How Nutrition Improves
Half a Century of Understanding and Responding to the Problem of Malnutrition
STUART GILLESPIE AND JODY HARRIS

MALNUTRITION IS A global challenge with huge social and economic costs. Undernutrition kills millions of young children annually, stunts growth, erodes child development, reduces the amount of schooling children attain, and increases the likelihood of their being poor as adults, if they survive. It also persists through the life cycle and beyond—underweight mothers are more likely to give birth to underweight children, perpetuating the transmission of malnutrition across generations. Undernutrition reduces global GDP by USD$1.4–2.1 trillion a year—the size of the total economy of Africa south of the Sahara. And even though many countries are making progress in reducing child undernutrition, another form of malnutrition—overweight and obesity—is now changing the health landscape in every region of the world.

Over the past 50 years there have been many changes in how the problem of malnutrition has been conceptualized, analyzed, and addressed. Recent years have witnessed an unprecedented global rise in high-level political commitment and financing. Nutrition champions are making an increasingly effective case for investing in nutrition, and as we move into the new era of the Sustainable Development Goals (SDGs), the wider development world is beginning to embrace nutrition as central to development programming and fundamental to achieving a whole range of development goals. Yet, although political momentum is essential for progress in nutrition, it is unquestionably not enough. In fact, it is in danger of fizzling out unless it leads to more and better action that yields results on the ground.

So, while much remains to be done to build and sustain national-level commitments to nutrition, policy makers and practitioners are increasingly grappling with the nuts-and-bolts challenges of turning the newfound global commitment into large-scale action at the country level. It is in this context that lessons on how to improve nutrition in the real world and in real time are needed. A recent multicountry review of scaling up impact on nutrition, undertaken by the international research consortium Transform Nutrition, summed up the challenge thus: “Although there is a strong
consensus on what needs to be done, much less is known about how to operationalize the right mix of actions in different contexts, [and] how to do so at a scale that matches the size of the problem, in an equitable manner.”

The type of knowledge required to meet this challenge is as much about experience as it is about evidence. There is a growing demand for narratives of what has worked well (and what hasn’t). Case studies of successful approaches to designing, implementing, scaling up, and sustaining an appropriate mix of nutrition-relevant actions are increasingly called for in global nutrition research and operations.

This book is an attempt to meet this demand by combining a review of various analyses and studies with a narrative approach to convey the drivers and pathways of success in nutrition in different contexts and at different times. It seeks to inspire as well as to inform. In recent years, there has been a growing focus on the potential of narrative and storytelling to inspire and promote change. Stories can turn the key in ways that help the reader intuitively grasp why change is needed, what it involves, how it happens, and—crucially—how it can be made to happen. Stories enable listeners to extrapolate from case studies and to see analogies with their own backgrounds, their own contexts, and their own fields of expertise. Research has shown that stories catalyze change because they are natural and easy to tell, they show connections between things, and they cut through complexity. They are memorable, nonadversarial, and nonhierarchical. And because they
engage feelings, they inspire, motivate, and energize people.\textsuperscript{5}

There are many stories of change in this book—stories of how countries have accelerated progress in reducing malnutrition, of how successful interventions have been developed and implemented, and of how individual leaders and nutrition champions have emerged and changed the landscape. These stories fit within a larger context of the multiple narratives that have shaped global nutrition-relevant discourse and action during the past half-century since nutrition science emerged as a discipline. These narratives relate to the nature of the problem of malnutrition—its manifestations, causes, and consequences—as well as to the value of different approaches to addressing it. Representing, as they do, different perceptions and ways of framing malnutrition, they condition what is done and not done in different contexts and at different times. In this first chapter we seek to paint a picture, using a broad brush, of the evolution of approaches to understanding and responding to the challenge of malnutrition through the decades.\textsuperscript{6}

### Paradigms in International Nutrition: An Overview

Much has been written about the history of international nutrition from different subdisciplinary perspectives. Figure 1.1 summarizes a review of 11 nutrition history papers, grouped according to the broad perspective from which the authors chose to write.\textsuperscript{7} Both differences and similarities between accounts are evident from this review, and

**FIGURE 1.1** Historical evolution of approaches to understanding and responding to malnutrition

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Emergence of nutrition science</td>
<td>Food shortage</td>
<td>Multisectoral planning</td>
<td>Nutrition isolationism</td>
<td>Specific and sensitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Protein era</td>
<td>Multisectoral planning</td>
<td>Nutrition isolationism</td>
<td>Micronutrient</td>
<td>Nutrition priority</td>
<td>Nutrition priority</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Protein deficiency</td>
<td>Multisectoral planning</td>
<td>Nutrition policy</td>
<td>Community</td>
<td>Micronutrient</td>
<td>Rights vs investment</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Deficiencies and undernutrition; dietary recommendations</td>
<td>Overweight and NCDs; dual burden; food systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Protein and starvation</td>
<td>Targeted feeding</td>
<td>RUTF / CMAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lactational performance; weaning; formula milk and maternal food provision</td>
<td>Infant and young child feeding / breastfeeding promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Medical pathology; milk powder; home economics</td>
<td>Rehab centers; food technology</td>
<td>Multisectoral planning; food distribution</td>
<td>Integrated projects; breastfeeding; school feeding; food coupons</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Authors, based on sources listed in notes 8–18.

**Notes:** RUTF = ready-to-use therapeutic food; CMAM = community-based management of acute malnutrition; NCDs = noncommunicable diseases.
it is useful to understand the origins and drivers of these differences and similarities before we begin to unfurl the history of international nutrition.

In terms of the differences, it is important to note at the outset that the nutrition community is not monolithic; indeed, it has been characterized by some as fragmented.\(^{19}\) In recent decades, the international nutrition community has experienced a split between “emergency” nutritionists, who focus predominantly on treating malnutrition present in acute or recurring emergencies through various medical models, and “development” nutritionists, who focus on preventing malnutrition by addressing its more basic social, economic, and political drivers. This has also been characterized as a philosophical split between technocrats, with medical solutions to existing problems, and structuralists, who want to address why a problem emerges and is perpetuated—though the dichotomy between these two philosophies is rarely so clear-cut in practice. The discipline of nutrition stems from health and medicine, which in turn rest on classical theories from behavioral psychology, biomedical science, and public administration.\(^{20}\) Nutrition training has therefore often struggled to bring in a broader social science perspective, which can help explain the complex interactions underlying malnutrition.\(^{21}\)

In terms of the similarities, certain themes prevail across many of the histories. The practice of international nutrition is based in the discipline of nutrition science, which like any discipline has gone through distinct phases of understanding and action. The primary focus on starvation, protein, and medical models of intervention and treatment in the 1950s and 1960s gave way to multisectoral planning in the 1970s, before the focus shifted toward micronutrients (and subsequently what some termed the disciplinary isolationism of nutrition) in the 1990s and 2000s. In recent years the picture has become more complex as more actors, with a wider recognition of the multiple issues surrounding nutrition, have become involved. In what follows, we describe the key historical phases and try to explain how certain thematic or operational priorities emerged and evolved over time.

1950s–1960s: Famine, Hunger, and a Fixation on Protein

In the mid-20th century, the complexities of postwar reconstruction and an increasingly globalized world gave rise to the modern field of international development, concerned with improving the lives and economic prospects of “underdeveloped” countries. For many people working in development, hunger, and in particular the periodic famines that stalked these countries, was a particular preoccupation.

Alongside this focus on hunger, scientific research in nutrition targeted the biological role of particular nutrients in severe forms of undernutrition. The origins of a development focus on nutrition can be traced to an assumption that deficiencies of macronutrients—energy and protein—play a primary role in hunger and are the most visible manifestations of undernutrition in children. During the postwar years, the international community focused on the metabolic consequences and treatment of severe protein deficiency, which was the assumed mechanism for severe malnutrition. In 1955 the United Nations Protein Advisory Group was formed to advise the UN secretary-general on nutrition interventions. Right through to the 1970s, research continued to focus on the technological challenge of developing protein concentrates and isolates and on ways of increasing the protein content of conventional foods.

1970s: From Protein to Multisectoral Nutrition Planning

As the 1970s opened, some nutrition scientists were beginning to challenge the notion that protein...
deficiency was the main nutritional problem of the time. In groundbreaking work in India, Professor P. V. Sukhatme found that malnourished children improved not only when fed protein-rich foods, but also after consuming staple foods, including cereals. In 1974, Donald McLaren published the article “The Great Protein Fiasco,” which finally blew a hole in the notion that the main nutritional challenge was protein deficiency.

The concept of the much-publicized world protein “gap,” “crisis,” or “problem” arose from the description of kwashiorkor in Africa in the 1930s and the assumption, which has turned out to be wrong, that malnutrition in children takes this form throughout the world. As a result, measures to detect protein deficiency and treat and prevent it by dietary means have been pursued until the present time. The price that has had to be paid for these mistakes is only beginning to be realized.

Building on Sukhatme’s findings, subsequent analyses showed that if people’s diets were adequate in calories, then their protein intake too would be adequate. In a classic example of a collapsing paradigm, solutions to malnutrition began to be sought in the wider social and economic arena, well beyond technical nutrient fixes. The focus turned to alleviating hunger and poverty and assuring access to food.

McLaren’s work also resonated with a wider movement underway to systematically diagnose and treat the underlying causes of malnutrition as part of a new field of nutrition policy and planning, which emerged from the first International Conference on Nutrition, National Development, and Planning in 1971. This was a key moment when nutrition science began to connect with development policy and practice. In 1973, Alan Berg published The Nutrition Factor, advancing the idea that nutrition was an essential driver of economic growth, arguing that nutrition programs could be viewed as investments rather than simply consumption, and recommending specific actions that could be implemented relatively easily.

As the decade progressed, an increasing number of national governments and international agencies began to embrace nutrition objectives. Partly in response to food crises, nutritional surveillance initiatives emerged in which indicators of nutritional outcomes were tracked alongside those relating to their core determinants and sequelae, including food availability and health status.

In 1974 the World Food Conference focused on the global food crisis, and issues of distribution and access to food—rather than aggregate food supply—were increasingly perceived as drivers of hunger and malnutrition. Two years later, the World Bank published an influential study showing that reliance on economic growth alone to assure dietary adequacy among the poor would take too long. Amartya Sen’s work on entitlements, which later won him a Nobel Prize, reinforced this shift away from a supply-side focus on food by emphasizing the distributional links between inequality, hunger, and famine. In 1977 the UN Protein Advisory Group evolved into the UN Administrative Coordination Committee’s Subcommittee on Nutrition (ACC/SCN or just SCN), with its attention now focused on improving breastfeeding, maternal and child nutrition, and complementary feeding.

The August 1973 publication of “The Baby Food Tragedy” in the New Internationalist was a pivotal event in nutrition that reverberates to this day. The editorial in that issue started, “On the cover of this issue is a photograph of grave no. 19232. It is the grave of a Zambian baby. On it, the mother has placed a feeding bottle and an empty tin of milk-powder. They are symbols of infant death and of the mother’s attempt to do her best for her child during its short life. What the
mother does not know is that the way in which she used that same milk-powder and feeding bottle was also the main cause of her baby’s death.” Multinational companies (and Nestlé in particular) were accused of contributing to infant mortality in developing countries through the practices they adopted to market infant formula foods (see Chapter 3). This led to the World Health Assembly’s passage of the International Code on the Marketing of Breast-milk Substitutes in 1981.31 Ever since, these events have acted as lightning rod in the ongoing debate over the role of the private sector in nutrition.

As people’s understanding of nutrition’s etiological landscape continued to evolve, many raised the question of the most appropriate type of

---

**Box 1.1 Conceptualizing nutrition**

For more than a quarter century, the UNICEF conceptual framework of nutrition has been the gold standard for understanding the drivers of undernutrition.29 The framework illustrates how these drivers operate at multiple levels, from immediate, individual-level causes, to underlying household- and community-level determinants related to food, health, and care, to basic or structural-level causes related to policy, politics, power, and capacity. Widely adopted and adapted,30 the framework was the basis for the 2013 Lancet Maternal and Child Nutrition Series that shaped this book’s structure.

**The 1990 UNICEF nutrition framework**

![Diagram of the 1990 UNICEF nutrition framework]

*Source: Adapted from UNICEF, Strategy for Improved Nutrition of Children and Women in Developing Countries (New York, 1990).*
institutional arrangement for nutrition. Emerging notions of the multisectorality of nutrition and its causes, consequences, and solutions led, as Alan Berg succinctly put it, to nutrition being perceived as “everybody’s business but nobody’s main responsibility.” A growing understanding of this blind spot led to the concept of multisectoral nutrition planning, marking a reaction to largely food supply–oriented interventions that did not address the wider, nonfood drivers of malnutrition and had little impact. Program planning came to the fore. Nutrition institutes in many countries (such as Chile, Guatemala, India, Indonesia, Mexico, the Philippines, Tanzania, and Zambia) were now viewed as anachronistic because they treated malnutrition as a largely medical problem. To advocates of multisectoral planning, the challenge was not launching more and better nutrition interventions, but rather influencing policies and programs in a broad range of development sectors. This thinking led to the establishment of “nutrition cells,” often in the office of a president or prime minister. A total of 26 nutrition planning entities were established in the 1970s, supported primarily by the U.S. Agency for International Development (USAID) and the Food and Agriculture Organization of the United Nations (FAO).

1980s: From Multisectorality to Nutrition Isolationism

The decade of the 1980s dawned against a background of competing narratives on the provision of health care and on development more widely. The promotion of structural adjustment (focusing on removing state controls in national economies) did not sit easily with the World Health Organization’s push for access to primary healthcare following the 1981 Alma Ata declaration. Against this backdrop, the notion of active community participation in nutrition program development began to take root (see Chapter 2). This aligned with wider participatory trends in development, as evidence emerged that programs with community-driven decision making had sustainable impacts. The Iringa program in Tanzania, launched in 1985, was a leading example that would have a major impact on nutrition thinking and action in years to come, stimulating the development of the pioneering UNICEF conceptual framework and nutrition strategy in 1990, as shown in Box 1.1.

By the 1980s most nutrition planning cells had ceased to function or been abandoned. The notion of multiple sectors somehow being coordinated in complex master plans by a nutrition cell that rarely had any political clout or funding was deeply flawed. In an important policy retrospective, John Osgood Field attributed this failure principally to unwarranted assumptions about political priorities, a focus on planning rather than action, and a lack of capacity and data for the systems analysis demanded by multisectoral planning. The hard-learned lesson here was that a multifaceted challenge like malnutrition requires action from many sectors, but it does not necessarily require such actions to be elaborately choreographed by any one entity. Analysis of such programs revealed a frequent lack of consideration of political determinants and resource availability. The failure of multisectoral planning gave rise to the era of “nutritional isolationism” in which the pendulum swung back to nutritionists who increasingly focused on two sets of interventions that needed little involvement from other sectors: micronutrient supplementation and breastfeeding.

The nutrition community itself, however, was not entirely harmonious at this time. Disagreements about responsibilities across sectors and agencies and an “either/or” mentality bedded in as debates on whether nutrition was primarily a health or a food issue became increasingly fractious. A commonly raised question was whether nutrition
was better served by being incorporated into larger programs, divisions, or departments for health, agriculture, or social welfare or by maintaining its own identity in nutrition departments. Strangely, the notion that both options could be pursued was less common. There were debates too between practitioners, who argued that the field was too dominated by the science of nutrition, and academics, who questioned the rigor of conceptual constructs, data collection, and analysis used in practice.

During the 1980s, it became increasingly clear that certain micronutrients—that is, vitamins and minerals—were crucial for physical and cognitive growth and for preventing birth defects, morbidity, and mortality (see Chapter 4). In 1985 the UN SCN developed a 10-year plan for controlling vitamin A deficiency. The following year the International Coordinating Committee on Iodine Deficiency Disorders (ICCIDD) was formed and quickly became effective at bringing iodine deficiency disorders (IDDs) to international attention, developing support for wide-scale salt iodization, and promoting laws to enforce the participation of salt manufacturers.

1990s: The Birth of the UNICEF Framework and the Micronutrient Era

Conceptually, the start of the 1990s saw a giant step forward in the form of UNICEF’s development of a coherent nutrition framework that provided a common language and indicated roles for different actors. The two pillars of UNICEF’s new nutrition strategy—both deriving from experiences in the UNICEF-led Iringa program in Tanzania (described in Chapter 2)—comprised the conceptual framework describing the determinants and drivers of undernutrition at different levels (see Box 1.1) and a process for assessing, analyzing, and acting to address nutrition problems: the “triple A process.” Both were to prove highly influential in the years to follow and remain so today (see, for example, Figure 1.2, showing the Lancet framework, which derives from the UNICEF framework). In 1990, UNICEF organized the UN World Summit for Children—a milestone in setting ambitious malnutrition reduction goals and building strong momentum around the human rights–based rationale for action, which UNICEF executive director James Grant called an “ethical imperative.”

The 1990s was also the decade of micronutrients, especially the “big three”: vitamin A, iodine, and iron (see Chapter 4). The 1990 World Summit for Children set a goal of reducing anemia by one-third by the end of the decade (practitioners later concluded it could not be achieved because of the widespread difficulty of delivering supplements as well as recipients’ poor adherence to supplementation due to side effects). It also established a goal of virtually eliminating IDDs by 2000, and many agencies, donors, and the salt industry took to this challenge. In 1991 the conference “Ending Hidden Hunger” helped strengthen micronutrient programming, and in 1993 the Micronutrient Initiative was formed. Overall, micronutrient control programs achieved considerable success during the 1990s: by the end of the decade, 60 percent of developing-country households were using iodized salt and 30 percent of children were receiving vitamin A capsules twice a year.

In 1992 FAO and WHO co-convened the International Conference on Nutrition (ICN) in Rome. The conference endorsed the UNICEF conceptual framework and the World Summit for Children nutrition goals while laying further emphasis on household food security, nutrition surveillance, and micronutrient deficiency control. Countries were encouraged to prepare national plans of action for nutrition. Many were produced, but few were implemented.

Up to this point, the literature on nutrition policy had been sparse since the first flush of
publications on nutrition planning in the 1970s. Starting in the early 1990s, though, work on the political economy of nutrition began in earnest. In 1993 Per Pinstrup-Andersen edited a volume bringing together key thinkers in nutrition policy. In one chapter, John Osgood Field summarized the factors behind nutrition’s low political capital at the time (many of which still hold true today). These included the poor framing of issues; the relatively meager power of nutrition actors, who were unable to persuade political leaders to prioritize nutrition; entrenched structural or organizational issues, including nutrition’s institutional homelessness; and the difficulty of defining or measuring political commitment. Pinstrup-Andersen’s summary posited that actors’ goals, roles, and relative power are key to understanding and responding to nutrition policy challenges and concluded with a plea for more contextual political economy analyses to yield more useful and realistic results in the field.

Also in the early 1990s, the UN SCN convened several interagency workshops and undertook a series of eight country case studies that culminated in the synthesis entitled How Nutrition Improves. The final chapter, which covered political economy, institutional capacity, and nutrition policy, pointed to the need for a mix of state- and community-led nutrition-relevant action, institutional support from both research and implementing partners and strong links between them, the use of a “functional classification” of data on nutrition and its drivers to catalyze and incentivize wider sectoral action, and a free press to shine a spotlight on emerging food and nutrition crises. The process of formulating the policy was increasingly viewed as at least as important as the final policy itself. Along these lines, the SCN frequently stressed the need to see policy as not just what it says, but what it does (following Clay and Schaffer’s 1984 book) in which the implementation mechanisms and processes developed by stakeholders needed to be clearly articulated. By the end of the 1990s, though, the field of the political economy of nutrition sank back into relative silence.

2000–2010: Emerging from the Development Shadows

From the mid-1990s to the mid-2000s, nutrition went through a lean policy period. Other major development challenges such as HIV/AIDS held the limelight, drawing donor dollars and generating media interest, as nutrition languished in the shadows. The spotlight shifted somewhat following a joint World Bank-UNICEF global assessment of nutrition-relevant policy and practice. The ensuing book argued that despite a growing consensus within the nutrition community on the key interventions that could be applied to tackle nutrition directly, beyond the nutrition community, knowledge about undernutrition, its consequences, and its relevance to poverty and other human development goals was fragmented and was being inconsistently applied. It remained therefore for nutrition researchers, practitioners, and donors to demonstrate impact through rigorous evaluations and to communicate better outside their disciplinary comfort zone. In the same period, Richard Heaver of the World Bank wrote about management and capacity issues surrounding successful implementation of nutrition programs, focusing in particular on the role of higher-level nutrition “champions” and midlevel policy “entrepreneurs” in policy change. Drawing from these various inputs, the World Bank published its highly influential nutrition strategy, Repositioning Nutrition as Central to Development.

During this period, work was also underway at the International Food Policy Research Institute (IFPRI) on exploring the potential for “raising the floor” of a population’s micronutrient status by developing and promoting biofortified crops, bred to be rich in vitamins and minerals. This work
ultimately led to the launch of the HarvestPlus program in 2004.

Momentum picked up later in the decade with the publication of the first *Lancet* Maternal and Child Nutrition Series in 2008, which significantly raised the profile of nutrition. The series achieved several outcomes: it provided a structured, up-to-date evidence base on the trends, causes, and consequences of different forms of undernutrition and on the critical importance of the 6- to 24-month age group (which later led to the “1,000 days” concept). It focused on a package of direct, nutrition-specific interventions for which there was compelling evidence of efficacy, including micronutrient supplementation, fortification, infant and young child feeding, and prevention and treatment of severe acute malnutrition. Finally, it identified 36 countries in which 90 percent of the global burden of child stunting was located. The challenge, according to the *Lancet*, was to operationalize and scale up this package of interventions in these high-burden countries.

2010–2015: Ramping Up Political Commitment and Financing

In recent years high-level political commitment to address undernutrition has ramped up significantly among international UN, donor, and NGO organizations as well as many donor governments. Nutrition is no longer in the wings of the international development stage. Policies and strategy documents on nutrition proliferated among development agencies in this period, and overseas development assistance rose markedly.

This ascendancy has been brought about by a number of factors. Some of the impetus undoubtedly stemmed from the original 2008 *Lancet* Series and the ensuing discourse and media attention. The food price spikes of 2007–2008 also sparked renewed media and policy interest in undernutrition, and the 2008 Copenhagen Consensus (building on initial work in 2004 and later updated in 2012) concluded that nutrition interventions were among the most cost-effective in development.

One of the most important drivers, as well as beneficiaries, of the global momentum has been the Scaling Up Nutrition (SUN) Movement, launched in 2010, which now has membership from 57 countries worldwide. Founded on the principle that all people have a right to food and good nutrition, the SUN Movement seeks to “unite people—from governments, civil society, the United Nations, donors, businesses, and researchers—in a collective effort to improve nutrition.” 48 Although the SUN Movement includes businesses as partners, the role of private-sector engagement—four decades after “the baby food tragedy” article in the *New Internationalist*—is still being vigorously debated.

In 2013 a second *Lancet* Maternal and Child Nutrition Series widened the scope of the 2008 series to review evidence and experience with “nutrition-sensitive” interventions from a range of sectors, including agriculture, social protection, education, and early childhood development. 49 It did so in light of evidence that direct interventions alone—if scaled up to 90 percent population

Consuming biofortified orange maize can help children meet their daily vitamin A needs.
coverage—would address only about one-fifth of the burden of child stunting in the highest-burden countries. This second series included an article on the politics of addressing malnutrition that raised the issue of enabling environments and reviewed experience. The arena for nutrition-relevant action was broadening.

In the same year—2013—a major international Nutrition for Growth (N4G) summit led to unprecedented pledges of US$23 billion to address malnutrition. This was followed in 2014 by the Second International Conference on Nutrition (ICN2) and the launching of an annual series of Global Nutrition Reports. The Global Nutrition Report has positioned itself as not just a report, but a global accountability intervention. It highlights progress toward meeting nutrition goals and describes innovative approaches to addressing malnutrition and country experiences, but it also goes further to track the follow-up to the many pledges made at the 2013 N4G summit.

Such events, outputs, and policy windows have been underpinned and catalyzed by an international nutrition community of academics and practitioners that had been working in the background throughout nutrition’s lean period and were thus poised to make links and grasp opportunities to advance an important part of the development agenda. The nutrition community has become more effective and more politically “streetwise” in making the case for investing in nutrition. It has done so by using a range of rationales including human rights, economic, and human development arguments. Other development sectors and actors are also now increasingly embracing nutrition—especially the agriculture community, which sought to put agriculture to work for better nutrition. In its reform process, the CGIAR network has placed a greater emphasis on nutrition than ever before, spearheaded by the Agriculture for Nutrition Health (A4NH) program, launched in 2010.

These international events and opportunities have also played out in national contexts. The emergence of a focus on how to implement, rather than simply what to implement, has led to a greater emphasis on the importance of political commitment from national governments, to efforts to build and measure commitment in various forms, and to implementation and scaling up of nutrition-relevant actions. The notion of “scaling up”—which only really surfaced in the nutrition world in the late 1990s (see Tom Marchione’s 1999 book Scaling Up, Scaling Down)—is the SUN Movement’s raison d’être. The focus is now shifting toward scaling up impact on nutrition—that is, not simply increasing coverage of a nutrition program, but rather focusing on what drives impact and then determining what mix of interventions must be applied to attain that impact. This in turn emphasizes the need for a multisectoral, multilevel, and multistakeholder approach to generate a significant impact on malnutrition and to sustain it over time.

While high-level speeches in support of nutrition have been forthcoming, more concrete forms of financial and institutional commitment have in most cases been slower to materialize. Most high-burden countries still face significant gaps in their technical and strategic capacity to conceive, run, and scale up effective nutrition policies and programs—and as yet, there are few tangible, long-term plans or programs to strengthen capacity to improve nutrition.

But progress has been made and is being made. This book is intended to serve as a repository of experiences—to show what was done and how—in different contexts and at different times to address malnutrition and improve the lives of millions.

**Structure of This Book**

This overview’s historical walk through 50 years of thinking and action on nutrition provides context
for the stories that follow. The structure of the book, its themes, and the choice of chapters have been strongly influenced by, among other things, the *Lancet* 2013 Maternal and Child Nutrition Series’ framework for actions (see Figure 1.2, adapted from the UNICEF framework in Box 1.1) and inputs from the Nourishing Millions advisory committee.

The stories in this book are divided into three sections, which correspond to the levels of response to malnutrition as shown in the *Lancet* framework. The first section—“Transforming Nutrition Interventions”—focuses on nutrition-specific interventions and programs that directly address malnutrition and target its immediate causes (light blue boxes in Figure 1.2). The chapters in this section focus on community-led programming (Chapter 2), interventions to ensure optimal infant and young child feeding practices (Chapter 3), micronutrient supplementation and fortification (Chapter 4), and community-based management of acute malnutrition (Chapter 5).

Section 2, “Transforming Sectoral Actions,” covers nutrition-sensitive programs and approaches, which address the underlying determinants of malnutrition (green boxes). Nutrition sensitivity is not a new concept, but investment in developing, implementing, and evaluating nutrition-sensitive programs has intensified in the past few years. This section includes chapters focusing on agriculture (Chapter 6), social protection (Chapter 7), and water, sanitation, and hygiene (Chapter 8), all of which offer huge potential contributions to addressing malnutrition at scale. The final chapter in this section is on obesity prevention and control (Chapter 9), reflecting this growing global problem.

The third section—“Transforming National Policy and Programming”—focuses on how stories of change in nutrition play out at the country level. This permits us to highlight the role of the enabling environment (at the base of Figure 1.2 framework) and to show how the different levels of policy and practice come together, in different contexts and at different times, to drive change. Case studies have been developed for Thailand, Brazil, Bangladesh, Nepal, Peru, Vietnam, Ethiopia and the state of Odisha in India (Chapters 10–17). These all represent contexts in which a significant political commitment emerged, and actions were taken, to address a high burden of undernutrition. The chapters in this section attempt to unravel what happened and how change came about.

The choice of case studies highlighted within each chapter was determined by a set of criteria described in the Appendix.

Finally, before concluding, we devote a chapter (Chapter 18) to understanding the pivotal and transformational issue of leadership, highlighting stories of individuals who have successfully championed the cause of nutrition in different countries.
FIGURE 1.2  *Lancet* Nutrition Series framework for actions to achieve optimum fetal and child nutrition and development

<table>
<thead>
<tr>
<th>Benefits during the life course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morbidity and mortality in childhood</td>
</tr>
</tbody>
</table>

**Nutrition-specific interventions and programs**
- Adolescent health and preconception nutrition
- Maternal dietary supplementation
- Micronutrient supplementation or fortification
- Breastfeeding and complementary feeding
- Dietary supplementation for children
- Dietary diversification
- Feeding behaviors and stimulation
- Treatment of severe acute malnutrition
- Disease prevention and management
- Nutrition interventions in emergencies

**Optimal fetal and child nutrition and development**
- Breastfeeding, nutrient-rich foods, and eating routine
- Feeding and caregiving practices, parenting, stimulation
- Low burden of infectious diseases

**Nutrition-sensitive programs and approaches**
- Agriculture and food security
- Social safety nets
- Early child development
- Maternal mental health
- Women’s empowerment
- Child protection
- Classroom education
- Water and sanitation
- Health and family planning services

**Building an enabling environment**
- Rigorous evaluations
- Advocacy strategies
- Horizontal and vertical coordination
- Accountability, incentives, regulation, legislation
- Leadership programs
- Capacity investments
- Domestic resource mobilization

**Knowledge and evidence**
- Leadership, capacity, and financial resources
- Social, economic, political and environmental context (national and global)
