area. Measuring height is complicated, for both community volunteers and professionals. Even a millimeter or two can mean a child is labeled as either malnourished or normal.… The Ministry of Health focuses more on technical aspects than social-communication strategies to ensure parents change feeding practices.

Historical and ongoing politics

Combined with these underlying influences, the complex relationship between the Ministry of Health and the aid community—paralleling the scenario in other Latin American countries [21–23]—explains many of the reactions that took place during the decision-making process. This relationship was defined by the Ministry of Health's need for external assistance but animosity about its loss of authority that often accompanied the aid. Until recently, Ministry of Health actors noted how the World Bank "acted as if it *was* the Ministry of Health" using "interventionist and top-down" approaches. The US Agency for International Development (USAID) also had a reputation for funding NGOs without consulting (and often intentionally

TABLE 2. Summary of MOH and NGO arguments and support backing their claims

Concern	MOH claim	Type of support
Scaling up	MEWG is not feasible to implement at scale: too costly, too confusing for staff and caregivers, too staff intensive	Logical inference
Reducing population-level obesity rates	Monitoring weight-for-age inaccurately diagnoses stunted children as underweight. Doctors then recommend that the children gain weight, causing them to become obese	Programmatic experience in clinics; expert opinion; logical inference
Effectiveness	MEWG is not effective for reducing undernutrition and seems to increase childhood obesity	MEWG studies (viewed as few, outdated, self-serving, invalid, and contradictory); logical inference
Reducing population-level dual burden	By integrating height or length measures, we can differentiate obesity, stunting, and wasting. We must, since evidence shows a rise in obesity rates in our country and globally	WHO growth standards; formal studies; expert opinion; academic literature
Scaling up; paradigm change; professionalizing the health sector; reversing fragmentation	In designing a national program, protocols, indicators, and nutrition messages must be standardized at all levels of the system. We must "change the paradigms of all health staff" as well as the "deeply cultural, social assumption that fat people and babies are healthy"	Programmatic experience in public health; logical inference; visit to other country MEWG program that seems to have problems
Concern	**NGO claim**	**Type of support**
Preventing undernutrition	MEWG is effective for reducing chronic malnutrition	External program evaluation; programmatic experience in communities
Preventing obesity	If you promote more food intake in children under two, there is no relation with obesity, only growth in height. MEWG will not increase obesity	Interpretation of *Lancet* articles
Implementation	Health staff, even promoters, can implement and understand MEWG. It reduces many operational problems that will continue (or worsen) if height is the focus in the future	Programmatic experience in communities; visit to other country MEWG program that seems effective
Preventing undernutrition	GM focused on height-based indicators will frustrate caregivers if they see little progress in their children's height after changing their feeding practices	Programmatic experience in communities; logical inference
Preventing undernutrition	The indicator focus is a clinic-focused and treatment-oriented concern, based on selective "decontextualized" literature and expertise. Unless the MOH focuses on GM social-communication prevention strategies and less on technical aspects, undernutrition will not be prevented	Programmatic experience in communities; logical inference

GM, growth monitoring; MEWG, minimum expected weight gain; MOH, Ministry of Health; NGO, nongovernmental organization; WHO, World Health Organization

countering) national government ministries. One Ministry of Health actor similarly complained that "NGOs must stop thinking of health promoters as *their* promoters—they need to work as if they are part of the Ministry of Health system."

These dynamics suggest that the Ministry of Health's flip-flopping on the MEWG question (**table 1**) may have been in part for strategic reasons: the Ministry of Health first declined to use MEWG in 2006, probably as a political statement when the World Bank suggested adopting the approach; but in early 2008 the Ministry of Health may have reconsidered the approach as a way of maintaining cordial donor relations at a time when the Ministry of Health Nutrition Unit was administratively and financially weak and when the NGO network actors (who were using MEWG) were backed by a $16 million USAID project. The final decision to not allow the use of MEWG later in 2008 coincided with a government-wide interest in pushing back against the aid community, particularly USAID, just as the Nutrition Unit was regaining the authority to lead national policy.

As this latter shift occurred, there was a clear sense that the Ministry of Health actors were exerting their newfound power, as they noted how "We essentially said, 'This is the program and *the entire world* needs to use height.'… We didn't 'convince' the NGOs. It's the national standard. There's no discussion." Another Ministry of Health actor saw it as "a historic moment in epidemiology…the moment that *the country* decided to change paradigms. It was a policy mandate that

everyone who uses growth monitoring change their paradigm—it was an instruction." One Ministry of Health team member was also proud that "We did what we needed to do. It was important to establish Ministry of Health leadership with a technical vision.… We maintained a solid and consistent front."

NGO actors also felt the shift in power relations. One person noted how "They said to us at times that 'You appear to be against us, against the government.' They told (one of our staff) at one point that they no longer wanted 'outsiders' at the table." An LNR staffer also described how "Around this time I felt a certain closing off to international experiences. There's an argument within the Ministry of Health about government 'sovereignty.'" Displays of authority became especially heated by the end of the decision period:

> *[By 2009] there were no other opportunities to express concerns or participate in decision-making. The Ministry of Health sent USAID a "note" indicating we should not use MEWG. Other agencies received Ministry of Health notices indicating that in "no uncertain terms" could growth strategies like MEWG be used.… Though we had long participated in a very productive Ministry of Health working group, after the tense conversations in 2008, we started finding out about meetings to which we were not invited.… If we called about meetings, Ministry of Health staff would say, "We'll work on getting you an invitation," but eventually we weren't included anymore. Once they said in person, "Sure, come," but the next morning before the meeting they sent someone who said, "I'm sorry, since we still don't have the USAID document that says you agree not to work with MEWG, you can't attend."… Mid-2009 at the national nutrition program review, I asked to be a part of the IMCI* group, but they stuck me with the multisectoral group, I think, so that I wouldn't bring up MEWG.*

Behaviors on the NGO side also escalated the defensive posture of the Ministry of Health team. Ministry of Health actors noted how "the NGO network program seemed already coordinated," that project managers seemed to have a "clear mandate" to implement MEWG, and how "it seemed we were talking to the deaf." The lead Ministry of Health actor also recounted a meeting where USAID appeared to be flexing its funding muscles: "USAID staff said they were offering support in 'this way,' with 'these' funds for 'this' and so 'we want to use MEWG.' " NGO actors similarly admitted, "We should have informed and coordinated with the Ministry of Health from the start—not try to convince them to use MEWG several years after implementing it." One NGO network coordinator guessed that part of the breakdown may have occurred when rumors began in 2008 that USAID planned to "spread MEWG across the country" without Ministry of Health approval. Yet he was unapologetic about his critiques of the Ministry of Health nutrition policy: "I've been very frank in saying that the Ministry of Health nutrition policy is very vertical—another top-down approach without a social base of support to ensure its sustainability. I put that in a UN review that was conducted in early 2009. This angered the Ministry of Health…but I don't care—I'll continue being honest about what I see."

Decision outcomes

At the end of the decision period, there were tentative moves toward restoring relations, but both sides continued to disagree sharply about the implications of the Ministry of Health decision while indicating that there was a lingering mistrust and few lessons drawn from the experience. Even as Ministry of Health actors in 2010 admitted they lacked sufficient community-based knowledge for designing the national community IMCI strategy, and asked the NGO network to assist, they were unsure if NGO actors could work "honestly, transparently and with nothing under the table." Some NGO actors saw the chance to develop the community IMCI protocols as a new outlet for influencing Ministry of Health policy, to make "the approach much less clinical…[and] again focus on prevention." Others, however, were skeptical that this would make much of a difference, in light of the broader growth-monitoring decision which they felt "as a country…is a major setback for combating chronic malnutrition." One network actor also worried, "The fact that perspectives of people with years of experience don't appear to be taken into consideration by the Ministry of Health, just makes me doubt that they'll incorporate these perspectives in future decisions."

Asked what lessons they had learned from the process, Ministry of Health team members "would choose to make the decision the same way again" and interpreted that their decision "hasn't hurt the Ministry of Health. If anything, it helped the Ministry of Health attract more support, external funding and technical assistance, from various donors and the UN," totaling over US$20 million by mid-2010. NGO actors, on the other hand, continued wondering how they might have accumulated better and more convincing evidence about MEWG, as if this had been the crux of the problem. One network actor reflected

> *Maybe a neutral, impartial expert would have been able to evaluate all the options objectively to help us all decide what approaches to use, based on evidence.*

* IMCI stands for Integrated Management of Childhood Illness, a health model that promotes preventive care and combined treatment of multiple childhood illnesses [24].

Maybe advocacy for these approaches can be stronger. Maybe we haven't done enough research in [our country] on community-based approaches, to show its implications, how it should be done, etc.

Conclusions

This case was a classic example of "adversarial science" [25], the common result of avoiding or underestimating the complexity of a decision and failing to build in the opportunity for open exploration of the issue, structured dialogue about its multiple dimensions and uncertainties in the evidence base, and negotiation or reconciliation of alternative goals, interests, and perspectives. Rather than recognize how the broader context, opposing sources of evidence, unique operational concerns, and past and present sociopolitical factors were influencing each side's positions, NGO and Ministry of Health actors entered into a vicious downward cycle that pitted one seemingly "objective" technical argument against another. As a deliberative planning scholar has observed in similar scenarios, both parties were in fact trying to "win yesterday's war"; rushed to focus on answers without clarifying the questions or teasing apart their interests; made presumptions about the other parties or policy options so that "past relationships foreclose options"; and acted defensively, creating "zero-sum traps" rather than win-win scenarios [8]. Regardless of how technically "right" the final decision might have been, there are hints that "today's success (for the Ministry of Health) comes at the price of tomorrow's reputation and the next day's distrust" [8].

What might have prevented policy actors in this case from speaking at cross-purposes and potentially weakening the cohesion and political effectiveness of their nation's nutrition advocacy community? We argue that a more mutually satisfying, and probably "wiser" growth-monitoring strategy—one that would have been more durable, feasible, appropriate, and effective—could have emerged had both parties approached the decision-making process differently and acknowledged that there were several valid considerations and forces at play, aside from evidence.

Many decision-making models in the change management field could be considered and adapted for situations such as these. Two models are offered for illustration. The *search conference* [26] is a 3-day event based on an open-ended process of reflecting (both in plenary and in small groups) on a system's past and present condition and the potential future state (what would result if the status quo was maintained versus the group's desired outcome), and the features or activities that should be dropped, retained, or changed in order to move toward the desired state. This process contextualizes the issue at hand in the broader environment—which would have brought out the Ministry of Health's concern with global and national health sector priorities and nutrition conditions—while also grounding it in the details of the "task environment" and system within which a change must be made—which would have accounted for the NGO's concern with local-level operational issues. The second example, *deliberative mapping* [27], is carried out in separate meetings over several months and involves a series of individual interviews and initial small-group work among homogenous stakeholders who decide on a list of policy options, determine multiple criteria to judge each, and then discuss their relative weight and uncertainties; a larger conference where experts, public officials, and other stakeholders learn about each other's perspectives; and a final set of small-group meetings to discuss changes of opinion and identify the options where groups find the most common ground. This strategy is particularly useful for revealing the multiple criteria that underlie parties' preferences, creating spaces for groups with less power to express their diverging opinions and deliberate over tradeoffs, before finally settling on decisions all parties find workable. These are but two examples, among many, of structured, systematic decision procedures that are readily available but seldom used in nutrition policy formulation [28, 29].

Broader policy implications

In the wake of the Paris Declaration, the Accra Agenda, and broader recognition of the need for effective alignment in development work, the international nutrition community has embraced the principles of "country-owned" and "country-led" policies [1–3]. Inevitably this will require supporting the Ministries of Health in asserting their authority and coordinating the fragmented efforts that have long dominated the health sector and nutrition initiatives [30]. This case, and a decade of similar efforts in the 1970s that failed to create integrated nutrition actions in Latin America [31, 32], suggest that the "evidence" foundation upon which many nutrition agendas are being promoted [4]—emphasizing what *should* be adopted based on the evidence from high-quality implementation in efficacy trials—leaves wanting questions regarding the messiness of real decision-making processes. As we learned here, breakdowns in communication about even simple decisions can ultimately undermine, delay, or unnecessarily complicate the ability of nutrition communities to work together, even when they agree on the broad goal of prioritizing malnutrition reduction and using evidence-based interventions.

The first major lesson this case offers is that nutrition

policy decisions should not be approached as technocratic or apolitical events if advocates hope to make use of windows of opportunity that appear to be opening. Precisely because divergent experiences, perspectives, and contentious histories likely exist in national decision-making contexts, negotiated decisions become all the more important when multiple actors are involved in deciding and implementing. This means that "understanding stakeholder values, interests, and perceived tradeoffs, therefore, and knowing how to negotiate those effectively, turns out to be as important as being clear and 'data-driven' about one's own interests and action agenda" [9].

Second, although there is ample evidence that "conflicting parties can listen, learn, and act together, doing so is anything but a *natural* achievement" [8]. In other words, greater intentionality around decision-making strategies is needed at all stages of the nutrition policy process—from agenda-setting to implementation decisions—and with all types of policy choices, even those that look deceptively simple and technical, such as growth monitoring. Conscious effort to use systematic, structured, and intentional decision-making processes will be critical to move beyond troubled relationships, identify health system weaknesses and strengths, and integrate the best scientific, contextual, and experiential knowledge—from the lab to the community—to jointly develop and advance shared agendas.

Finally, as more intentional decision-making designs are promoted and applied, it will be important to assess the factors that influence their utilization, resistance, and effects on decisions, stakeholder relationships, commitment to nutrition agendas, country ownership, and programmatic outcomes. These "process studies" are needed to understand successful and problematic cases, "grounded in the dilemmas that decision makers face, the roads taken and not taken, and the efforts to move agendas under conditions of imperfect information, controversy, and other messy features of 'operating democracies' rather than idealized ones" [9].

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The formulation of consensus on nutrition policy: Policy actors' perspectives on good process

Renée Hill, Wendy Gonzalez, and David L. Pelletier

Abstract

Food security and nutrition are ascendant issues on global and national policy agendas in recent years, as a result of the global food crisis and growing recognition of the magnitude and consequences of these problems for human and economic development. The translation of this attention into effective action at the country level will require multistakeholder agreements concerning priority problems, interventions, delivery strategies, roles and responsibilities, and other matters, but this has proven to be a difficult and contentious process in many countries. This study explores stakeholders' perspectives on the characteristics of a good process in Guatemala, a country that has encountered difficulties deciding such matters in recent years, as well as their views on decision acceptance and the feasibility of implementing a good process. Semistructured interviews were conducted with 20 participants in earlier policy deliberations who were identified through snowball sampling. The constant comparative method was used for analysis. These participants attach great importance to the quality of decision processes, have strong support for decision principles derived from theory and experience elsewhere, would be willing to participate in such a process and accept the resulting decisions, and feel such a process would be challenging but feasible in the Guatemalan context. These findings, together with experiences elsewhere, suggest that countries would do well to seek agreement on the design of a multistakeholder decision-making process before they seek agreement on priority nutrition problems, target groups, interventions, delivery strategies, and other matters that have proven contentious in many settings.

Key words: Conflict, consensus, nutrition policy, policy formulation, policy process

Introduction

Undernutrition and food insecurity have become ascendant issues on global policy agendas in recent years due to the convergence of several factors. For undernutrition, these factors include broader recognition of the magnitude of these issues and their consequences for mortality, morbidity, cognitive development, work capacity, economic growth, and the Millennium Development Goals (MDGs) [1, 2]; the availability of effective, low-cost interventions [3]; and the convergence of global actors on a common framework for action [4]. For food insecurity, a catalytic factor was the food crisis in 2008 leading to the G8 joint statement on global food security [5], the High Level Task Force [6], and bilateral initiatives such as the US Feed the Future program [7]. Among other objectives, these global initiatives aspire to foster country-owned and country-led strategies, greater harmonization among external partners in support of these strategies, and the improvement of nutritional status among vulnerable groups as well as household food security.

As these initiatives become operationalized at the country level, a crucial activity will be policy formulation [4, 8]. In this context, policy formulation refers to the seeking of agreements among government ministries, external partners, and other stakeholders on priority interventions, target groups, and implementation strategies, along with delineation of roles and responsibilities. Although these global initiatives endorse the principles embodied in the Paris Declaration and Accra Agenda [9] concerning broad stakeholder consultation and alignment on the broad development agenda, they provide neither guidance on how to achieve this

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in relation to food security and nutrition in particular, nor mechanisms for monitoring and ensuring it will be conducted authentically and effectively. Yet, the experience in many countries reveals that this can be a difficult, protracted, and contentious process [10], even when high-level political commitment has been expressed [11].

The present study bears directly on this fundamental issue. It was undertaken in response to difficulties in policy formulation experienced by the food security and nutrition community in Guatemala in 2006/7, despite the fact that systematic and participatory procedures were used with that policy community in an effort to secure agreements on key interventions and strategies. Those experiences suggested either that various stakeholders may differ in their views of what constitutes an authentic consultation and decision process, or that they may refuse to accept the final decisions even after they have participated in such a process. The present study was undertaken to explore these alternative possibilities. The specific questions guiding this research are the following:

» What constitutes a good decision process from the perspective of actors in the Guatemalan Food and Nutrition Security (FNS) policy community?
» What are the desired results from a good decision process?
» Would these actors be willing to participate in a process designed according to good process principles?
» Would these actors be willing to accept the decisions resulting from a decision process if it met their criteria for a good process?
» Would such a process be feasible in Guatemala?

Background

Guatemala is one of the countries with the highest economic disparity in the world, with 60% of its income being concentrated among only 20% of its population. Among the 14 million total population, the poverty rate is 56% nationally and 75% in rural areas [12]. It has the highest prevalence of stunting in Latin America and among the highest globally, with 54.9% of children under 5 years of age being chronically malnourished or stunted (height-for-age z-score [HAZ] < –2 SD) [13]. Malnutrition is a reflection of the country's longstanding economic and political inequalities and social exclusion, with most of the hunger hotspots found in places most affected by the 36-year civil war, as well as recurrent droughts that damage the livelihoods of the population [14].

Despite their longstanding existence, malnutrition and hunger have only recently received high-level government attention. Extensive damage caused by mudslides after Hurricane Stan in October 2005, followed by severe droughts in parts of the country, raised awareness about the severity of hunger and malnutrition among politicians, media, and civil society. This renewed interest in malnutrition and hunger, and the commitment and strategic efforts of one high-level champion [14], were some of the factors that led to significant political commitment and support to address malnutrition and food insecurity (see **box 1**).

The new government structure, the National Food and Nutrition Security System (SINASAN), created by the Food and Nutrition Security law (**fig. 1**), and the multisectoral Program to Reduce Chronic Malnutrition (PRDC) recognized the importance of involving

BOX 1. From political interest to government structures and policy

During the presidential term of Oscar Berger (2004–2007), the Commission "National Hunger Coalition" (FNCH) coordinated a technical team to study the multiple existing versions of proposals for a national food and nutrition security policy. In 2004, the government established the National Food and Nutrition Security (FNS) policy after a long process of analysis and revisions in which actors from civil society also participated through the National Food Security Table (Mesa Nacional Alimentaria). In 2005, the National Food and Nutrition Security System (SINASAN) law (Decree 32-2005) was approved. This law established the functions and structures of SINASAN, created by the National Council for Food and Nutrition Security (CONASAN) as the governance body, the Secretariat of Food and Nutrition Security (SESAN) to coordinate the FNS activities in the country, the Forum for Consultation and Social Participation (INCOPAS) to integrate the various civil society organizations working with FNS, and the Group of Supporting Institutions (GIA) to provide technical, financial, and operational support for FSN activities.

During this same period, the planning and implementation of two programs—the Program for the Reduction of Chronic Malnutrition (PRDC) and Creciendo Bien (CB)—to improve the nutritional status of children began. The PRDC was coordinated by SESAN with the main objective of reducing the prevalence of chronic malnutrition among children under 5 years of age by 50% by the year 2016. This program was based on six main components: basic health services, food and nutrition education, breastfeeding and complementary feeding, water and basic hygiene, improvement of the family economy, and community organization. This program is currently implemented under the name of the National Strategy for the Reduction of Chronic Malnutrition (ENRDC). The CB program, discontinued under the new government, was coordinated by the Secretariat for Social Work of the First Lady (SOSEP), with the main objective being to develop the capacity of women for the prevention of malnutrition in children under 5 years of age through the improvement of dietary practices in the family and community.

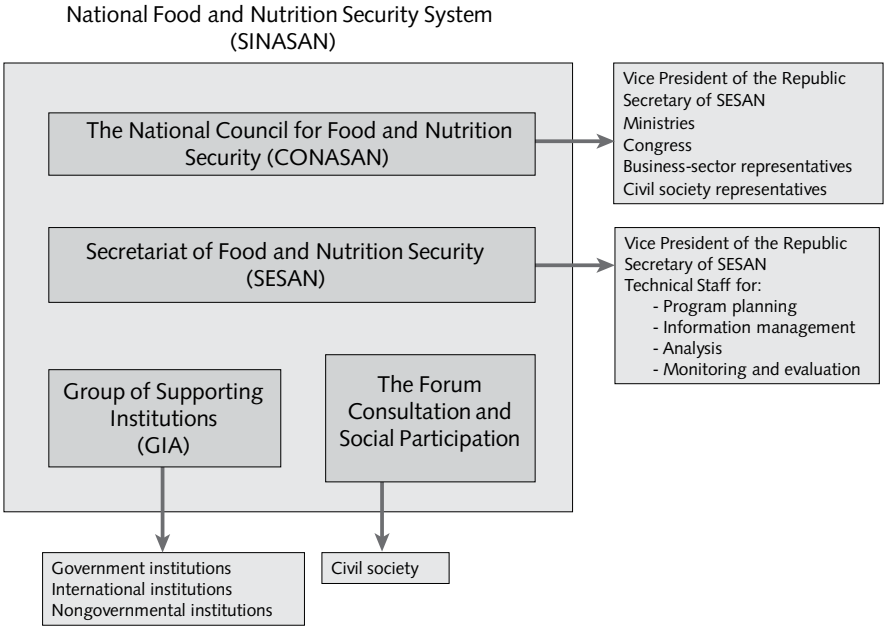

FIG. 1. Diagram of SINASAN structure

multiple sectors in the development and implementation of policies and strategies. Therefore, the Guatemalan FNS community engaged in a systematic approach to formulate specific interventions and delivery strategies to address malnutrition and food insecurity in the country. The FNS policy community included actors from many sectors and administrative levels, from governmental and international agencies, national and international nongovernmental organizations, and academic and research institutions.

The impetus for the present study came from the results of an exploratory study conducted 1 year earlier, by the same authors, which sought to document the highly successful agenda-setting process that stimulated government attention and the creation of national policies and structures [15]. An unexpected outcome of that study, involving interviews with 50 members of the FNS policy community, was the discovery that the subsequent policy formulation stage had encountered a number of challenges, namely, fragmented and competing efforts of various actors and institutions; interpersonal and interinstitutional jealousy, lack of trust, and differing values, interests, and perspectives; and varying levels of commitment to the FNS agenda. We undertook the present study in part in an effort to better understand what type of decision process might prevent or overcome such challenges in Guatemala itself, and in part because such challenges are found in many other nutrition policy communities at the national and global levels [10, 16]. This work received logistic assistance from the country Food and Agriculture Organization (FAO) office but otherwise was not aligned with or influenced by any of the FNS policy stakeholders.

Methods

Research approach

The object of study in this research, namely, the perspectives of FNS policy actors on the desirable features of a good decision process, is inherently subjective, complex, and contextual. It also is one that has received a considerable amount of attention in the literature, but mostly in industrialized democracies. Finally, given the identity of the respondents (mid- to senior-level participants in an ongoing policy process at the national level), we anticipated a need to limit each interview to 1 hour or less. For these reasons, we employed semi-structured interviews designed to elicit a combination of unprompted and prompted responses concerning the characteristics of a good decision process, with the main prompt being a tool developed for this study based on previous empirical and theoretical literature (described below).

Participants and sampling

This study sought to interview all actors involved in the Guatemalan FNS policy community, defined as those who were part of SINASAN, along with active participants from academic and research institutions. Purposive snowball sampling [17] was used in the

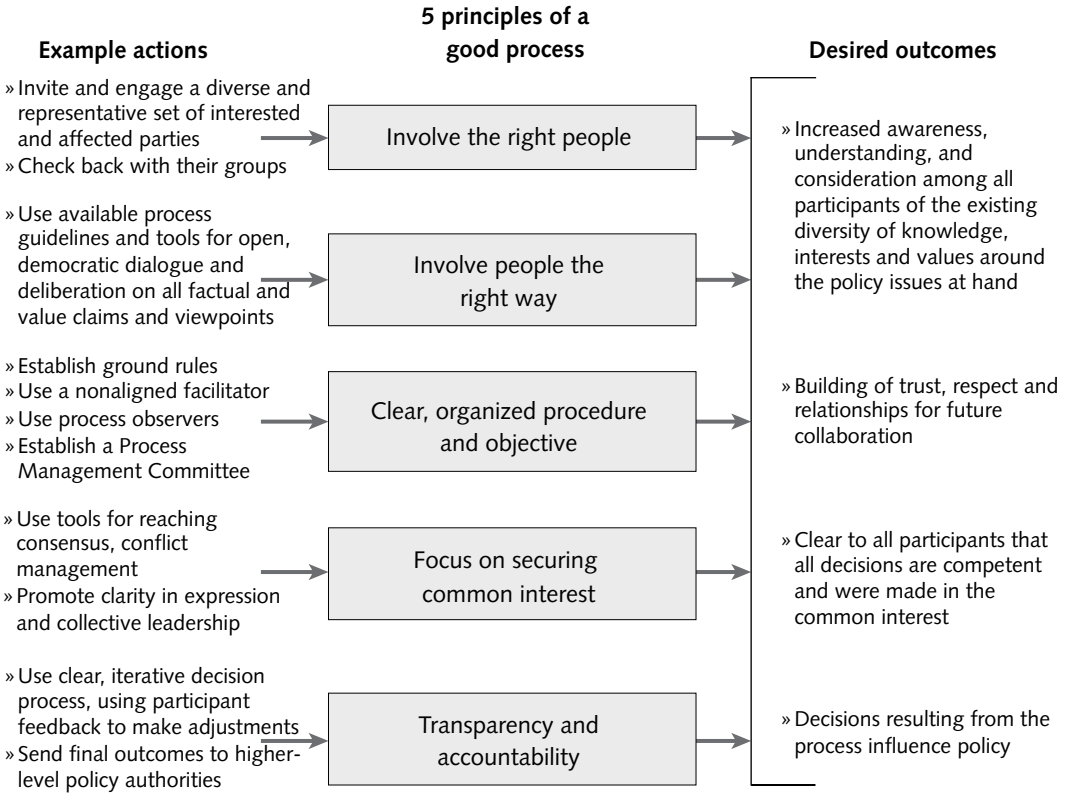

FIG. 2. Five principles of a good process, example actions, and desired results

earlier exploratory phase [18] to identify the specific individuals to interview. This set of individuals (n = 50) then became the sampling universe for the present study.

E-mail invitations were sent to all 50 actors from the exploratory phase. Forty-four actors responded to e-mail and telephone requests (6 did not respond), but 24 were not interviewed due to new jobs (n = 7), scheduling conflicts (n = 10), and participation in a parallel study (n = 7). Thus, for the present study we conducted semistructured interviews with 20 actors in all, including 10 from governmental institutions, 4 from nongovernmental institutions, 3 from international institutions, and 3 from academia.

Instruments, data collection, and analysis

A semistructured interview guide was developed [18] to gather unprompted and prompted responses related to the research questions. We created an interview tool (**fig. 2**) by aggregating the elements of a good decision-making process mentioned in peer-reviewed literature from a range of academic fields and policy domains [18]. This literature identifies a variety of criteria of a good process from normative theoretical perspectives (i.e., what principles *should* be followed) and from an empirical perspective (i.e., the key principles as viewed by participants in actual policy deliberations). Procedurally, we first consolidated elements from a small number of seminal papers and then reviewed other papers to search for additional, nonredundant principles. The seminal works were various papers by Webler, Renn, and colleagues who combined theory and case studies to construct a theory based on the meta-constructs of fairness and competence in citizen participation [19–23]; Rowe and colleagues [24, 25] who developed frameworks for evaluating public participation and reviewed empirical evaluations of public participation cases; and a committee of the National Research Council (1996) that made recommendations on how to integrate technical analysis and social deliberation into policy-making [26]. The additional papers used to supplement the principles from these works are cited in Hill [18].

The process elements discussed in this large body of literature were initially compiled into lists and then aggregated into five categories of principles, four categories of desired outcomes, and a set of illustrative actions that could be used to operationalize the principles (**fig. 2**). (The full list of process elements is shown in Hill [18]) The boundaries between these five principles are recognized to be fuzzy and the categories

are not mutually exclusive. These five categories were chosen for purposes of organization and to prompt a discussion with the participants about process criteria, recognizing that they would interpret and unpack them as they saw fit.

The first part of the interview sought comments from the participants on the report the authors had prepared based on the earlier phase of the research, which documented the difficulties the FNS community had encountered in policy formulation. This helped create the context for the main portion of the interview, which focused on their perspectives on a good process. The participants then were presented with the tool (**fig. 2**) either as a hard copy (8 face-to face interviews), an electronic copy (10 telephone interviews), or an oral description (2 telephone interviews when a computer was not available). When the tool was presented in person, the pieces under discussion at any point in time were revealed and others were concealed in order to minimize distractions. When the tool was presented by telephone interview, the interviewer asked the participants to direct their attention to each of these pieces at the time they were discussed. Presentation of each of these pieces of the tool consisted of the interviewer's reading and briefly describing each element in order to give sufficient background detail about process characteristics to help the participants to become familiar with the process ideas.

Each of the interviews lasted between 45 and 80 minutes. All of the interviews were carried out, transcribed, and analyzed in the Spanish language. The interviews were analyzed by the constant comparative method [27], as described in further detail elsewhere Hill [18]. As a means of validating the findings, a member-checking process was used [17], in which interview transcripts were sent via e-mail to the participants in order to allow them to make changes and to ask for their acceptance of the use of the transcript in the present study. They were notified that a nonresponse to the e-mail within 2 weeks would be considered as acceptance of the transcript for its use in the study. Seven participants responded to the member-check e-mail, four of whom provided revisions consisting of grammatical and wording corrections. All seven approved the use of their transcripts for the study.

This research was submitted to the Cornell University Institutional Review Board for approval and was exempted on the grounds that interview respondents were participating in their official capacities and not being asked to share personal information. Nonetheless, oral consent to record and transcribe the interviews and to participate in member checking was obtained from each interviewee.

Results

Desired results from a good decision-making process

Data concerning the desired results of a good decision-making process were obtained when prompted by the tool and from unprompted portions of the interview (before the tool was presented). The unprompted comments from six participants suggested that a good process should ensure that the policy will truly achieve its objectives; will meet community needs; and will delineate institutional roles, responsibilities, and coordination.

> *Because I would be sure that my efforts and my contributions are going to have an impact, and that it is not just a tiring and frustrating process . . . . we often end up frustrated because we do not manage to overcome the challenges and results are not visible anywhere, so . . . to find something that really allows us to see that what we do is really going to be good for the country.*

After being shown the tool, all participants agreed that the desired results shown in the tool are results that they would hope for or expect from a good decision-making process. Additional comments volunteered by various participants included that these results may be necessary but not sufficient, that "respect for decisions made by the group" should be added, that clarity and consensus about the process should be assured, that the responsibility of all actors and sectors should be clarified, that the views of local authorities at the community level should be included, and that these inherently subjective "results" should be accompanied by measurable indicators. One point of direct disagreement was expressed in relation to the second desired result (building of trust, respect, and relationships for future collaboration). One participant commented that this result was impossible to achieve in the context of the National Council for Food and Nutrition Security (CONASAN), where ministers and civil society are involved together, and that it should not be expected in this context.

Further insights about desired results were obtained from 12 participants late in the interviews when they were commenting on the importance of participating in a good process, not just any process. The emergent themes were to involve actors and improve representation, build leadership, create dialogue, make valuable contributions, reach consensus, build trust, improve coordination, and achieve objectives.

> *In order to deliver and truly work toward the reduction of food insecurity in Guatemala in all the communities, this requires a certain type of trust. Without trust people do not consider working together.*

Characteristics of a good decision-making process

Unprompted responses

Prior to introduction to the tool, the participants were asked, "What elements are needed in a process in order to achieve these results?" The emergent themes were participation, dialogue, and clear rules for decision-making; participants with knowledge and decision-making power; clear, shared objectives; clear procedure, provision of information, and planning prior to process; leadership and credibility to build trust; and documentation and sustainability of process. All of the responses were related to the five principles of the tool, which the participants had not yet seen. Although no one particular participant mentioned all of the elements in the tool, all the elements were mentioned when the responses were looked at collectively. A few elements noted by participants but not included in the tool were the need for documentation of the process in order to share and refer to later, and the idea of creating shared agendas. The latter was implicit in the tool, as part of working toward identifying and serving the common interest, but it was not made explicit as an element.

Prompted responses: Local interpretations of the five principles

The participants were then asked to describe what each of the tool's five principles of a good process means in this context in Guatemala. Emergent themes from the discussions of each principle are presented in **table 1**.

Principle 1: Involve the right people. The responses emphasized that many actors from multiple sectors and disciplines should be involved and that those involved should represent the population. There were also many comments indicating that participants should have knowledge about, experience with, and interest in the issues at hand in the process. The comments also suggested that those affected by FNS problems and those with a professional position and decision-making capacity in the area should be involved in the process. Two participants referred to the need to set the agenda first, then involve the people according to the agenda.

Principle 2: Involve people the right way. The responses revealed the types of interactions these interview participants value in a decision-making process, such as open dialogue and clear communication, democratic and genuine participation, participants' having a voice and being involved in the decision-making, respect for values and differences, achieving consensus, and having an unaligned, unbiased facilitator.

Principle 3: Clear, organized procedure and objective. All of the comments about this principle also were underlying elements in the tool [18], although some were not explicit in the summarized tool shown to participants. Examples include shared objectives, time frame established and respected, clear roles and responsibilities, and documentation of the process. Establishing and respecting a time frame is an "example action" in the tool, rather than a principle, illustrating the fuzzy boundaries between these components of the tool.

Principle 4: Focus on securing common interest. Comments about this principle were related to the prioritization of community needs, limiting individual and political interests, common objective consensus, an organized process, and satisfaction with the process, all of which are related to one or another of the five principles in the tool. Several comments referred to an organized process and satisfaction with the process;

TABLE 1. What do each of these process elements mean in this context?

Involve the right people. Multidisciplinary, multisectoral, multiple actors; representation and voice; knowledge; experience, interest, and opinions; affected by problems at hand—civil society, communities, families; professional position and decision-making capacity; present proposals, not just complaints; involve the people according to the agenda; who should decide who the right people are?
Involve people the right way. Open dialogue and clear communication between actors/levels; democratic, genuine participation throughout entire process; voice and involvement in decision-making; respect for values and differences; achieving consensus; unaligned and unbiased facilitator; political will and true commitment
Clear, organized procedure and objective. Participation and group function (dialogue, facilitation, conflict management); planning and leadership; clear, shared objectives and strategic plans; agenda and time frame established and respected; clear norms and rules; clear roles and responsibilities; consensus; documentation and monitoring and evaluation of the process
Focus on finding and serving the common interest. Awareness of problem and prioritization of community needs; limit individual interests, political interests, and corruption; common objective, common agenda, and consensus for interinstitutional coordination; organized, continuous, long-term process; satisfaction with participation, contributions, and process
Transparency and accountability. Participation, contribution, and recognition; collaboration and resolution of turf issues; limit corruption; sustained, long-term decision-making processes that achieve their proposed goals; sharing of results; follow up decision-making process by acting on decisions, designating financial resources, and maintaining monitoring and evaluation systems

these ideas were envisioned as part of the third principle (clear, organized procedure and objective) and as an implicit result of a good process, respectively.

Principle 5: Transparency and accountability. Most comments about this principle were related to the previous four principles. The comments addressed the need to have recognition for participation and contribution, resolve issues related to turf, limit corruption, sustain processes over the long term so they will meet their proposed goals, share results, follow up on decisions, designate financial resources, and maintain monitoring and evaluation systems. The comments about sharing results referred to sharing the results with process participants as well as with others outside the process, which is a more inclusive concept than that written in the tool about communicating results to the appropriate political authorities.

Overall comments on the tool: Agreement, additions, and modifications

After discussion of each of the five process elements in the tool, the participants were asked to share their overall comments about the tool and whether they would suggest adding, eliminating, or changing any of the elements. There were many comments that indicated agreement with these elements as a whole and no comments indicating disagreement with them. There was one comment that indicated possible disagreement, which was more of a call for caution with the use of a prescribed set of process principles that guides or expects certain behavior:

> *It must be understood that Guatemala is a society that has a diversity of cultures and ethnic groups that have their own forms of organizing themselves. . . . We need to be very respectful of these forms and not impose our own forms.*

Regarding suggested changes to these principles, two participants referred to the need to make these principles less general and more specific to the FNS context in Guatemala. Many referred to the need to emphasize follow-up on actions in these principles, indicating specific aspects of follow-up such as commitment, evaluation, and designated financial resources. Another suggestion was to show transparency as a transversal element instead of a separate principle:

> *This [transparency and accountability] should be something transversal. Because public policy is never linear, it is never going to be a process where everyone is going to be there because they like it, because they want to collaborate, because they have trust, no, it is a great struggle with interests at stake.*

Other suggested changes were related to respect among participants and creating a win–win situation. These comments suggest that the principles and desired results of the tool as a whole resonated well with these actors.

Willingness to participate

The participants were asked whether they would be willing to participate in a new process with these principles. Eighteen of 20 participants stated that they would be willing to do so. The reasons they cited included the fact that they had already tried or were trying to create such processes, they had the capacity to participate like this, a process like this was necessary, and there was a need for clarity, organization, participation, shared principles, transparency, and a common agenda. Most of these are tightly related to the desired results and principles in the tool:

> *Yes, because our forms of working have not been effective.*

> *Of course I would. . . . . If it is a clear, organized, transparent, inclusive process and in the medium term we can see real results I think I would be willing to participate.*

> *Yes, yes. Of course. Because I think that at least there are principles that are shared by everyone and by participating like this we make the process ours.*

One participant responded "no," stating that these actors were already involved in this process. The participant who indicated "maybe" initially cited a lack of time, but then mentioned that a process like this is attractive and expressed interest and willingness to participate if it really was to be a good process.

The participants were then asked whether they thought that the other actors in the Guatemalan FNS policy community would be willing to participate in a new process with these principles. There was more doubt expressed in their responses concerning other actors' willingness to participate than concerning their own. Fifteen of 19 participants thought other actors would be willing to participate, citing the priority of the issue in the country, the results that would be achieved, the motivational impact of seeing results, willingness to give time to achieve this and the need to understand the issues, and the need for organization and collaboration. These reasons are similar to those provided when the participants were asked about their own willingness to participate, showing that they believed other actors had similar values and motivations to their own. Four actors said that other actors might be willing to participate, but the reasons for their hesitation were due to concerns (based on previous experience) about which institution convened the process, the lack of transparency, and the existence of partisan agendas:

> *I don't know. . . . I don't know what the other actors think. I think so, though. I think that it would be hard for them to value a good process if it is based on partisan views.*

> *It depends how you frame it, you should propose it at the institutional level. For example, FNS issues should*

TABLE 2. Willingness to accept decisions resulting from a process with these principles

Would you be willing to accept resulting decisions? Yes, . . . (reason why): Decisions made with participation and in the common interest; if aligned with community needs; if it is focused, logical, and in line with the law; if participatory, democratic, and consensus-based; satisfaction and ownership of process; easier to reach consensus; if the other side's point is valid; objectives achieved; part of the good process is that participants agree to accept final decisions
Would others be willing to accept resulting decisions? Yes, … (reason why): Support consensus, fact that there was a good process; must respect the consensus; common interest and achieve an impact; if it is done based on the law; participatory, democratic process is convincing. *Maybe . . . :* I hope so; this has been proposed, but not applied; depends on conflict management; transparency will help; Guatemalans are opinionated; people change; I can't speak for them. *Some will, but others won't . . . :* Easier to accept decisions in some cases; there are disagreements; depends on the values of each participant

be within CONASAN, articulated by the Secretariat of Food and Nutrition Security (SESAN). If it is proposed there, I don't think there are any barriers with these principles.

Willingness to accept decisions

When the participants were directly asked whether they would agree to accept the decisions resulting from a good process, all 20 participants responded "yes." Although the explanations for their positive responses varied (**Table 2**), all of the responses were related to elements that are included, either implicitly or explicitly, in the tool. Most responses referred to process elements as providing the conditions necessary for accepting the decisions resulting from a good process. Several participants referred to the fact that part of a good process should be the acceptance of the resulting decisions. Some referred to the fact that agreement on the process will allow for consensus and for acceptance of the final decisions. There were three references to achieving results and producing results that will be used. One participant explained that acceptance of decisions would depend on the validity of the arguments used by other participants:

Definitely. If there has been participation. I don't have any doubt that I, or others, would accept the decisions. Even though sometimes I don't agree, but if the majority sees that this is the common good, then I would be willing. If the majority see this as beneficial, I don't doubt that it is going to be beneficial.

The participants were then asked whether they felt that the other actors in the FNS policy community would be willing to accept the decisions resulting from a good process. Eighteen participants were asked this question, and 11 responded "yes." Many of the affirmative responses emphasized that acceptance would depend on the fact that it really was a good process. There were several comments emphasizing that participants would respect the consensus from a process as long as it did have these elements. There were also references to acceptance of results conditional on a democratic process, based on the law, and in the best interest of the country. Two participants provided contextual examples from the Guatemalan FNS policy community, one describing a situation where there was little acceptance of a decision that was not based on consensus, and the other describing an example in which a democratic process led to the acceptance of decisions. All of the themes that emerged from the affirmative responses had already been previously mentioned during the interviews, and all were related to elements of the tool. The participants referred to the principles in the tool in order to describe why they felt that they themselves and others would be willing to accept the decisions resulting from a good process:

I think so. People see that in reality the decisions were made thinking of the common good, and thinking that this is going to be what really leads to an impact, people will accept it. I don't think that they are going to oppose.

Definitely, if it is based on the structure of the law, if it comes from the law. It wouldn't be questioned because it is institutional.

Four participants indicated uncertainty about whether others would accept the resulting decisions. One explained that a process like this had been proposed but has not been applied. One indicated the inability to speak for others. Two indicated that acceptance would depend on the ability to manage conflict and differing opinions. Three participants felt that some actors would be willing to accept resulting decisions, but others would not, depending on the decision itself, management of disagreements, and the values of the process participants. All of these conditions for acceptance are included as elements in the tool, so in effect these participants are further endorsing these elements but implicitly indicating concern about whether these can be met:

This is going to depend on how the conflicts that arise are managed. As long as it is discussed well and the reason for the conflict is well understood, greater consensus will be achieved, and in the end the people are going to say that they are content with the results. But, of course, not everyone is going to agree. As long as this is transparent it seems that people will not complain much.

I hope so. These solutions [principles] have been

proposed, these solutions [principles] are there. What needs to be done is apply them.

Feasibility in Guatemala

Eighteen interview participants were asked whether they thought this type of process would be possible in this context in Guatemala. Twelve participants said that a process like this would be possible; however, they indicated existing challenges that would have to be addressed to make this possible. These challenges included time (a process like this would take a long time; it would have to be efficient), clear objectives (we would need clarity on what we would be doing and how it would be done), leadership (the process organizer has to have the authority or power to carry it out), political backing (such backing would motivate participants), and process awareness (shared understanding among participants of the processes to be employed):

I think so, even though it will be difficult. But it could be done. I think that it is very complicated, but it is necessary. Complicated because of the diversity of actors that are involved, for the attitudes that people have. Also because the results are not seen in the short term. Sometimes there are groups who want immediate results, but to start now and hope that in 1 month we will see a nutritional impact is impossible. So many people lose patience and stop participating. This makes it more complicated, but I think [this process] would be worth it.

Two participants stated that a process like this would not be possible. One of them explained that there is too much inequality in Guatemala and the other said it simply would take too much time. Two other participants felt that feasibility depends on the proposed purpose of the process and the amount of time it would take. Two others felt that this type of process was already in progress in part or had been interrupted. In effect, these 6 participants who doubted feasibility identified the same challenges as the other 12 participants, but they were less optimistic that these challenges could be overcome and did not identify the actions that could be taken to overcome them.

The role of evidence

Although it not included as an original objective of the research, we noted in the course of analyzing the data that there was little or no reference to the role of evidence in the decision-making process. Given the importance placed on evidence by experts, academics, and international agencies, we undertook a systematic search on this theme throughout the interview texts (**appendix 1** presents the references to the themes that did emerge). There was only one reference to the role of experts in decision-making, and there were no direct references to evidence-based decision-making. However, there were many references to the fact that those involved must have knowledge of the issues at hand and the need for technically sound decisions. Many of these comments distinguished between political and technical roles in the decision-making process and the need to maintain a balance between these, in addition to the need for decisions to reflect community realities, as emphasized throughout the interviews. Some of the comments indicated a need for politicians to be involved in the decision processes in order to better achieve the needed balance and to increase their awareness and understanding of the issues:

The technical level [needs to be involved] because they know the problem and the political level because that is where the final decisions are made, those that lead to actions. It can't be only technical, or only political, or even only those who know the issues. Everyone has to be involved.

Discussion

Policy formulation in a multistakeholder context is an inherently ambiguous and difficult process because of differing perspectives concerning the nature of the problem and the most effective and appropriate solutions in a given context [28, 29]. Far from being empirical or technical matters that can be resolved through better evidence alone, these perspectives are intimately related to variation in institutional, professional, and personal values, interests, historical relationships, trust, and other factors [30, 31]. All of these factors were present in the Guatemalan FNS policy community, as documented in the exploratory study [15] that gave rise to the present study, and they have been observed in a much larger set of countries [10]. In a situation such as this, successful policy formulation (defined in terms of decision quality, acceptance by stakeholders, and respect for democratic norms) depends upon the quality and acceptance of the decision-making process employed [26]. These issues have received virtually no attention in nutrition research agendas, with most research instead focusing on technical matters related to the causes, consequences, and efficacy of potential interventions [16, 32]. The present study is the first to our knowledge that examines the extent to which the FNS policy stakeholders in a given country might agree on what constitutes a good decision-making process and whether they would, in principle, accept whatever decisions emerged from such a process.

The first major finding is that the Guatemalan FNS stakeholders are in strong agreement with the principles derived from the theoretical and empirical literature from industrialized democracies concerning the desired outcomes and characteristics of a good decision-making process. Presentation of the tool generated detailed discussion of the process principles

that matter to these stakeholders and often generated further suggestions for process principles. (Typically these already were embodied in the long list of elements that underlies the summary tool itself; see [18].) The second major finding is that all 20 participants stated they would be willing to accept the results of a decision-making process based on these principles. Their explanations for doing so invariably were in terms of one or more of the outcomes or principles embodied in the tool. The majority also felt that other participants would accept decisions from such a process. The minority who disagreed did so because of feasibility concerns: these participants were not as optimistic as the others that the process principles could be faithfully applied. The feasibility challenges identified related to the amount of time, organization, and sponsorship required. Even while noting these challenges, most participants suggested that these could be addressed by employing an efficient process, with clear objectives, appropriate leadership and facilitation, political backing (to motivate participants to be efficient and results-oriented), and clarity on the process principles to be employed. These all are embodied in the tool and the underlying elements gleaned from the literature, but these participants are pointing to some important practical considerations identified in all such decision processes [33].

The interpretation of these findings must take account of potential sampling bias, response bias, investigator bias, and contextuality. Of the 50 actors interviewed in the exploratory study, 44 responded to the invitation and 20 were interviewed. None of the 44 refused to participate in the interview; however, we have no knowledge of why these other 6 actors did not respond to e-mails or telephone invitations. Our knowledge of the context in which these actors work (from the exploratory study) leads us to believe that most of the nonresponse and nonparticipation is due to their tight schedules and the change of government administration that led many to change jobs. There is no apparent reason to believe that the nonresponders were less interested in these issues or would respond differently, but this remains a possibility.

In principle, response bias could have arisen as a result of prompting with the tool, social desirability bias, and the hypothetical nature of the interview questions. These may have been mitigated, but not eliminated, by the rapport established in the exploratory study (when all interviews were face-to-face), the relaxed nature of the interviews, the importance these participants attached to good process in light of their recent experiences with the FNS policy formulation, and the opportunities created (and taken) for participants to express their own views. The interviewer's impression was that the participants considered the interview to be addressing important issues directly connected to their work and their interests, as opposed to an academic study, and they did not hesitate to give their views on good process. The efforts to minimize investigator bias included the use of audio recordings, complete transcriptions, member checks, iteration between text and codes during the analysis, and the need for the first author to defend her methods and interpretations to her M.S. thesis committee [18]. However, the possibility of such bias remains a threat in all qualitative research [17]. The hypothetical nature of the interview questions (regarding willingness to participate in and to accept decisions from a good process) is an inherent limitation of this study and highlights the need to study these issues through careful evaluation of real-life policy deliberations conducted via process principles explicitly agreed upon by the participants. The role of contextuality in interpreting these findings is addressed below.

Conclusions and policy implications

The most important conclusion from this study is that actors in the Guatemalan FNS policy community show a substantial interest in the elements of a good decision-making process and that they recognize its importance for making sound decisions, gaining consensus and acceptance of decisions, and respecting democratic principles. The elements of a good decision-making process distilled and summarized from theory and experience in industrialized democracies resonate well with these actors, and they express both the desire to participate in such a decision-making process and a willingness to accept the resulting decisions. They further indicate that a process with the proposed principles is needed and, with careful attention to detail, is a feasible way to undertake FNS policy formulation in Guatemala. The detailed design of such a process is a matter that would need to be discussed and agreed upon by the FNS policy community in Guatemala and in any other country, taking account of a wide range of contextual considerations. The tool used in this study and the detailed elements underlying it [18] might be used as a starting point for that discussion, and there are some well-established methods from the change management field to facilitate such a discussion [34–36].

It is likely that the difficulties that faced the Guatemalan FNS community will be encountered in many other countries as the major food security and nutrition global initiatives get under way [4, 8]. Those initiatives all have expressed a desire to harmonize the efforts among external partners in support of government-owned strategies, but they have not articulated the principles and processes to be employed for that purpose. The Guatemalan experience (including the difficulties experienced earlier and the findings of this study) suggests that these countries would do well to

seek agreement on the principles for a multistakeholder decision-making process (i.e., "constitutive" policy decisions) before they seek agreement on priority nutrition problems, target groups, interventions, delivery strategies, and other "ordinary" policy decisions [37]. It will require an investment of time to agree upon these principles and then to implement them well, but this needs to be weighed in relation to the potential benefits in terms of decision quality (and public health impact), decision acceptance (and conflict avoidance), and strengthening of democratic norms and capacities [26].

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Appendix 1. References to technical, knowledge-based, and evidence-based decision-making: Emergent themes and quotes from interviews

Theme: Institutional roles: Technical versus political

"Now the Secretariat of Food and Nutrition Security (SESAN) exists, there are meetings . . . and things are going well… There can be good intentions, but they aren't carried out because they have to present their purposes to levels that are more political than technical. So we arrive at an option that is not necessarily the best technically but makes for better visibility.

The role of SESAN is more one of technical coordination, not political coordination… The Forum for Consultation and Social Participation (INCOPAS) makes decisions at a different level… about technical opinions about situations… So INCOPAS has to say something about the fortified food, they have a technical opinion and they share it. So the National Council for Food and Nutrition Security (CONASAN) comes and says that they can't have opinions about this because this is a very technical matter and does not fit within their role, that INCOPAS should be a consultation to civil society, but not for technical issues. But, yes, this is within the role of INCOPAS.

There has to always be a technical secretariat, with representatives from both parts. Because generally government is more political than technical. But I am talking about helping people express their ideas, transform their ideas into institutional documents. The people from rural areas have excellent ideas and we have to help them transform them into an institutional language. There always has to be someone with technical training to help, if not, this will not happen.

I would say that there should be a technical group. There was one, the Interagency Group for Food and Nutrition Security (GISAN), but it disappeared, it is not in the law. It is an inter-institutional group, a technical group that should sit with INCOPAS, to talk with them, GISAN with the technical role and CONASAN with the political role. But what happens is that in the political part they discuss technical things that are nothing within their role.

And what happened with INCOPAS is that it was technical people. Technical, and not very political, and with an interest in finding common interests."

Theme: How decision-making is or should be

"The politicians are the ones who make the decisions for the implementation of actions. But the technical people are the ones who design the interventions and those in civil society are the ones who live the situations. These would be the right people. Currently there is more participation in the technical aspect. And what is lacking is the participation of the politicians and civil society.

[Decision-making should be] technical, knowledge-based, and inclusive.

It is impossible to reduce malnutrition without financial support and technical assistance.

[The decision to distribute Vita Cereal] is a super-controversial case in the country. Because it has many connotations, and people presume that there are many elements that are not technical, not transparent, without accountability in the decision-making process."

Theme: The right people who should be involved in decision-making processes: Political versus technical

"That they have absolute knowledge of the problem in Guatemala.

It means involving the key actors, the ones with knowledge.

It has to be somebody who is working in these issues, with prior knowledge in order to know who are the actors that should be involved.

Sometimes they are not technical people, but they are the right people. So "right" depends on the situation.

I read the word "right" and I think it is who has knowledge, who knows the issues… It could also be that they come politically, but also that they have the right knowledge.

The technical level because they know the problem and the political level because that is where the final decisions are made, those that lead to actions. It can't be only technical, or only political, or even only those who know the issues. Everyone has to be involved.

I think that the technical and political levels should participate, in the sense that they make decisions and assure that the resources are there so it is done.

For the same reason that there are levels, not to try to make the technical people tell the political people what to say, or vice versa, because sometimes that is where there are conflicts. So at the political level we should try to be highly aware, understand the issues at hand, and this could help the technical level. So they can say that yes, we support you, and then find resources. But the technical level would have to be in the middle, trying to influence the political level in decision-making, but also understanding the part from the affected group so that they are well represented or someone can speak for the people affected by the problems."

Theme: Accepting resulting decisions

"If I am not convinced that [the final decision] was a technical decision, made by everyone involved and affected, I am not going to respect it."

Theme: Experts

"There are many people who are experts or who could contribute a lot but are not necessarily inside the institutions. This is my point. I think that upon convening the people those who are interested should be invited … by looking for and asking for those who consider or believe that they could contribute information and who are not directly associated with or working in the institutions."

Assessment of epidemiologic, operational, and sociopolitical domains for mainstreaming nutrition

Purnima Menon, Edward A. Frongillo, David L. Pelletier, Rebecca J. Stoltzfus, A. M. Shamsir Ahmed, and Tahmeed Ahmed

Abstract

Although undernutrition impacts a range of short- and long-term outcomes, nutrition often has low priority on global and national development policy agendas because of overemphasis on technical solutions without adequate consideration of contextual and political factors. An approach is needed for strategic development of nutrition agendas that embraces the contexts influencing policy and program planning and implementation, while addressing salient causes of undernutrition. We describe a simple, comprehensive assessment approach to enable development of sound nutrition strategies and well-grounded effective and appropriate actions for nutrition in a given context. The conceptual framework for this assessment approach incorporates three domains, each essential for defining strategic actions for nutrition: epidemiologic, pertaining to the nutritional situation and the evidence about the efficacy and effectiveness of nutrition interventions; operational, pertaining to coverage, quality, and utilization of nutrition-related interventions and programs as well as capacities, opportunities, and constraints to improving these; and sociopolitical, pertaining to social, political, cultural, and organizational factors at various levels, which may enhance or inhibit efforts to create positive changes in policies and programs. The domains are interlinked, and the sociopolitical domain often underlies the other two domains. Using this framework can reveal important insights for the nutrition policy agenda that were hitherto not considered explicitly in efforts to advance nutrition. This is highlighted in an example from Vietnam and through other papers in this Supplement. Use of this three-domain assessment framework can greatly aid development of feasible and actionable nutrition strategies that are grounded in epidemiologic, operational, and sociopolitical realities.

Key words: Assessment framework, nutrition policy

Introduction

Undernutrition contributes to short- and long-term development outcomes [1, 2]. Despite ample evidence of the impact of undernutrition on outcomes ranging from disease burden [1] and child development [3] to education and economics [2], nutrition often has low priority on global and national development policy agendas. Consequently, undernutrition reduction is neither rapid nor sustained in many parts of the world, and worse, undernutrition is increasing in other parts. Moving nutrition up the list of development policy agendas is a high priority for improving immediate and long-term outcomes [4].

Differences in global health problems regarding political, policy, and funding attention are not explained by the associated burdens or consequences [5]. Undernutrition [2] and maternal mortality [5] are examples of global health problems not receiving adequate attention. Research to understand differences in global attention is important, as is understanding how to assess and then ultimately build attention to neglected global problems at the country level.

"Undernutrition" captures a range of nutritional deficiencies from poor physical growth to micronutrient deficiencies. Because of its many aspects and causes at the individual, household, community, and subnational and national levels, comprehensive policies and programs are required to address undernutrition [6, 7].

Concerted, comprehensive, and strategic investments

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both in nutrition and in other social sectors by national governments can lead to meaningful acceleration in the reduction in undernutrition [8–10]. Although it is no small challenge, developing comprehensive and strategic policies and programs to address undernutrition in diverse settings is achievable. A critically important need for achieving this goal, however, is strategic agenda development* [11, 12], which should also be undertaken as part of a broader effort to build stakeholder support and ensure political and financial support for sustainable, at-scale policies and programs.

The United Nations Children's Fund (UNICEF) [6] has argued that comprehensive policies and programs need to build on understanding of the causality of undernutrition in local, subnational, and national contexts. The potential constraints to nutrition were represented in the UNICEF conceptual framework for child nutrition, and UNICEF recommended the use of their "triple-A cycle"—assessment, analysis, and action—to ensure that solutions to the nutrition problem were locally relevant and that chosen interventions were periodically adjusted depending on their outcomes. Success with the use of the UNICEF framework and assessment methods, however, has been mixed. It has been suggested that this has been largely because sociopolitical factors sway the use and interpretation of the framework and assessment methods. For example, in three different countries, after initial acceptance of the role of food, health, and care in determining child growth, development, and survival, the trilogy of food, health, and care often was not fully considered in planning and programmatic choice. Instead, individual sets of determinants were given preference, depending on the context and the individuals or institutions involved [13, 14].

An approach is needed for strategic development of nutrition agendas that embraces the sociopolitical contexts that influence policy and program planning, while still addressing the most salient causes of undernutrition [15]. This paper describes an approach for undertaking strategic assessment for nutrition that was developed to guide the activities of the Mainstreaming Nutrition Initiative (MNI). This was a 3-year project (2006–09) funded by the World Bank that aimed to catalyze positive changes in the design and implementation of nutrition policies and programs in key countries and thus lead to processes that would in turn sustain improvements in the nutritional status of populations.

This paper presents a simple, yet comprehensive, assessment approach that can enable the process of developing sound nutrition strategies and thus also enable well-grounded effective and appropriate actions for nutrition in a given context. We present the conceptual framework on which this assessment approach is based, a range of ways to apply the framework, and the key elements of the approach. We briefly describe the insights from an assessment using this framework and approach in Vietnam, and we conclude with insights into the use of the assessment approach, proposing next steps for nutrition practitioners and researchers in its application. Although we focus on undernutrition as the example, the assessment framework and approach that we have developed is not specific to nutrition and may be applicable to many global health issues.

Principles of assessment

The central questions in any assessment are what domains to assess and how to assess them. The answers depend on the purpose and context of the assessment. Our approach in countries was based on an explicit theory of policy and program change, which, in turn, informs the assessment framework. Although there are many theories and models of the policy process, these tend to focus on only certain aspects of the process, such as agenda-setting, decision-making, implementation, or evaluation [16], and often are highly context-specific. Our approach is based on a meta-framework, known as the policy sciences, which can facilitate a contextualized assessment of how sociopolitical factors affect all aspects of the policy process [17]. Our approach is grounded in the principle that sound policies and program require epidemiologically and operationally sound decisions, shared understanding and support for the decisions among key actors, the appropriate means to implement decisions in a given context, and the ability to make adjustments as events unfold and lessons are learned. The theory explicitly acknowledges that policy decisions are complex, that going from designing policies and programs to achieving health outcomes can be a long process, and that the processes therein can be ambiguous and involve many actors with varying aims, perspectives, and power (**fig. 1**).

Decisions, actions, and processes at all points, from agenda-setting in the policy arena to financial allocations for program implementation and use of program benefits by beneficiaries, influence the ultimate outcomes of good nutrition and health. Evidence in the health policy literature indicates that *critical decisions* pertaining to political commitment, policy choices, definition of programmatic actions, and allocation of resources are influenced by the nature, discourse, and decisions of multiple actors and groups [18]. Similarly, a variety of steps and decisions pertaining to program implementation and enabling client utilization of program services influence program success outcomes

* "Strategic agenda development" here refers to an iterative process of assessment and planning for policy and program decisions for the immediate future, as well as a focus on long-range directions for capacity strengthening, policy influence strategies, etc.

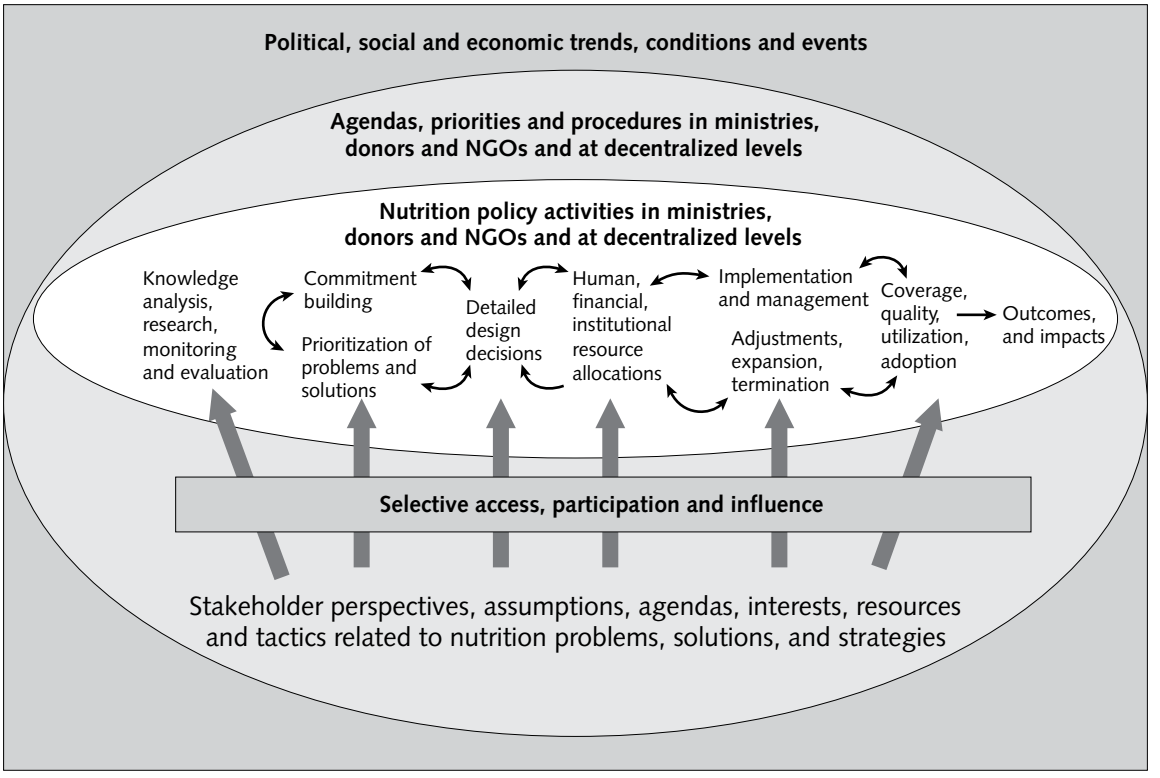

FIG. 1. From policy decisions to health and nutrition outcomes in a sociopolitical context.
NGOs, nongovernmental organizations

[19]. A strategic assessment can help make these impact processes explicit, unearth the major bottlenecks inherent therein, and point to possible solutions to these bottlenecks.

Description of assessment framework and methods

Assessment framework domains

Given the theoretical considerations above, as well as an emerging literature on delivery-system challenges [20, 21] and sociopolitical forces in decision-making about health [18, 22, 23], our assessment framework proposes three domains, each of which, when examined in an assessment, can answer specific questions and provide the basis for defining strategic actions to address the nutrition situation in a given country or context. We build on the prior UNICEF conceptual framework for nutrition that recognizes the influence of factors in the policy context as well as factors at the level of the community, household, and child.

The three domains in the assessment framework (**fig. 2**) are the following:

» *Epidemiologic*, pertaining to the current nutritional situation in the country (e.g., the prevalence and causes of key nutrition problems) and the current body of evidence about the efficacy and effectiveness of nutrition interventions;
» *Operational*, pertaining to coverage, quality, and utilization of nutrition-related interventions and programs as well as the capacities, opportunities, and constraints to improving these;
» *Sociopolitical,* pertaining to sociopolitical factors, from the community level to the national and international levels, which may enhance or inhibit efforts to create positive changes in policies and programs.

The framework recognizes and stresses that the domains are interlinked and that the sociopolitical domain often underlies the other two domains by influencing not just how nutrition problems and proposed solutions to those problems are framed and perceived [24], but also how every stage of policy-making—from agenda-setting to policy and program choice, and on to monitoring, evaluation, and program modification (or even termination)—is perceived and acted upon in a given context. The three domains play out at every level of decision-making and action in the public health and nutrition policy space (and beyond), and therefore, a sound assessment of how to best forge a relevant, actionable, and sustainable nutrition agenda should consider how these issues are placed among different players in the policy space, and around different

stages of policy formulation and action. Each of the three domains is dynamic over time, rather than static; scientific knowledge is continually evolving, implementation options and requirements can and do change, and sociopolitical conditions at all levels can rapidly or gradually change.

The three domains are inextricably linked because factors pertaining to each of them can influence processes and decisions in the other domains. Also, there are tradeoffs in how the three domains must be balanced in decision-making and action related to nutrition. An assessment should reveal what some of these tradeoffs were in the past and anticipate tradeoffs that might be needed to move forward with building support for nutrition and developing an evidence-based approach to designing policies and programs for nutrition. For example, an early attempt to build an alliance for infant and young child feeding in India in 2008 was derailed by activists and scientists opposed to the use of fortified complementary foods for young children [25]. Even though the need for fortified foods and/or vitamin and mineral supplements is recognized and recommended by the World Health Organization (WHO) [26], sociopolitical opposition to multinational firms and an established preference for food-based approaches in India probably led to this situation. A nuanced assessment and explicit recognition of the possible underlying sociopolitical and scientific concerns in the Indian policy landscape might have facilitated a less-charged process of alliance-building for infant and young child feeding.

We argue here that inquiring into each of these domains can provide answers to critical questions to inform the development of strategic directions for nutrition (**box 1**). For example, inquiring into the epidemiologic domain will provide insights into what the major nutrition problems are, who is affected by them, and which geographic areas and/or cultural or ethnic groups carry the highest burden of undernutrition. Inquiring into the operational domain can provide insights into what is currently being implemented to address undernutrition, where coverage of key interventions is inadequate, who is implementing nutrition programs and services, and how much they cost. Inquiry into the sociopolitical domain can reveal the social, legal, institutional, and political factors that drive decisions about agenda-setting, intervention choice, programmatic strategies, financing, and resource flows for nutrition. It can also provide an understanding of what sociopolitical factors are likely to influence how solutions to the nutrition problem are perceived, and thus provide insights into how desired, efficacious solutions can best be promoted, placed, and operationalized in a given context.

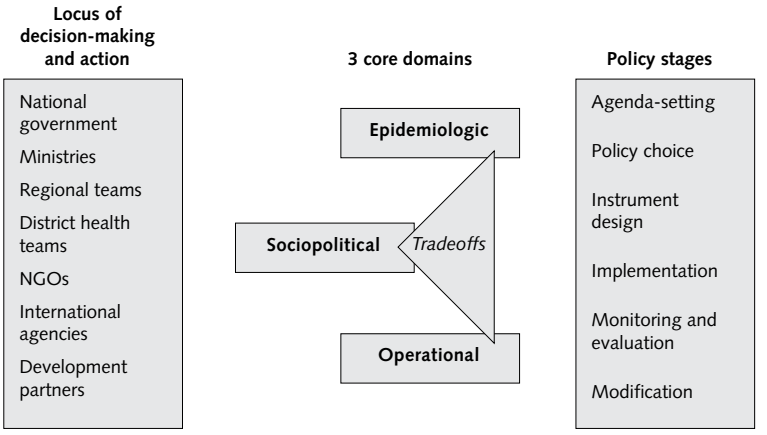

FIG. 2. Mainstreaming Nutrition Initiative assessment framework: Epidemiologic, operational, and sociopolitical domains.
NGOs, nongovernmental organizations

A comprehensive assessment that examines all three domains can be a powerful approach to strategic development of a national nutrition agenda, one that is ultimately acceptable to all key stakeholders. This approach can lead to solutions that are relevant to the most salient problems in a given country or context, feasible to implement within the programmatic setting, and acceptable and appropriate within the sociopolitical, cultural, and economic context.

Assessment approach

Based on the considerations above, we suggest that the *assessment approach* should generate knowledge for

BOX 1. Examples of critical assessment questions for each of the three assessment domains

Biologic and epidemiologic
What nutrition interventions are critical to deliver?
When during the life cycle?

Operational
How can the delivery of nutrition interventions be integrated with other Maternal and Child Health programs, services, and initiatives?
Who can deliver interventions?
How much will delivering key interventions cost?

Sociopolitical
How is the nutrition problem perceived?
What are the values and interests of people and organizations who will need to take action to move the nutrition agenda?
Why might organizations buy into the nutrition agenda (or not)?

sound decisions, lead toward understanding and support of key actors, and generate actions that can help reduce the burden of nutrition problems. UNICEF's triple-A cycle was an example of such an assessment method, but it was intended for use more at the community level than at higher policy levels. More recently, a manual for designing community-based nutrition programs [27] has provided a good example of an assessment approach that engages a participatory assessment team and uses a mix of methods ranging from document review to program observations and stakeholder interviews. Both of these approaches were designed to develop strong *programs* and not to address strategic policy choices and directions, which require buy-in from a wider range of stakeholders. Thus, these two approaches are highly useful but are not complete to drive policy choices, although they could be adapted for use at a policy level.

Our approach builds on this prior work by expanding the role of the sociopolitical domain and considering the interconnectedness of the three domains. It is crucial to understand the sociopolitical processes that influence how key epidemiologic and operational issues are framed, shaped, and acted upon in local and national policy processes. By making these factors explicit at all levels and providing guidance on how to examine the social and political factors, our assessment approach emphasizes their importance while also recognizing that sociopolitical factors are amenable to change.

Table 1 summarizes possible methods for assessing each of the three domains and lays out key data sources for each domain. This extensive list is intended to provide a menu of options for gathering data for strategic assessments rather than recommend that all methods be applied in all situations.

Methods for assessing the epidemiologic domain

This domain can be assessed through literature reviews and examining reports of recent surveys, supplemented by interviews with key informants. There is a long tradition in nutrition, and an extensive body of scientific knowledge and techniques, for assessing the nutritional situation of individuals and populations [33–35]. Often, there has been ample research in the countries of interest that have applied these methods for nutritional assessment. Other excellent sources of information on current nutritional challenges, especially in terms of undernutrition, are the Demographic and Health Surveys (DHS), now available in over 50 countries; the Multiple Indicator Cluster Surveys (MICS) conducted by UNICEF; and the Living Standards Measurement Surveys (LSMS) conducted by the World Bank. These surveys usually provide some basic estimates of the coverage of key health and nutrition services and can also document nutrition problems as

TABLE 1. Examples of methods and data sources for assessing the three domains in the Mainstreaming Nutrition Initiative assessment framework

Domain	Key issues	Assessment methods	Data sources (examples)
Epidemiologic	Major nutritional problems Affected groups and geographic areas	Literature review Secondary data analysis (if essential) Key informant interviews	Published literature Survey reports and/or survey data (DHS, MICS, LSMS, and national surveys) Unpublished reports Interviews with national and international health agency staff (e.g., National Institutes of Nutrition, WHO, etc.)
Operational	Coverage and utilization of interventions Quality of intervention delivery Constraints and opportunities for improving quality, scale of service provision, and utilization of services	Literature review Secondary data analysis (if essential) Program mapping[a] Visits to program sites Key informant interviews Workshops and meetings (content and process analysis) Participant observation (short and long term)[b]	Published literature Survey reports and/or survey data (DHS, MICS, LSMS, and national surveys) Unpublished program evaluation reports Workshop and meeting reports Interviews with national and international health agency staff Interviews with regional and/or local program managers and program staff Interviews with program beneficiaries

continued

TABLE 1. Examples of methods and data sources for assessing the three domains in the Mainstreaming Nutrition Initiative assessment framework

Domain	Key issues	Assessment methods	Data sources (examples)
Sociopolitical	Key individual and institutional stakeholders and their: Perspectives on nutrition problems, solutions, and critical issues Current, emergent, and potential policy and program initiatives Institutional interests and agendas, sources of power Relationships, points of tension, and opportunities for collaboration Policy development and implementation processes Formal and informal institutions and venues for analysis, influence, decision-making, implementation, and evaluation, including decentralized contexts Rules, incentives, practices, and power relations that mediate participation, influence, and likely outcomes for nutrition Macro context: political, ideological, and social climate and conditions: Tenor of current and recent discourse and policy agendas relevant to social policy Political incentives and opportunities for advancing nutrition-relevant themes within larger development agendas Current, emergent, and potential champions and allies in the political arena	Stakeholder matrices[c] Network analysis[d] Force field analysis Static mapping Process mapping Process tracing Micropolitical mapping Vulnerability analysis Livelihoods analysis Gender analysis Empowerment analysis Country social analysis Power analysis Drivers of change	Interviews with subnational, national, and international agency staff Key informants and participant observers in the policy process Structured participatory analyses with stakeholders and/or knowledgeables Workshop and meeting reports Policy and strategy documents Secondary literature review Media articles and news clips Varied participatory tools at district and community levels

DHS, Demographic and Health Survey, LSMS, Living Standards Measurement Survey; MICS, Multiple Indicator Cluster Survey; WHO, World Health Organization

a. MNI has developed a matrix for mapping the nutrition interventions and services provided by different organizations (government, NGO, international agency, etc.). This can be applied at the national or subnational levels.

b. Short-term participant observation refers to assessments that focus on discussions and experiences at key events such as workshops and meetings, while in the long term, participant observation implies a longer-term country presence and participation in various meetings as well as ongoing activities related to nutrition.

c. A variety of methods for this domain have been developed over the years and only recently have being brought together in a systematic way. The methods shown here are taken from *Tools for Institutional, Political and Social Analysis of Policy Reform* [28]. Other valuable collections for selected issues can be found in Mathauer [29] and in Reisman et al. [30].

d. Recently developed participatory stakeholder network and influence mapping tools are likely to be especially useful in assessing the roles, influences, perspectives, and power of different stakeholders in the policy environment. See Schiffer [31] and Schiffer and Hauck [32].

well as gaps in coverage. Often other analyses may be needed to understand the causality of undernutrition problems and shed further light on the distribution and manifestation of determinants (e.g., the role of poor diet quality or breastfeeding practices in determining nutritional outcomes).

Methods for assessing the operational domain

This domain includes two subdomains: coverage, quality, and utilization of key services; and capacities to deliver existing services or for new services or interventions.

The need for assessing the coverage, quality, and utilization of key services is well recognized, and surveys such as the DHS, MICS, and LSMS commonly include indicators of coverage and utilization of services. Often, household surveys include health facility assessments, which can provide insights into key healthcare quality constraints, but these are often not adequate to assess the suitability and capacity of the health system or of health facilities for providing nutrition services. A specific resource for assessing the quality of nutrition services provided through health services, and/or for assessing the suitability of specific health

facilities for delivering nutrition interventions, is the Essential Nutrition Actions District Health Manager Checklist [36, 37].

A useful framework for the subdomain of capacity is provided by Potter and Brough [38]. Delivering high-quality services requires *tools*, *skills, adequate staff and infrastructure,* and clearly defined *institutional structures, systems, and roles*. Adequate attention to structures, systems, and roles is needed to ensure adequate staffing and infrastructure, as well as appropriate and adequate staff skills and tools. The tools, skills, and staff needed to deliver different types of nutrition interventions will differ. For example, interventions dependent on a well-functioning supply chain and logistics for their success (e.g., vitamin A capsules, iron–folate tablets) place different demands on a system than do interventions dependent on the availability of skilled staff who can engage in behavior-change communication (e.g., promotion and support of exclusive breastfeeding and complementary feeding; see example in **table 2**). Examining existing and potential capacity through the lens of these four categories will unveil the critical systems assets and constraints from an operational perspective.

Assessing the sociopolitical domain

In nutrition, theory and practice for sociopolitical assessments are much less developed than for the other two domains. Our approach provides theory-based methods for assessing this domain. The methods are primarily anthropologic, including qualitative interviews with key informants and policy stakeholders and participant observation [39, 40]. Some methods include interviewing stakeholders about the history and evolution of nutrition-related policy decisions and analyses of discussions and debates at key stakeholder meetings and media reporting around nutrition. A good sociopolitical analysis can provide substantial insights into the prevailing thoughts about problems and solutions and can also help identify upcoming windows of opportunity for nutrition [24]. The results from assessments of the sociopolitical environment can be used to identify strategic allies or points of resistance, understand the motivations and incentives for actors, design long-term information and advocacy efforts, and strengthen or modify existing institutional arrangements. A variety of methods have been developed in other fields that are useful to understand the sociopolitical context around nutrition (**table 1**).

These methods are based on a policy-change model in which some core group or "key change agents" are undertaking the assessment, analyzing the results, and using the results in strategic ways to advance or redirect the nutrition agenda. In some cases, this is an appropriate model. In light of the divergent perspectives, interests, and distributed power relations among the actors in the national nutrition system (**fig. 1**), a more productive model in many cases is to use explicitly collaborative change-management methods [41]. These methods directly involve key stakeholders in the assessment and analysis, thereby promoting shared understandings; facilitating integration of contextual knowledge, stakeholder interests, and shared aspirations in decisions; and designing the change management process.

Application in Vietnam

In late 2006, an assessment was led by an expatriate with experience in Vietnam, in collaboration with a nongovernmental organization and the National Institute of Nutrition [42]. The assessment methods included document review, key informant interviews about current challenges and history of nutrition policy decisions, mapping of nutrition program activities and services delivered by national and international organizations, and program site visits. The information from these sources was analyzed using the three framework domains. **Box 2** provides examples of some of the constraints in the domains that emerged from the assessment. The assessment was consultative; a set of initial interviews identified interested parties and

TABLE 2. Critical capacity needs for group education programs to improve breastfeeding practices

Intervention	Capacity needs			
	Tools (including supplies)	Skills	Staff and infrastructure	Structures, systems, and roles
Exclusive breastfeeding promotion by group counseling	Visual materials on breastfeeding, positioning the infant	Knowledge about breastfeeding practices Group facilitation and problem-solving skills	Adequate staff, trained in group facilitation and technical aspects of breastfeeding	Supervision processes to monitor and provide feedback; well-trained supervisors; institutional commitments to training of health staff in breastfeeding counseling and group facilitation

BOX 2. Examples of constraints from assessment in Vietnam of the three domains (see Lapping et al. [42] for further details of the Vietnam case study)

Assessment process. Document review, stakeholder interviews, program field visits, attendance and participation at nutrition workshops and events, hosting of workshop on assessment results with national and provincial officials; facilitated by an in-country focal person.

Epidemiologic issues. Main nutrition issues include stunting among young children, micronutrient deficiencies, infant and young child feeding. Wide disparities in the undernutrition problem by geographic area, ethnicity, and economic development.

Operational issues. Programmatic needs include ensuring coverage in remote areas, ensuring locally specific and contextual approaches to addressing infant and young child feeding and undernutrition, and enhancing capacity and motivation of village-level nutrition collaborators to engage in behavior-change communication.

Sociopolitical issues. Lack of coordination among sectors resulted in fragmented nutrition plans and low budget allocated to nutrition program at provincial levels. Low incentive for village health workers and community communicators working at grassroots levels and low cost norms impede effective nutrition planning and implementing at all levels.

important stakeholders in nutrition, which in turn led to the formation of a nutrition partnership group. The sharing and discussion of an analytic assessment report with national and provincial partners via a workshop revealed further challenges and opportunities for addressing nutrition. Further consultations among the nutrition partnership group helped to identify specific actions that could likely help lead to the development of a national strategic plan for reducing stunting. For example, a key issue identified was that operational guidance on developing a strong infant and young child nutrition (IYCN) strategy would be critical to ensure attention to this vulnerable age group. This led to the inclusion of specific IYCN-related activities in the project's work plan, including a review of successful IYCN programs, development of an approach for rapid assessment of local constraints to IYCN, and national-level advocacy around IYCN. The influence of the assessment and the overall engagement in Vietnam is described in detail in Lapping et al. [42].

Discussion and conclusions

Applying the assessment approach to specific countries has reaffirmed the value of all three domains and their interconnectedness [43, 44]. In an application in India, applying a governance lens to the sociopolitical domain highlighted critical gaps in capacities in Bihar, a state with a high burden of undernutrition and extremely low levels of coverage of critical interventions for undernutrition [43]. The analysis of a better-off state, on the other hand, highlighted the positive impacts of the attention paid to service delivery and scaling up of essential health services such as immunization and antenatal care, but also highlighted the need to pay attention to improving behavioral inputs for nutrition, such as infant feeding practices. In Vietnam, although the problem of undernutrition among children has been recognized by policymakers, the technical aspect of the in-country assessment process drew attention to the need to explicitly understand key determinants of stunting in that country. The operational aspect drew attention to the potential reach of community nutrition workers, while also revealing potentially low implementation capacity for behavior-change interventions. The sociopolitical aspect revealed the importance of building support for nutrition at subnational levels (in this case, the province), because important programmatic decisions and budget allocations occur at that level. Furthermore, the assessment revealed that setting budgetary and cost norms related to health worker salaries was out of the hands of health and nutrition ministries, hence restricting the actions of key sectors to operating within limits set by actors outside of these sectors. In other papers in this Supplement, the study from Bolivia highlights that the inability of the non-health sectors to identify and obtain ministry support for key actions for nutrition hampered the development of multisectoral operational plans to address nutrition [45]. This major constraint, which has technical, operational, and sociopolitical aspects, slowed the progress of an entire major national program. Lastly, the paper from Guatemala, also in this Supplement, demonstrates that disagreements over the participatory process for choosing technical and operational strategies for nutrition could influence the ability of stakeholders to come together to find mutually acceptable strategies [46].

The fourth paper in the *Lancet* Nutrition Series [47] exhorts countries to focus on building commitment, doing the right thing, not doing the wrong thing, scaling up, and building operational and strategic capacity. A critical step in many countries and subnational groups in getting to those desired outcomes is strategic development of a nutrition agenda, including setting capacity-building priorities and nutrition actions, which in turn should be driven by comprehensive assessments that develop strategies for the problems at hand, while anticipating the challenges that lie ahead. Use of this assessment framework and approach can help lead to the development of feasible and actionable nutrition strategies that are grounded in epidemiologic, operational, and sociopolitical realities.

Responses to other global health challenges also require the development of feasible and actionable strategies grounded in epidemiologic, operational, and sociopolitical realities. Many other global health challenges share with undernutrition a history of significant focus on epidemiologic considerations, but much less focus on operational and sociopolitical considerations. For example, the *Lancet* Child Survival series highlighted 23 interventions that are efficacious, available, and feasible for implementation in low-income countries at high levels of population coverage [48]. Yet coverage for nearly all of these interventions is low [49], because we do not have the necessary operational and sociopolitical knowledge, attention, and focus. Use of this assessment framework can assist in focusing on these two often-neglected domains to move toward high operational coverage and sustained sociopolitical support.

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REACH: An effective catalyst for scaling up priority nutrition interventions at the country level

Brenda L. Pearson and Björn Ljungqvist

Abstract

Background. *Renewed Efforts Against Child Hunger (REACH) is the joint United Nations initiative to address Millennium Development Goal (MDG) 10, Target 3, i.e., to halve the proportion of underweight children under 5 years old by 2015. The United Nations Food and Agriculture Organization (FAO), the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP), and the International Fund for Agricultural Development (IFAD) developed and tested a facilitation mechanism to act as a catalyst for scaling up multisectoral nutrition activities.*

Objective. *The UN-REACH partners developed pilot projects in Mauritania and Lao PDR from 2008 to 2010 and deployed facilitators to improve nutrition governance and coordination. Review missions were conducted in February 2011 to assess the REACH approach and what it achieved.*

Methods. *The UN review mission members reviewed documents, assessed policy and management indicators, conducted qualitative interviews, and discussed findings with key stakeholders, including the most senior UN nutrition directors from all agencies.*

Results. *Among other UN-REACH achievements, the Prime Minister of Mauritania agreed to preside over a new National Nutrition Development Council responsible for high-level decision-making and setting national policy objectives. REACH facilitated the completion of Lao's first national Nutrition Strategy and Plan of Action and formation of the multistakeholder Nutrition Task Force. During the REACH engagement, coordination, joint advocacy, situation analysis, policy development, and joint UN programming for nutrition were strengthened in Lao PDR and Mauritania.*

Conclusions. *Improvements in the nutrition governance and management mechanisms in Mauritania and Lao PDR were observed during the period of REACH support through increased awareness of nutrition as a key development objective, establishment of governmental multisectoral coordinating mechanisms, improved government capacity, and new joint UN–government nutrition programming.*

Key words: Multisectoral coordination, nutrition governance and management, undernutrition

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Background

UN-REACH was jointly established by the United Nations Food and Agriculture Organization (FAO), the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and the World Food Programme (WFP) to solve the nutrition needs of the world's most disadvantaged and vulnerable children and women. Recognizing that this would require a multisectoral approach, these UN agencies—later joined by the International Fund for Agricultural Development (IFAD)—agreed to set up a joint mechanism to ensure that the UN system at the country level would be able to jointly support better-coordinated efforts to end hunger and undernutrition. It was also recognized that effective interventions to address these problems already existed and that by focusing investments on an equity-based approach to development, the world will meet the Millennium Development Goals (MDGs) faster and more cost-effectively. Reducing malnutrition among the world's most vulnerable children prevents irreversible damage to human development and helps achieve the goal of halving extreme poverty and hunger as well as the MDGs related to child mortality, maternal health, primary education, and gender equality, and will make significant contributions to all the remaining MDGs.

REACH places the child at the center of its efforts to avert maternal and child deaths and stunting. Approximately 3.5 million child deaths and 35% of the total disease burden for children under five can be attributed to undernutrition [1]. This magnitude of undernutrition is alarming, particularly since recent empirical evidence has revealed that undernutrition during pregnancy and the first 2 years of life may result in largely irreversible damage to cognitive and physical development [2]. The implications of this damage are far-reaching. In addition to compromising a child's cognitive and physical development, undernutrition during this critical period of the life cycle may adversely affect a child's health as well as his or her ability to learn and generate income in the future [3]. Undernutrition weakens the immune system, making people susceptible to other health problems, and undermines the effectiveness of lifesaving medications needed, for example, by people with HIV and AIDS. This critical window of opportunity to make lasting change is sometimes referred to as the 1,000 Days for Change Agenda.

The REACH approach to scaling up nutrition actions is becoming part of a global movement of heightened political interest in nutrition. This Scaling Up Nutrition (SUN) movement is a collaborative process that provides the principles and direction for increased support for countries as they scale up their efforts to tackle undernutrition across a range of sectors [4]. This renewed focus on nutrition aims to promote the formation of broad-based, global partnerships to support national efforts to eradicate child hunger and undernutrition. In this context, the REACH approach has been explicitly identified as a country-level mechanism to establish and strengthen multistakeholder platforms that promote synergized actions and simplify coordination among partners. As such, it responds to many of the difficulties in policy formulation and implementation that countries often experience, as documented by the Mainstreaming Nutrition Initiative (MNI) in other papers in this series.

Through such multistakeholder platforms and processes, REACH and other development partners can greatly facilitate government-led efforts to coordinate and scale up proven and effective interventions to link child undernutrition, food security, health, and care in a sustainable strategic approach. It has been widely observed that nutrition interventions are often neglected and under-resourced because they require multisectoral cooperation among Ministries of Health, Agriculture, Education, Planning, and others responsible for water and sanitation. Food availability, access, and utilization, together with child and maternal care and health, must all be taken into account when analyzing the causes of hunger and malnutrition [3]. The coordinated REACH approach to good governance and management through capacity development ensures more effective and coherent food and nutrition assistance. REACH currently is supporting nutrition and food security activities in Bangladesh, Lao PDR, Mauritania, Mozambique, and Sierra Leone. Plans are under way for expansion to Ethiopia, Ghana, Mali, Mozambique, Nepal, Rwanda, Tanzania, Uganda, and Zambia in 2011–13.

REACH conceptual approach

REACH, in coordination with other development partners, helps governments analyze the current coverage of critical interventions, prioritize nutrition actions, develop a national plan of action, and establish the required multisectoral governance and management mechanisms. Such mechanisms are needed throughout all levels of government to ensure that all children receive critical food, health, and care interventions that provide them with an adequate nutritional foundation for life. REACH promotes a holistic approach to child undernutrition and firmly places the rights of the child at the center of these efforts.

REACH is thus based on the conceptual framework that is now universally adopted but was originally proposed by UNICEF, based on work in Tanzania, for understanding and analyzing the causes of undernutrition (**fig. 1**) [5]. This framework identifies the three key areas of food, health, and care as the underlying conditions for a good nutritional status of the child. Each of these conditions warrants equal attention and their relative importance can vary from one situation to another and is also likely to change with the age of the child, the time of year, and a whole range of factors. Subsequently, there is a need for continual monitoring in order to ensure that nutrition interventions are adjusted to meet current needs. This is the reason why nutrition management systems based on a continued process of "assessment, analysis, and action" ("triple A") are needed for sustained nutrition improvements. To ensure that these nutrition management systems are institutionalized at the relevant administrative levels and that they are made accountable, a nutrition governance structure is required. Since essential nutrition actions need to be pursued in several government sectors, the nutrition management system and, indeed, the governance structures need to incorporate a multisectoral approach for scaling up.

REACH goals, outcomes, and activities

The overall goals and outcomes and the major areas of action for REACH are summarized in **figure 2**. The goal of REACH, in adherence to a human rights approach to programming, is to provide effective support to countries to achieve the MDG target of halving the rates of child undernutrition (measured as underweight) by 2015 and to sustain a continued reduction

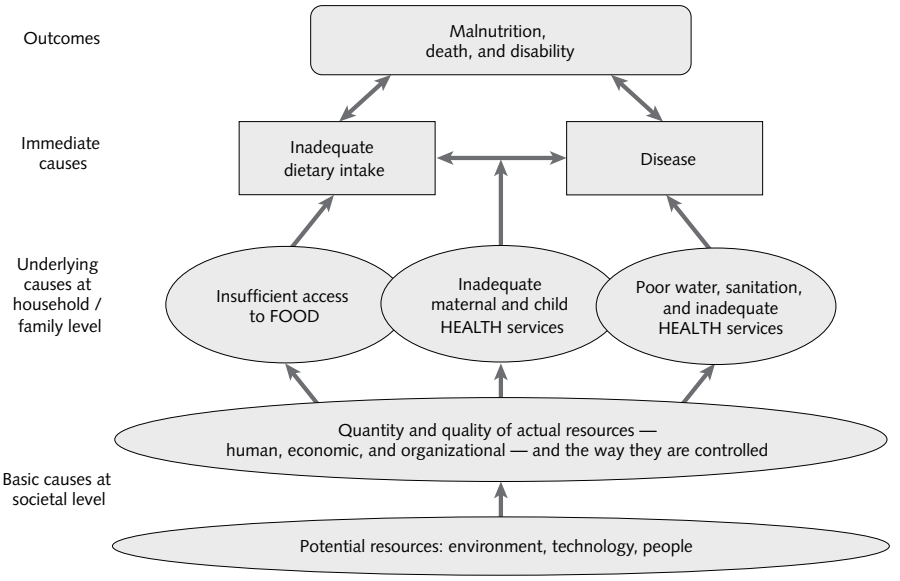

FIG. 1: Conceptual framework for analyzing the causes of malnutrition

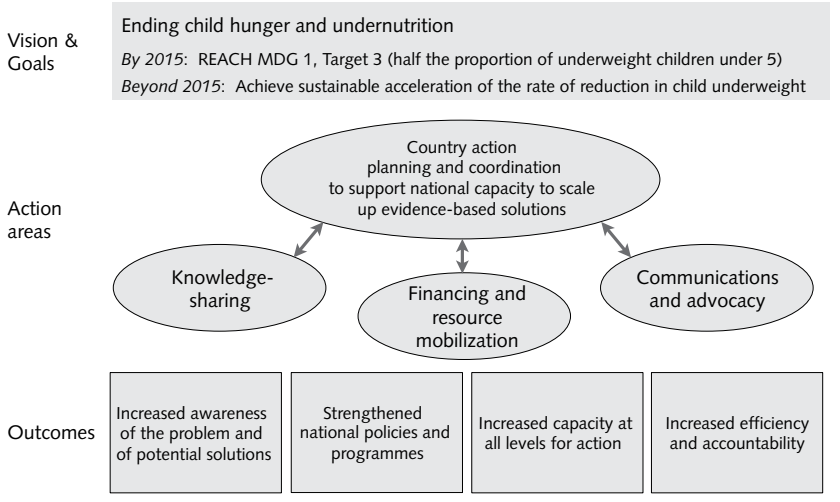

FIG. 2: REACH focuses on scaling up country actions

beyond that date. The specific and strategic outcomes that REACH will focus on are the following:

» Increased awareness of nutrition problems and their solutions;
» Strengthened national nutrition policies and programs;
» Increased capacity at all levels for essential nutrition actions;
» Increased efficiency and accountability.

In order to achieve these objectives, the REACH country-level support activities will be backed up by sharing of knowledge and experiences and resource mobilization, as well as communication and advocacy. This means that REACH will focus on building capacity for updated assessment and analysis of nutrition problems affecting children and women in the country, building consensus around this analysis and the priority actions required, translating these actions into policies and programs, operationalizing the programs and activities, and effective monitoring and evaluation—all embedded in improved management and governance systems. REACH will not, however, engage in supporting direct implementation of the identified programs and interventions, as this is considered the responsibility of the government, individual UN agencies, and other partners.

REACH within the UN system and global nutrition and food security initiatives

REACH is a direct outcome of the Paris Declaration (2005) and the Accra Agenda for Action (2008), which recommend local ownership, donor alignment and coordination, and division of labor and management for aid programs to support country development strategies with maximum effectiveness. REACH is considered to be a strategic vehicle to advance the SUN policy framework and the corresponding road map to action [4]. The REACH approach has been explicitly highlighted by the UN Special Representative on Food Security and Nutrition as a major resource for scaling up nutrition action and strengthening capacity at the country level. Within the UN system, there are distinct linkages to other global structures and initiatives on nutrition and food security, namely, the UN Standing Committee on Nutrition (SCN), the UN High Level Task Force on the Global Food Security Crisis, and the Committee on World Food Security.

REACH governance structure

The executives of the four UN partners entered into a joint agreement that sets forth their commitment to a renewed effort against child hunger and undernutrition and also designates WFP as the host agency for the initiative. WFP developed a Memorandum of Understanding and established a Multidonor Trust Fund for REACH. The initiating partners jointly established and contributed staff members to an interagency team; WHO seconded the first REACH Coordinator for 2 years, and UNICEF seconded the current Global Coordinator in April 2010. The Deputy Global Coordinator is seconded by WFP.

REACH is guided by a technical advisory group that is composed of representatives from the four UN agencies who are responsible for managing their respective nutrition divisions. UN partners such as IFAD and SCN and prominent members of the nongovernmental organization (NGO) and academic communities and the private sector meet on an annual basis to guide the REACH agenda. The advisory committee communicates via teleconference monthly and in person on a quarterly basis; notes from these meetings are distributed to all partners. During these monthly oversight discussions, each agency representative ensures that there is continuity among the overall UN mandate, each agency's strategic objectives, and the REACH country-led programs. The REACH Secretariat provides technical expertise and program, managerial, and administrative support from its headquarters in Rome.

REACH benefits from strong interaction with NGOs at the global and country levels. In 2009/10, Save the Children USA and UK seconded a program officer to the REACH Secretariat. World Vision International seconded a senior level staff member in 2011 to provide guidance and technical assistance on advocacy, strategic communications, and stakeholder coordination.

Review of REACH methodology

REACH strengthens country ownership for scaling up nutrition

The embodiment of REACH at the country level is the REACH Facilitator. The facilitator assists in bringing key actors together to update the situation analysis and agree upon priority actions. For each of the priority actions agreed upon, a detailed analysis of implementation structures or "delivery channels" is undertaken and capacity gaps—as well as overlaps—are identified, and an operational plan for how to scale up the agreed set of priority nutrition actions can be formulated. The facilitators are well experienced and equipped to assist in all these critical steps of nutrition programming. If the programming process needs to be supported by specialized experts or if the team needs access to information about good practices, the REACH Secretariat and network of resource persons and institutions are accessed. As such, REACH is a mechanism for building strategic capacity, a need identified by the MNI.

REACH facilitators work with national counterparts and other stakeholders to strengthen government capacity from the first day. An international facilitator is paired with a locally hired national facilitator who is often recommended by government counterparts or local academic institutions. These two facilitators work in tandem and are both liaisons to government counterparts, stakeholders, and donors. During the 3-year period of the direct REACH engagement, the national facilitator learns how to conduct stock-taking exercises, establish a baseline of the current nutrition needs in the country, use costing tools, develop an Action Plan for scaling up, conduct ongoing monitoring and evaluation, and work with partners for developing behavior change and communications strategies needed for advocacy.

The national facilitator is primarily responsible for coaching national partners on how to conduct continuous monitoring of multisectoral nutrition activities and their impact on combating maternal and child malnutrition. It is explicitly stated in the recruitment of this facilitator that REACH and its UN partners are investing in the professional training and technical capacity skills of the facilitator, so that at the completion of the REACH engagement, this facilitator can be placed in a nutrition management position in the government.

REACH toolkit

A consistently identified gap in country-level nutrition governance and management is the use of international knowledge, norms, guidance, and expertise. This is

an area in which REACH adds value, as it provides a global platform for knowledge-sharing, connecting field practitioners to international professionals across stakeholder groups. The evolving REACH toolkit contains Acting at Scale intervention guides with accompanying case studies for REACH-promoted nutrition activities, Acting at Scale resource linkages, tools and templates for facilitating joint action planning processes, and country-level monitoring and evaluation systems that are compatible with overall MDG nutrition indicators.

The REACH Acting at Scale series draws on the reservoir of expertise that exists in individual countries about how to build commitment, develop, scale up, and monitor nutrition programs, and meet other implementation challenges. The series includes technical primers that synthesize the importance of certain interventions and how they work, case studies with lessons learned in scaling up interventions, and a reference library of normative and operational guidance, training materials, references, articles, and contact information for experts. The publication is updated periodically by REACH partners and can be found on the REACH website (www.reach-partnership.org).

In this way, REACH products are easily accessible to country practitioners elsewhere and are intended to increase national capacity to improve nutrition. The REACH toolkit provides easy-to-use frameworks, tools, and templates for the systematic analysis of gaps and opportunities, for creating and facilitating participatory, multisectoral processes, and for managing organizational change, thereby empowering country governments and stakeholders on how best to address the nutrition situation in their respective countries.

REACH recommendations for priority interventions

REACH is designed to help countries identify a set of essential and proven interventions that can be scaled up for maximum impact. REACH helps government counterparts to analyze and prioritize their capacity needs and then develop a road map of REACH-supported activities and tools to strengthen specific functional capacities such as policy and action planning, multisectoral coordination and management, monitoring and evaluation, advocacy, and targeted resource mobilization. As the following descriptions and figures will show, each of the countries assisted by REACH facilitation has recommended priority nutrition interventions specific to the country context.

Bringing partners together around a common goal and a common set of agreed interventions and actions, REACH concentrates on providing facilitation to countries with a high burden of undernutrition to assess and analyze current levels of nutrition needs and coverage of existing interventions and to identify gaps. The coordinated assessment and analysis work leads to consensus among multiple stakeholders about the magnitude of nutritional challenges in the country and the need for new approaches to scaling up multisectoral nutrition activities.

The common vision and baseline of knowledge developed through these processes leads to ongoing advocacy for elevating nutrition as a national political issue and builds accord and political will necessary to institutionalize multisectoral nutrition governance at the highest levels. The result is a consensus-based plan that accurately reflects a common view on the nutrition needs and priority interventions for children. REACH builds commitment and ensures that effective interventions are delivered at scale and synergies are exploited and provides a platform for in-country coordination to achieve this. The interventions proven to reduce child undernutrition target five priority areas: improving breastfeeding and complementary feeding, increasing micronutrient intake, improving hygiene and parasite control, improving the treatment of severe acute malnutrition, and increasing household food security (**fig. 3**). The nutrition situation varies widely from country to country as well as geographically within countries, and so will the recommended interventions. For example, REACH and the Government of Lao PDR identified 11 key nutrition interventions, and 19 were identified in a preliminary scoping exercise in Bangladesh.

As reflected in **figure 3**, increased attention needs to be put on maternal nutrition. The prenatal period and the first 2 years of life are the critical period for a child's physical and cognitive development, so it is imperative that good nutrition is available to mothers within this window of time. Nutrition interventions must be targeted to pregnant and lactating women and children during their first 2 years to prevent the irreparable, lifelong harm that results from chronic early childhood undernutrition, starting in the womb. Within the context of the 1000 Days for Change Agenda, it is currently estimated that some 40% to 50% of chronic undernutrition (stunting) is caused by maternal nutrition factors.

Consequently, the REACH approach is expanding its scope of recommended nutrition actions to incorporate maternal nutrition as a high priority for the benefit of both mothers and children. REACH already has established strong collaboration with the state-of-the-art maternal nutrition project at Emory and Tulane Universities (supported by the Bill and Melinda Gates Foundation) to benefit from their findings and advice. REACH will promote good programming practices for maternal and child nutrition in countries where Governments have committed to achieving sustained and significant reduction in levels of child undernutrition through a combination of specific nutrition and nutrition-sensitive interventions, and have requested support. These countries are engaged in building the Scaling Up Nutrition Movement and have been

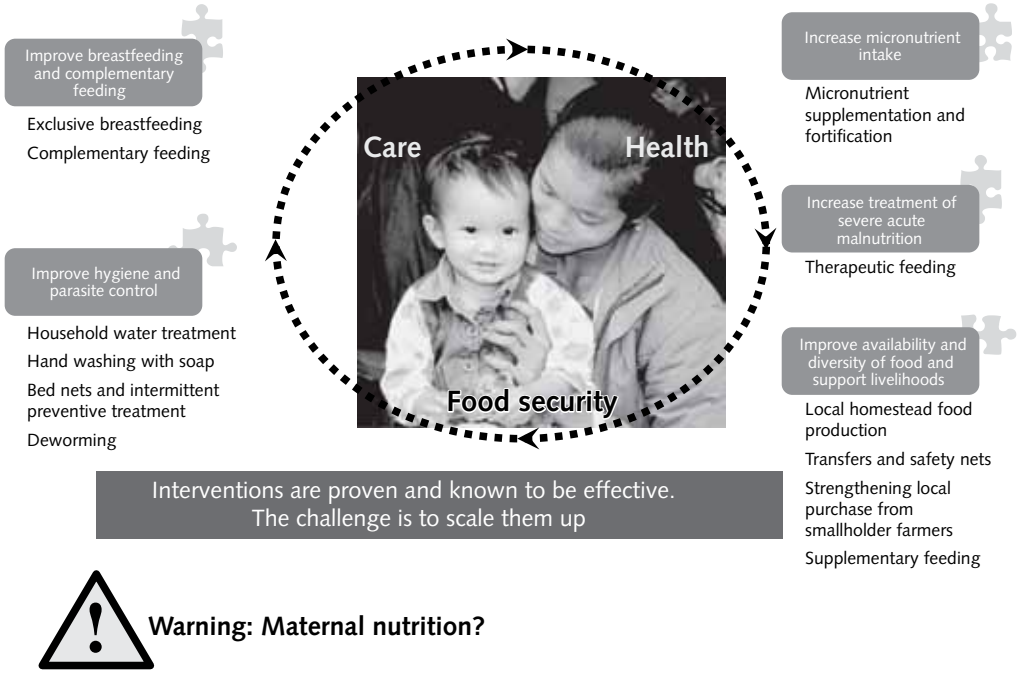

FIG. 3: REACH priority intervention areas

identifying themselves as "early risers". Through our links to the global SUN process, we are also involved in the broader 1000 Days for Change communication initiative that provides a strong advocacy platform for promoting maternal health and nutrition in the countries REACH supports.

Examples of REACH actions

A joint scoping exercise was conducted in Lao PDR to create a common understanding of nutrition across sectors, interventions, and stakeholders of the overall coverage of nutrition interventions, which in turn allowed for gaps and opportunities to be identified. The gap analysis revealed that the coverage of interventions to prevent and treat acute malnutrition among children under five was almost zero. This finding catalyzed stakeholders to collaborate with the Ministry of Health to develop a strategy for the prevention and treatment of moderate and severe malnutrition, including the introduction of a community-based screening, referral, and treatment program and the scaling up of facility-based treatment of severe acute malnutrition. In a more general sense, the REACH-supported situation analysis and ongoing technical and facilitation support helped to translate the Lao National Nutrition Policy into a National Nutrition Strategy and National Plan of Action for Nutrition (NNS/NPAN). REACH also catalyzed joint advocacy to raise the profile of nutrition through the annual Round Table Implementation Process, resulting in the government's committing to mainstream nutrition into the National Socioeconomic Development Plan.

Similarly, REACH scoping exercise and stakeholder mapping was launched in June 2008 at the request of the Government of Mauritania. REACH identified key government institutions, NGO practitioners, donors, and other partners to participate in a comprehensive analysis of the country's nutrition and food security situation. The extensive assessment and analysis improved the government's ability to gather and analyze data, to agree on key findings, and to develop a credible baseline of the nutrition situation that was accepted by all stakeholders. Based on evidence and best practices, the joint government and REACH Technical Working Group systematically prioritized interventions for scaling up, analyzed delivery mechanisms for feasibility and cost-effectiveness, and identified potential synergies between partner operations and delivery mechanisms.

The result was a consensus-based plan that reflected a common view on the nutrition needs and priority interventions for children. The REACH facilitator supported the joint Technical Working Group to proactively identify immediate opportunities to improve existing programs or address gaps. In the southern region of Mauritania, potentially harmful overlapping of vitamin A and deworming campaigns was identified and corrected, an improved referral and monitoring system for supplementary and therapeutic feeding was

launched, and the regional imbalance between activities and needs was corrected when an international NGO moved operations to the southeast region. The four UN partners in-country raised funds to extend the REACH facilitator position another year so that the REACH program could be integrated fully into community-based and national operations. **Figures 4, 5,** and **6** provide examples of REACH tools as applied in some specific country situations.

REACH creates nutrition frameworks for key government institutions, NGO practitioners, donors, and other partners. During the preparatory stage, REACH deploys a planning mission composed of key partners to examine specific geopolitical issues. For example, the World Bank joined REACH in the planning mission in Bangladesh. This planning mission also visited with key donors in their regional offices in Bangkok. REACH discussed the nascent Association of Southeast Asian Nations (ASEAN) nutrition initiatives and how this early attention to nutrition could be influenced at both the country and the regional levels. In Africa, REACH has established direct linkages to The New Partnership for Africa's Development (NEPAD) that oversees the Comprehensive Africa Agriculture Development Policy (CAADP) and made recommendations for the improvement of policy harmonization in REACH priority countries. REACH stresses the importance of linking country-level nutrition programming to regional and global initiatives. REACH will conduct planning missions to new SUN early riser countries and develop consensus on how to encourage better regional cohesion.

In addition to providing the REACH approach in Sierra Leone, the facilitators will develop and test national models to boost nutrition programs and scale up demand for nutritious foods purchased locally from small-scale farmers. The project is funded by a grant from the Bill and Melinda Gates Foundation. The objectives of the project are threefold: to identify ways to link smallholders to nutrition programming, to provide guidance to critical stakeholders to sustain agriculture–nutrition linkages, and to facilitate coordination of agriculture–nutrition linkages at the country, regional, and global levels.

REACH provided preliminary technical assistance to the Government of Mozambique through short focused missions to Mozambique in 2009 and 2010. Pending available funding, REACH will support government efforts to scale up its Multi-Sectoral Action Plan for the Reduction of Chronic Undernutrition.

Country-level capacity development

REACH, within the context of UN joint programming, as well as per the Paris Declaration and Accra Agreement guidelines, actively contributes to development sustainability and effectiveness. The importance of building sustainable national capacity to maintain scaled-up, effective nutrition actions is strongly emphasized. The REACH pilots in Lao PDR and Mauritania emphasized this fundamental principle of country ownership by pairing international and national facilitators together. The REACH Secretariat and field staff focus on the development of methodologies and tools for multisectoral nutrition governance and management and coordination. The more rigorous training component for governmental capacity development and institutional strengthening stemmed from lessons learned in the two pilot projects. More emphasis was placed on national capacity development in the second year of the pilots.

REACH has revised its approach to identify structural weaknesses and ways to strengthen national nutrition coordinating mechanisms. Current experience in Sierra Leone confirms the importance of capacity development at three levels: individual, organizational, and political environment. Accordingly, REACH has developed new capacity-development assessment and planning tools for in-country use and designed a new training module for the REACH facilitators. REACH has consulted with capacity-development experts at Tufts, Tulane, Cornell, and Wageningen universities and the Menzies School of Health Research, in addition to the World Public Health Nutrition Association. REACH will continue to collaborate with these and other renowned academic institutions.

REACH success at the country level in Mauritania created a demand from neighboring countries for REACH engagement. European Commission Humanitarian Office (ECHO) and the UK Department for International Development (DFID) provided funding to support a regional REACH facilitator based in Dakar, Senegal, to develop and apply the REACH model in West Africa. This facilitator not only coaches the in-country REACH facilitators and backstops REACH activities in countries in the region but also guides regional stakeholders in providing coordinated and harmonized nutrition support for capacity-building, advocacy, and coordination among donors. The evolving West Africa model of a regional working group is being considered in other regions pending further evaluation.

In Lao PDR, REACH supported the final development of the country's first national Nutrition Strategy and National Plan of Action for Nutrition (NNS/NPAN). REACH then facilitated the harmonization of working structures across vertical programs within the health sector into one coherent nutrition task force for all Ministry of Health programs. REACH supported the Ministry of Health to facilitate discussions with key external stakeholders that led to the creation of a Nutrition Task Force, which was charged with overseeing the implementation of the nutrition components in 15 line ministries and national commissions. REACH

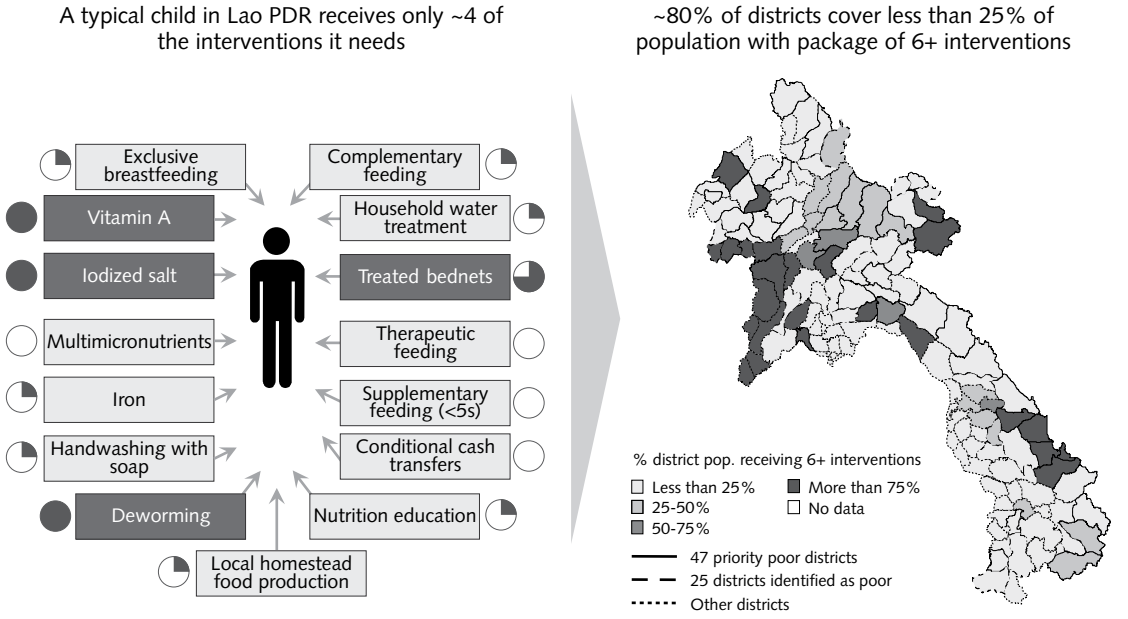

FIG. 4: Lao PDR coverage map. The map was produced by the National Statistic Center (NSC) in July 2003. It reflects districts proposed for early implementation of the Maternal Neonatal and Child Health core package as having full coverage. Source: Lao poverty statistical reports, provincial committees and authorities

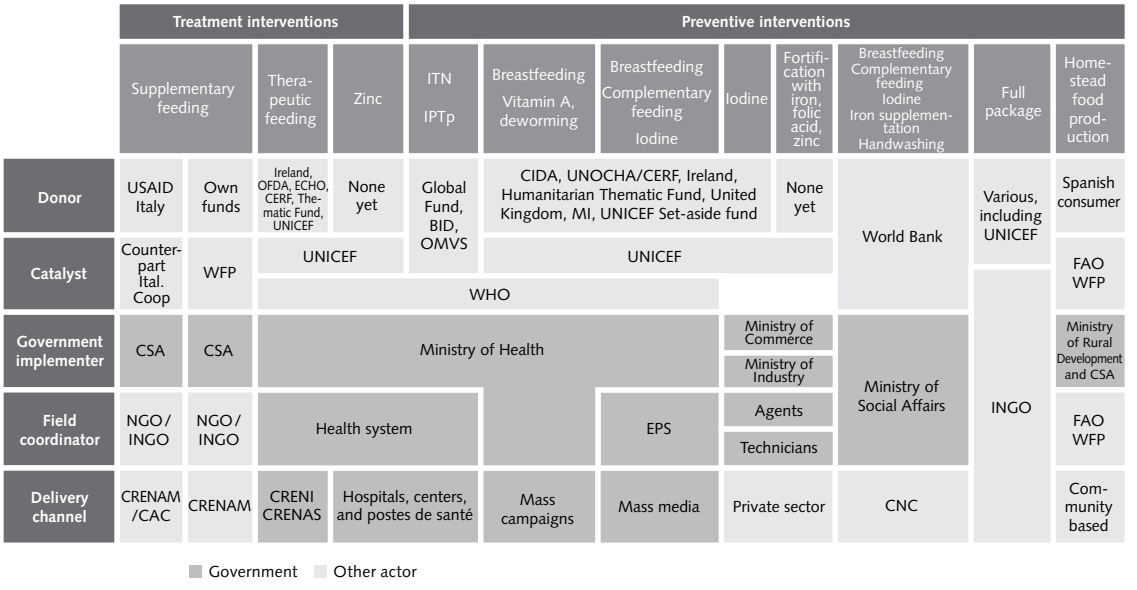

FIG. 5: Multistakeholder mapping in Mauritania.

BID, Banque Islamique de Developpement; CAC, Centre de Alimentation Communautaire; CERF, Central Emergency Response Fund; CIDA, Canadian International Development Agency; CNC, Centre de Nutrition Communautaire; CRENAM, Centre de réhabilitation et de l'éducation nutritionnelle pour la malnutrition aiguë modérée (nutrition rehabilitation center for MAM); CRENAS, Centre de réhabilitation et de l'éducation nutritionnelle pour la malnutrition aiguë sévère (nutrition rehabilitation center for SAM outpatient care); CRENI, Centre de réhabilitation et de l'éducation nutritionnelle intensif (nutrition rehabilitation center for SAM inpatient care); CSA, Commissariat de sécurité alimentaire (Food Security Commission); ECHO, European Commission Humanitarian Office; EPS, Education pour la Sante Department, Ministry of Health; FAO, Food and Agriculture Organization; INGO, international nongovernmental organization; IPTp, intermittent preventive treatment in pregnancy ; Ital. Coop., Italian Development Cooperation; ITN, insecticide-treated bednet; MI, Micronutrient Initiative; NGO, nongovernmental organization; OFDA, Office of U.S. Foreign Disaster Assistance; OMVS, Organisation pour la Mise en Valeur du fleuve Sénégal; UNOCHA, United Nations Office for the Coordination of Humanitarian Affairs; USAID, US Agency for International Development; WFP, World Food Programme; WHO, World Health Organization

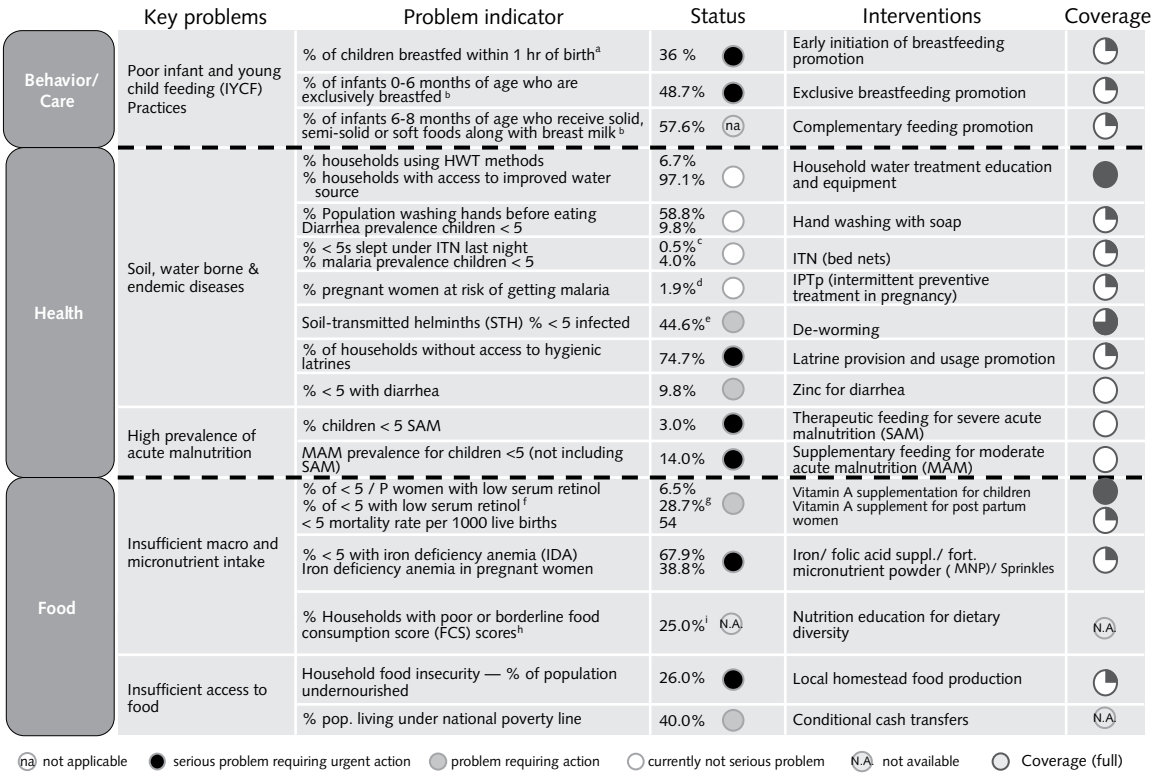

FIG. 6: REACH dashboard in Bangladesh. FCS, food consumption score; HWT, household water treatment; IDA, iron-deficiency anemia; IPT_p, intermittent preventive treatment in pregnancy; ITN, insecticide-treated nets; IYCF, infant and young child feeding; MAM, moderate acute malnutrition; MNP, micronutrient powder; SAM, severe acute malnutrition; STH, soil-transmitted helminths

a. BBS and UNICEF [6].
b. WFP, UNICEF, and Ministry of Health and Family Welfare - IPHN [7].
c. Operational coverage of any net per 2 persons at risk in 2007 (indoor residual spraying [IRS]/insecticide-treated net [ITN]) [8].
d. 19/1,000 estimated malaria cases for all ages in Bangladesh.
e. Data for rural Bangladesh only.
f. Tissue concentrations of vitamin A that are low enough to have adverse health consequences.
g. Before 21.7% according to WHO Vitamin and Mineral Nutrition Information System (VMNIS)/Helen Keller International (HKI) 1997/1998.
h. Food consumption score (FCS) is a benchmark for the World Food Programme (< 42 SCORE) [7].
i. Because of country-specific issues such as differing applications of the methodology and different thresholds (cutoff points), cross-country comparisons are not made.

also introduced common planning and implementation tracking tools that were adopted by both the Mother-Child Health National Commission and the Nutrition Working Groups, which has led to greater consensus on how to overcome human and institutional capacity constraints. The country-driven REACH process in Lao PDR has strengthened coordination, joint advocacy, situation analysis, policy development, and scale-up planning.

REACH is an important facilitator for multistakeholder coordination at the country level as well as a catalyst for action and results within the global SUN Road Map. The SUN Road Map has identified country-level nutrition governance and management as critical to ensuring sustainable commitment to achieving adequate maternal and child nutrition.

REACH monitoring and evaluation framework

The REACH country-level logical framework (Log-frame) outlines the structure for cascading impacts, outcomes, outputs, and activities of the REACH country approach. It defines the respective indicators against which to measure the impact, outcomes, and outputs of REACH. These indicators are incorporated into the respective REACH monitoring and evaluation results assessment instruments (REACH Baseline and Annual Review, and REACH Monthly Activity Monitoring) in support of the activities stipulated by the monitoring and evaluation framework. These instruments are linked to and harmonized with existing in-country data sources and monitoring and evaluation mechanisms and tools, where and to the extent possible with

regard to both nutrition impact and coverage data and the realm of nutrition capacity. Such existing data sources and mechanisms include landscape analysis, demographic and health surveys, comprehensive food security and vulnerability assessments, multiple indicator cluster surveys, and United States Agency for International Development Agency's Famine Early Warning Systems Network (FEWSNET), among others. The REACH partners promote consistency in reporting and increased coordination among major nutrition actors and want to prevent the duplication of efforts and maximize limited resources. REACH avoids overburdening countries by demonstrating sensitivity to evaluation fatigue and fosters government participation.

A key objective of the REACH approach is to create monitoring and evaluation frameworks that government counterparts can manage on their own. REACH assists with identifying ongoing nutrition monitoring conducted by partners and local implementing organizations. The REACH monitoring and evaluation system breaks down the elements of nutrition governance (encompassing policy, coordination, and capacity) and management into concrete terms as stipulated by the REACH process, with a view to measuring both its progress and its effectiveness. The monitoring and evaluation system tries to illustrate how nutrition governance and management unfold across the complex intersectoral and multistakeholder nutrition landscape. To this end, the system provides a standardized governance and management framework that allows comparisons of performance among different countries.

The evolving REACH monitoring and evaluation instruments define a set of indicators and processes for measuring the effectiveness and impact of improved capacities for multisectoral nutrition coordination and management to reduce undernutrition. This new framework incorporates components of nutrition impact assessments but focuses predominantly on monitoring and evaluating the policy and management process. As a result, the framework has the potential to help identify a set of benchmarks at the global level for improving multisectoral nutrition governance and management.

This monitoring and evaluation system is grounded on four main principles:

» Promotion of a *continuous* and *inclusive* monitoring and evaluation process with all relevant stakeholders;
» Use of monitoring and evaluation to help establish *consensus* on priorities, goals, and action among relevant stakeholders;
» Robust inputs and evidence base for *decision-making, advocacy,* and *resource mobilization*;
» *Diagnosis of critical success factors and areas for improvement* to facilitate responsive action and continuous *improvement* of approach.

The monitoring and evaluation system calls for the completion of monitoring and evaluation activities that utilize both quantitative and qualitative methods. Monitoring will formalize the continuous tracking of REACH activities and inputs conducted by REACH facilitators as part of their regular duties. The monitoring and evaluation system introduces a set of reviews and assessments to be conducted on an annual basis, inclusive of the baseline and endline reviews in all REACH country-level engagements (**fig. 7**). This framework outlines the relationship and distinction

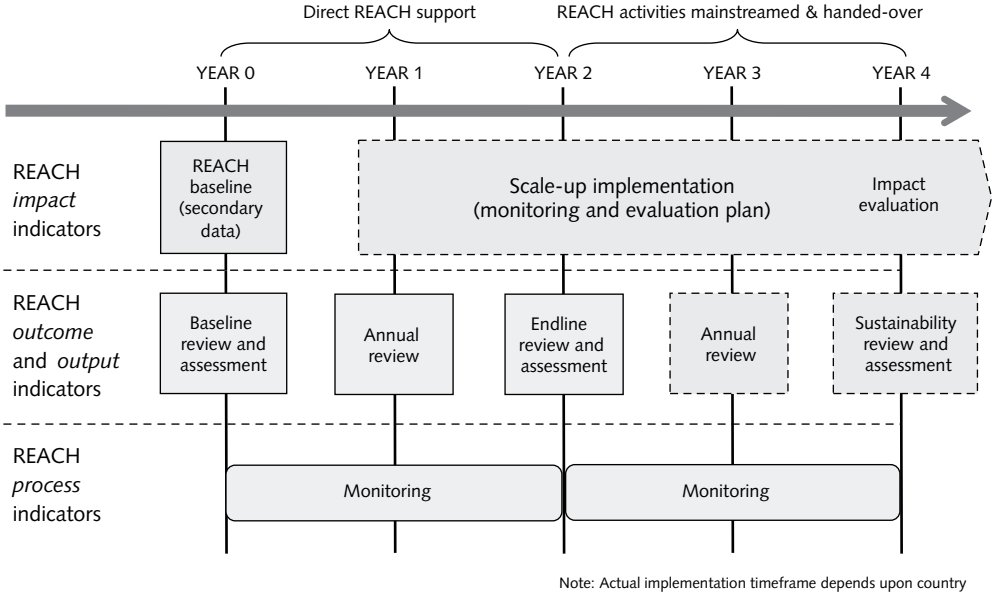

FIG. 7: Timeline of REACH monitoring and evaluation activities

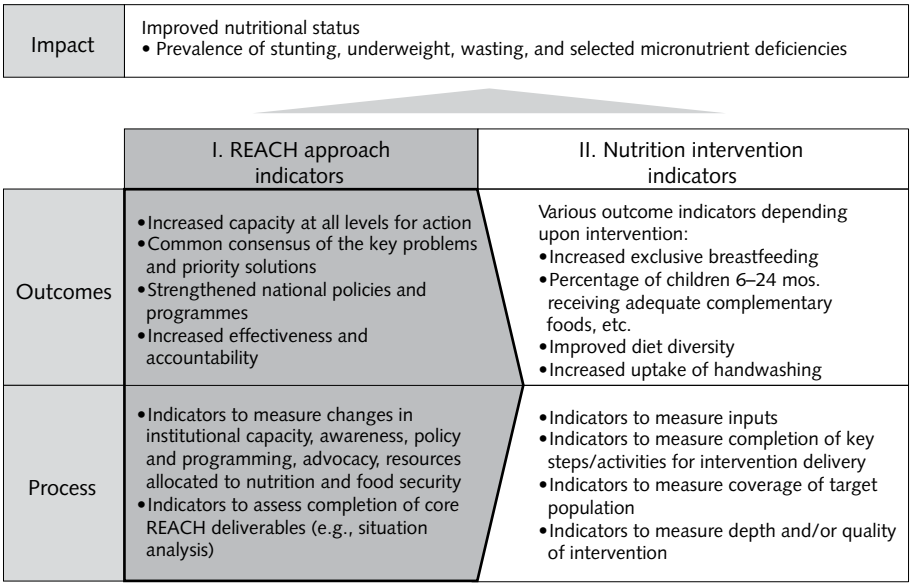

FIG. 8: REACH monitoring and evaluation framework, distinct from but linked with intervention indicators

between the nutrition intervention monitoring and evaluation components utilized by the REACH partner agencies and other implementing partners and those components for REACH. Whereas the monitoring and evaluation of nutrition carried out by implementing partners is geared toward program implementation of direct nutrition interventions and is linked to nutritional impact, the REACH monitoring and evaluation system will focus on measuring the REACH process and outcomes* with respect to nutrition governance and management and will link these components to nutritional impact. As a result, these two monitoring and evaluation streams interact, and both contribute to nutrition impact (improved nutritional status, as expressed by anthropometric and micronutrient status indicators) (**fig. 8**).

The US Agency for International Development (USAID) provided a grant to REACH to develop a robust monitoring and evaluation nutrition governance and management framework and supporting instruments. A preliminary version of the new REACH monitoring and evaluation framework instruments was formulated and reviewed by the UN country directors and technical experts in Mauritania, Lao PDR, and Sierra Leone. These instruments were then applied on a trial basis to evaluate the REACH pilots in Mauritania and Lao PDR in early 2011. The application of these instruments was used to assess the added value of REACH facilitation in Mauritania from 2008 to 2010 with regard to outcome number 1 as shown in **figure 9**. Both the REACH in-country team and the review mission found these monitoring and evaluation instruments helpful in assessing results achieved with regard to the expected outputs and outcomes of REACH support. Thus, there was common agreement and understanding of where progress was achieved and where there was a lack of progress. REACH could then extract lessons learned and recommendations for the way forward. Many of the actual findings of the two REACH review missions to Lao PDR and Mauritania are reflected in the relevant sections of this paper.

The new monitoring and evaluation framework that was tested during REACH review missions to Lao PDR and Mauritania in early 2011 was found to be very useful and allowed for both in-country and cross-country assessments and analyses of achievements and constraints. Additional work will be required to fine-tune the selected indicators and make them more adaptable to different country situations. It is also important to establish clearer links between the REACH governance and management outputs, outcomes, and indicators and the in-country mechanisms for monitoring nutrition impacts and coverage of nutrition interventions that are conducted by government and other partners.

The REACH Advisory Group and technical experts from the UN agencies will convene in March 2011 to provide comments and recommendations for improving and finalizing the frameworks and monitoring instruments. The REACH monitoring and evaluation component, once completed, will reinforce the

* The four REACH outcomes as established by the REACH partner agencies at the inception of REACH are increased capacity at all levels for action, common consensus on the key problems and priority solutions, strengthened national policies and programs, and increased effectiveness and accountability.

Indicators	Baseline	Endline	Outputs	Performance rating
Outcome 1 (Increased awareness of the problem and of potential solutions) Outcome indicator 1.1: Consensus on REACH Dashboard to achieve scaling of priority nutrition actions at national level				+
[1.1.1] Nutrition problem indicators compiled/updated	18 (2004)	25	**Scoping analysis completed**	+
[1.1.2] Proportion of coverage indicators compiled	4 / 16	19 / 17		
[1.1.3] Proportion of delivery channels explicitly identified and analysed in an integrated planning process	4 / 11	9 / 11		
[1.1.4] Stakeholder mapping updated	No	Yes		
[1.2.1] Prioritisation of selected interventions	No	Yes	**Selection of nutrition interventions for expected results validated**	+
[1.2.2] Targeting strategies for selected priority interventions defined	No	Yes		
[1.2.3] Selection of priority interventions validated	No	Sufficiently avalidated		
[1.2.4] Selection of targeting strategies for priority interventions validated	No	Sufficiently validated		
[1.3.1] Investment case completed	No	Partially	**Investment case completed**	√
[1.3.2] Proportion of total annual investment (USD) in nutrition & food security, directly financed by government revenue	1.7%	Ongoing		
[1.3.3] Proportion of total annual investment (USD) in nutrition & food security, financed by official development assistance (ODA)	98.3%	Ongoing		
[1.4.1] Creation of joint advocacy strategy	Partially	Yes	**Joint advocacy strategy established and pursued**	√
[1.4.2] Perception of stakeholders that nutrition is a national priority (attitude score) Somewhat prioritised Moderately or highly prioritised	 47% 35%	 44% 39%		
[1.4.3] Number of annual significant nutrition forums/conferences/events	2	4		

FIG. 9: Excerpt from Summary Report, Preliminary Findings from Mauritania. The performance rating is presented on a three-tier scale: +, good performance; √, progress, but not sufficient; –, unsatisfactory performance. ODA, official development assistance

monitoring and evaluation of implementing partners as a result of REACH's identification of limitations and facilitation of the required improvements. The REACH monitoring and evaluation framework is standardized, yet sufficiently flexible and dynamic that it may be applied to the great number of stakeholders implementing nutrition activities in different country contexts.

Concluding remarks

REACH was conceived in the spirit of UN reform and with a strong direct commitment on the part of the UN agencies tasked with providing effective and harmonized support to achievement of the Millennium Declaration/MDG hunger and poverty target. It seems, indeed, that the ambition of establishing better-coordinated UN support to nutrition programming at the country level has been fulfilled, and some UN country directors suggested that this kind of facilitation mechanism should be developed and adopted in other important cross-cutting areas of UN system development support.

Judging from the review missions of the two REACH pilot countries, Lao PDR and Mauritania, there is also clear evidence that the REACH facilitation, tools, and knowledge-sharing mechanisms have been valuable and used extensively, not only within the UN system but also among collaborating officials from government and among a wide range of in-country partners. REACH has been particularly effective in engaging at the technical working group level with governments, the UN, donors, NGOs, and other partners.

Regarding the scaling up of nutrition actions as well as direct measurable impact on undernutrition, the results of REACH engagement in the two pilot countries to date have been more modest due to the in-country context during the time of REACH engagement. In Lao PDR REACH was focused on a necessary but lengthy national planning process, and in Mauritania an initially very promising government-led nutrition initiative was interrupted by a military coup. In both cases, however, the two countries are scaling up essential nutrition actions, and REACH made very critical contributions to this end through its intense facilitation process to develop and further the coordination of governance and management.

REACH engagement at the country level does advance nutrition governance and management in a wide range of situations, but partners need to agree on the entry point for REACH assistance in each country.

REACH will certainly not single-handedly end child hunger and undernutrition, but it is positioned to become a very important catalyst in the scaling up of essential and effective nutrition actions. In a situation where a large number of partners and major resources are mobilized in the framework of the global SUN movement, the role of REACH and its value added are likely to become further enhanced.

Acknowledgments

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