CHAPTER 2

Multisectoral Approaches to Nutrition: Rationale and Historical Perspectives

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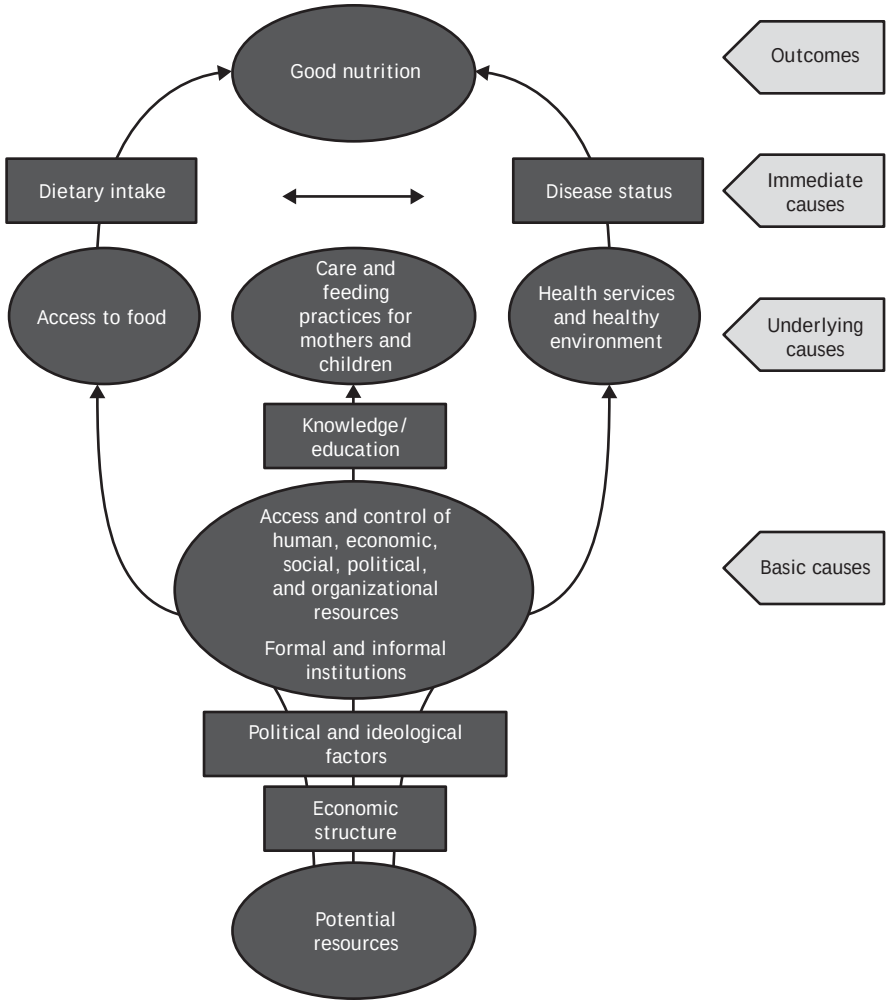
Why Involve Multiple Sectors?

Multisectoral thinking has long been attractive in the field of development, especially in the social sector, because social problems and their determinants are so complex and multifaceted. For nutrition, UNICEF's (1990) conceptual framework of the causality of child malnutrition illustrates the multisectoral nature of the problem (Figure 2.1). It shows the immediate determinants of malnutrition at the individual level (inadequate dietary intake and disease) as products of underlying causes at the family or household level (insufficient access to food, inadequate maternal and child practices, poor water and sanitation, and inadequate access to quality health services). These, in turn, are influenced by basic causes at a societal level, including the quality and quantity of human, economic, and organizational resources and the way (or by whom) they are controlled. More fundamentally, these factors operate within a given—although dynamic—economic, political, cultural, and social structure, where each actor has specific resources. Figure 2.1 emphasizes the importance of this sociopolitical environment.

Figure 2.2 is an alternative representation, which presents the more immediate determinants of child malnutrition in greater detail. This figure makes clear the diversity of actions needed across sectors, levels, actors, and environments to address the problem of child malnutrition. Specifically, for example, actions are needed to provide market infrastructure, education, and healthcare, as well as to support equitable economic growth. Actions are needed at the national level and also among subnational governments and communities. Government, the private sector, civil society organizations, and households all have roles, and recommendations for actions must adapt to specific situations, such as predominantly rural or urban areas and those areas in between.

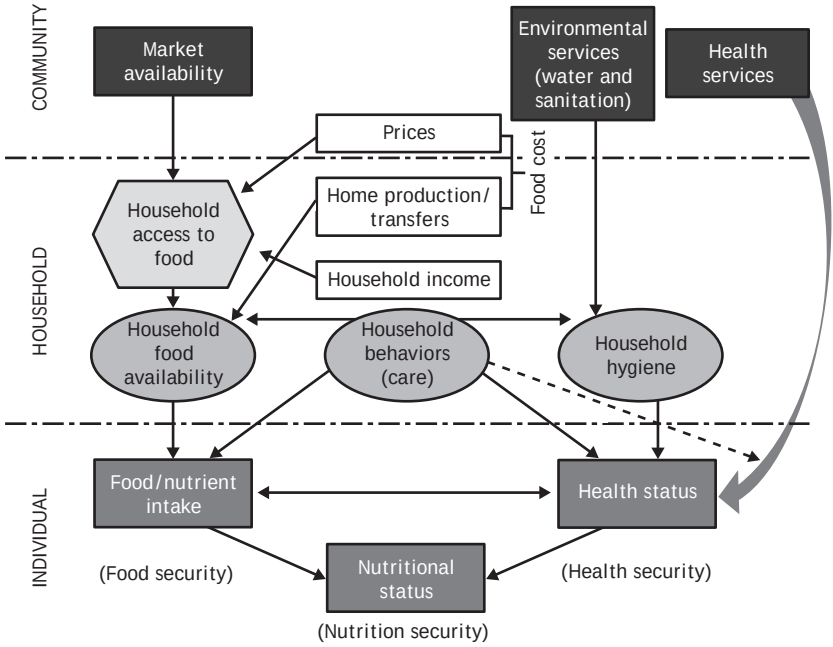
Figure 2.1 Determinants of nutrition security, by causal level



Source: Adapted from UNICEF (1990).

The framework captures the substantial empirical evidence demonstrating that economic growth or action in a single sector cannot solve the problem of malnutrition. Even fairly narrow interventions, such as those for micronutrient supplementation, cross sectoral boundaries, because their effective implementation and impact often depend on inputs not directly focused on nutrition and certainly outside a single sector (Rokx 2000). And in terms of reliance on income growth, Haddad et al. (2003) use a cross-country

Figure 2.2 Determinants of food, nutrition, and health security, by actor level



Source: Adapted from Ruel et al. (1998).

regression to estimate that a stable 2.5 percent annual growth rate in gross domestic product (GDP) per capita between 1995 and 2015 would reduce the malnutrition rate by 8 percentage points from rates in the 1990s. This estimate is significant but still optimistic. In only one-fourth of a more limited sample did economic growth exceed 2.5 percent annually during the 1990s. At this rate, waiting for economic growth to solve nutrition problems will take many decades.

Historical Context: Multisectoral Approaches in Nutrition

An abbreviated annotated history of multisectoral approaches in nutrition can help to set the context for the discussions of today.[1] Up until the 1970s, the health sector functioned as the traditional home for nutrition.[2] The under-

[1]This section and the following one build on Levinson (1995) and Bassett, Levinson, and Garrett (2007).
[2]The health sector was not the only home for nutrition even then, however. Agricultural extension services in the United States and in developing countries already employed home extension agents. The job of these agents, usually women, paralleled that of the agricultural extension agent. Instead of focusing on the producer and the production side of agriculture, these agents

standing of nutrition largely followed a disease model, with a presumption that infection or poor diet led to undernutrition. The response was tightly focused along medical and technological lines: treat the illness or improve the diet. Interventions tended to be supply oriented and focused on the malnourished individual and the proximate causes of malnutrition (diet and health status).

Developing-country realities made the insufficiencies of this model clear. Decisionmakers and researchers began to recognize that malnutrition was not simply a health problem but was also inextricably linked to actions and conditions across many sectors, including food and agriculture, education, economics, and environment. They also realized that reducing malnutrition required not only dealing with proximate causes but with underlying causes as well. Over time, researchers incorporated a constellation of socioeconomic, behavioral, and environmental determinants into new causal models. Ideas about how to address malnutrition then also had to change. A multisectoral understanding of the causes of malnutrition seemed to lay bare the need for a multisectoral institutional response. This new thinking was often referred to as "multisectoral nutrition planning," and it emphasized the applications of systems analysis to nutrition and the need to develop techniques and organizational models for multisectoral work (Pines 1982; Levinson 1995).

Workshops and conferences began to organize around the theme, with the 1971 Massachusetts Institute of Technology's Conference on Nutrition, National Development, and Planning (Berg, Scrimshaw, and Call 1975) being particularly influential. Programs in several universities began to address the approach, and international development agencies also revamped their strategies to take this shift in thinking into account. Berg's (1973) book, *The Nutrition Factor in National Development,* as well as works by others, gave major impetus to the idea of a multisectoral response. Of more importance, governments in several developing countries established units, councils, and committees to carry out explicitly multisectoral nutrition planning (Pines 1982; Levinson 1995).

The idea was that systematic multidisciplinary planning would produce a combination of policy or project interventions in several development sectors. If well operated and coordinated, these initiatives could be effective in reducing malnutrition, because they treated the problem holistically, with a more unified multisectoral approach. Specific tools for multisectoral nutrition planning (MNP) emerged. Techniques and approaches from the field of

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focused on the homemaker to enhance the consumption side of the food and agricultural system and take advantage of own-production. They provided information on food production, food preparation, hygiene, and diet for the rural family.

planning provided ways to assess the entire system and consider not only the immediate causes of malnutrition found in poor health and diets but also the broader causes beyond health, including markets, education, environmental conditions, and social and economic relations.

This new approach raised awareness about the range of causes and the importance of disaggregating analysis to more local levels. The new perspective further implied that strategies to address malnutrition had to shift from curative to preventive approaches. The approach—argued to be comprehensive, systematic, and cost effective—seemed to promise far greater national and international impact than previous isolated initiatives in such sectors as agriculture, health, and education (Field 1987).

This systems perspective was also present in other aspects of development discourse at the time and coincided with the rise of integrated rural development (IRD) programs (Loevinsohn and Gillespie 2003). That approach similarly used a holistic framework, attempted to address multiple constraints simultaneously, and emphasized elements of planning. Likewise, despite theoretical attractiveness, operational complexities made implementation of IRD very difficult, and few IRD projects were able to achieve sustained success.

The complex causality of nutrition was being rightfully acknowledged, but the resulting demands for data across sectors and even down to local levels (to be able to better understand causality and improve targeting there) overwhelmed institutions for planning and implementation and systems for data collection and analysis. National nutrition planners presented other actors with long lists of demands for data that were hardly taken seriously by anyone except the nutrition advocates themselves (Field 1985; Levinson 1995).

Such complexity made more difficult what was, in general, an already weak institutional response. For example, IRD had relatively strong institutional backing. Agriculture was a key economic sector in most developing countries; most of their populations lived in rural areas and depended on agriculture for livelihoods; and IRD programs could find a stable home in the Ministry of Agriculture. In contrast, responsibility for the promotion of multisectoral nutrition planning, or even for integration of nutrition into sectoral programs, usually fell to a small number of people with a limited budget in a nutrition-planning cell. This cell was generally located centrally in a planning commission or the Office of the President and was charged with coordinating nutrition planning efforts for the government.

These units were an initial response in the 1970s to try to raise awareness of nutrition in sectors outside health and to promote genuine cross-sectoral planning and intersectoral activities. Despite their potential, these units were largely unsuccessful. Although policymakers and technicians began to recognize the multiple causalities of malnutrition, the prescription of a single

nutrition planning unit, with a mandate to somehow orchestrate coordination among multiple sectors using top-down, highly planned actions, was generally a failure (Loevinsohn and Gillespie 2003).

The units were generally small, and their mission was often seen as being at odds with the main purpose of their host ministries (promoting nutrition instead of agricultural production within the agricultural ministry, for example). The nutrition cells lacked the presence or the political or financial clout to force other sectors to incorporate nutrition into their projects or programs. As planners, they usually had no budget to fund operations, even pilots, that could demonstrate to others how to integrate nutrition into their activities and the value of doing so.

Given their small scale, the multisectoral programs that did develop often suffered from a lack of scope (and perhaps appropriate focus), and the potential impact of the approach remained limited. A multisectoral program in Sri Lanka, for instance, remained largely sectoral, albeit this time the sector was agriculture, as it intervened in wage rates and attempted to stabilize agricultural prices and generate employment in the subsidiary crops sector. In the Philippines, resource allocation and coordination were placed in the hands of local nutrition committees headed by governors or mayors. This action was an attempt to elicit local political support and raise money. It sensitized local leaders to the importance of the malnutrition problem, but the result was often showcase projects with minimal reach and effectiveness (Levinson 1995).

Instead of increasing visibility and resources for nutrition, existing ministries often thought of these units as trespassing on their turfs (Levinson 2000). In Sri Lanka, the Food and Nutrition Policy Planning Division, frustrated by its inability to be taken seriously by other ministries (particularly Health), sought to assume operational control for food supplementation and community nutrition activities. In so doing, it generated even greater antagonisms with needed partner ministries (Levinson 1995).

In addition, at the time, nutrition itself was not considered a national priority, so even in the planning ministries the nutrition cells had little influence. The priority given to the cells' work was highly contingent on specific political support. The focus on traditional priority sectors—such as health (disease), agriculture (crop production), and education—could quickly resume its former dominance, if the political winds changed. In Colombia, for instance, an early multisectoral food-and-nutrition program, which involved agricultural cooperatives, agro-industry, and food coupons, met its demise with a change of government. The administration following the López government, which had initiated the program, dropped major components in an effort to put its own stamp on the program. The following government, frustrated by a fragmented effort, dismantled the program altogether. In Sri Lanka, the Ministry

of Plan Implementation that housed the division responsible for multisectoral nutrition was merged into the Ministry of Finance and Planning, which, in turn, responded to a governmentwide call for a reduction in the number of government units by abolishing the division altogether. In both of these countries, the programs, targeted primarily to the politically powerless rural poor, were largely devoid of an effective political constituency and were disbanded with hardly a whimper of dissent (Levinson 1995).

Following the derailing of MNP in the late 1970s and early 1980s, an era of "nutrition isolationism," or stand-alone nutrition programs, set in. The pendulum swung back to direct, nutrition-specific interventions, although with a greater emphasis on contextual understanding, as partly expressed through community ownership. In this phase, nutrition activists, who had felt marginalized and perhaps overstretched by the MNP process, chose to focus on things that the nutrition community could do alone and do well (Levinson 2000).

As with MNP, these community-based nutrition programs held promise and made much programmatic sense. However, in practice, true community-based programs were difficult to carry out, as they, too, required a holistic vision and, often, organizational capacities at the regional and local levels that were practically nonexistent. These efforts may have been community based, but they tended not to be community driven, were often not sustainable, and appeared to be difficult to scale up to the national level (capacity building and intensive program management seemed much easier at a local level).

Even these community-based nutrition programs tended to become more narrowly focused than originally intended and less holistic and multisectoral. They increasingly promoted micronutrients, primarily vitamin A capsules and iron supplements. National-level programs also narrowed their goals, focusing on salt iodization and occasionally other food-fortification initiatives. The broader and deeper problem of basic energy malnutrition—manifested as stunting and wasting in children, particularly in South Asia and Sub-Saharan Africa—was largely ignored as being too complex (Loevinsohn and Gillespie 2003). The poster children of nutrition became breastfeeding and micronutrients (Levinson 2000), and these continued to be the primary focal points of nutrition programs internationally for the next 20 years.

The Legacy of Multisectoral Thinking

This brief history illustrates some of the jousting with and within the international nutrition community during recent decades. Regardless of outcome, the discourse demonstrates the existence of a community of knowledge that was at least concerned about these issues and had begun to appreciate working and thinking multisectorally. The history also demonstrates some uneasy

fault lines not only of this community with other sectors but also of this community with the health sector, with research-oriented nutritionists who spent more time in the lab, and with those who worked on policy and program issues (the international nutritionists).

According to Field (1987, 19), multisectoral nutrition planning experienced a "meteoric rise and an equally meteoric fall," initially implying that little was left for the effort. What was elegant in thought was too cumbersome in practice (Field 2006). Yet in reply to Field's (1987) critique, "Multisectoral Nutrition Planning: A Post-Mortem," Berg argued that "nutrition planning is alive and well, thank you." Berg argued that MNP was not "holistic daydreaming" and nowhere near the "debacle" or "hapless odyssey" that Field described (McLaren 1977, 742; Berg 1987, 365–66). Acknowledging the weaknesses of early multisectoral nutrition planning—overblown assumptions about the primacy of nutrition within national structures and poor implementation strategies—Berg pointed to MNP's positive legacy: demand-oriented thinking, interventions extending beyond food-based approaches, and the use of economic and management tools in targeting and in project monitoring and evaluation (Berg 1987).

With MNP, holistic systems thinking and the concept of planning as responses took on a new forcefulness. Program staff began to communicate about interdependent relationships and the influence of sectors outside health. They brought in tools from the field of planning as they considered how to integrate actions across sectors. Nutrition began to penetrate development thinking as a legitimate subject of discussion for national policy, as a presence in national development planning, and in the design of projects outside the health sector, particularly agriculture.

Even during the period of nutrition isolationism, debate continued over the institutional positioning of nutrition. Did nutrition belong in the realm of health or in ministries of food or agriculture? Should nutrition be organized and institutionalized based on its technical aspects (for example, the type of malnutrition) or its practice (for example, methods of combating malnutrition) (Levinson 2000)?

Countries continued to attempt to operationalize multisectoral understanding and implement plans (or at least portions of them) in multi- or intersectoral ways during this period. In Thailand, for example, the first National Food and Nutrition Plan (NFNP) in 1976 formally adopted a multisectoral approach to improving nutrition, with activities in agriculture, health, education, and poverty reduction (Heaver and Kachondam 2002). Even as the international nutrition community drew back from multisectoral programs, Thailand's second NFNP, financed under the fifth national development plan (1982–86), confirmed this approach and integrated nutrition activities into national plans

for poverty reduction and rural development. This NFNP even expanded attention to water supply, sanitation, and community development.

The sixth national development plan (1987–91) emphasized primary healthcare, rural development, and poverty alleviation. This plan employed a Basic Minimum Needs approach at the community level, of which nutrition was an integral part. The result of mainstreaming nutrition into multiple sectors over time is that now national policymakers as well as village residents understand nutrition as being at the heart of development (Heaver and Kachondam 2002).

In another example, in Madagascar, Seecaline, which began in 1993 as a limited community-based nutrition project, became a national-level intersectoral project drawing largely on collaboration between the Ministry of Health and the Ministry of Agriculture (Natalicchio et al. 2009). Relying largely on community mobilization, Seecaline's components include traditional elements of community nutrition (such as growth monitoring and promotion); connection with health services; and support of community activities to improve nutrition, hygiene, and sanitation. But beyond these efforts, Seecaline links with schools to distribute micronutrient supplements, carries out deworming, and promotes nutrition education; it also links with the agriculture sector to disseminate technical guidelines on improved crop diversification and home storage (World Bank 2006a).

The use of a more holistic conceptual framework received an important sustained push from the 1992 International Conference on Nutrition and widespread dissemination beginning in the early 1990s of the UNICEF (1990) model of nutrition, an explicitly multisectoral understanding of the causes of malnutrition. This model, which emphasizes malnutrition as a problem of development rather than of disease, has become the favored framework for understanding determinants of and action for nutrition (Pelletier 2002). The livelihoods framework that emerged during the mid-1990s further supported a holistic approach to development analysis and interventions (Carney et al. 1999).

So despite an international focus on rather isolated interventions, by 1996 a large number of countries (139) were preparing national plans of action for nutrition. Interestingly, regardless of the previous experience with MNP, these plans largely took as given the need for multisectoral action in nutrition. The analytical frameworks underlying these plans were clearly based on a multisectoral understanding of nutrition; strategies were seldom criticized as weak or incomplete. However, these plans, strategies, or national policies, frequently sponsored by donors or external partners, often failed to specify priority interventions or provide the resources and mechanisms necessary for implementation (Rokx 2000). Again, what seemed a good idea in theory was not well executed in practice. In effect, the understanding of nutrition as a

development problem with multisectoral causes far exceeded an understanding of how to respond institutionally. The holistic understanding of nutrition, strong on an understanding of the breadth of determinants, was again proving less helpful in providing guidance to operationalize responses.

Why Reconsider Working Multisectorally?

Given this history, why reconsider attempts to work multisectorally in nutrition? In the more than 20 years since the vigorous exchange between Field and Berg (Berg 1987; Field 1987), the conceptual, planning, and operational environment has changed, making continued consideration of the idea sensible. Several factors have altered the operational environment so it is more encouraging for multisectoral approaches in nutrition. Program managers and policymakers now often have a more explicit goal-oriented or results-based approach, paying greater attention to capacity for implementation and, often, community involvement. Increasing pressure by donors and from national governments to demonstrate the impact of investment also supports the idea of a reorientation toward results.

In addition, developing countries have more resources than before, which may ameliorate the challenges of implementation. Although often still quite limited, in almost every country more human resources—technical experts and analysts, managers, and academics across a range of disciplines—do exist. Increased attention and funding has gone to support data collection and analysis and planning for social sectors, including health and nutrition. Surveys on nutrition are more systematic, broader, deeper, and more frequent than before. Knowledge about country context, determinants, and what works and what does not is more advanced.

Greater emphasis by governments and donors on stakeholder analysis and country-level ownership has made nutrition advocates more aware of the political landscape (and its effects on their success) than was the case for the initial attempts at multisectoral nutrition planning. Specific tools for social, political, and institutional analysis developed in recent years now provide these actors with the means to understand the political context and what to do about it.

In a similar vein, knowledge about institutions and program operation, implementation, and change is vastly greater now. Management science, along with other social sciences (such as political science, psychology, and sociology) now has two more decades of insight into individual behavior and institutional and organizational processes and arrangements. Literature and experience with change processes and knowledge management provide paradigms and tools for improving implementation in complex organizations (McLachlan and Garrett 2008).

Social and technological advances also encourage institutional change. With more experience in cross-sectoral management, capacity, and newer technologies, transactions costs (those related to operation as well as to the costs of gaining needed data for analysis, planning, coordination, and monitoring) are likely much lower than before. Thus the benefit–cost calculation of multisectoral actions may now be much more favorable than before.

In addition, the development community at large is also much more supportive of, and familiar with, multisectoral development approaches than before. They usually use UNICEF's (1990) nutrition framework, which emphasizes multiple causalities and connections among the determinants of nutrition. More integrated, nutrition-friendly development tools exist at the international level, such as the World Bank's Comprehensive Development Framework and Poverty Reduction Strategy Paper and the United Nations Development Programme's Human Development Index.

International and national commitment to the Millennium Development Goals (MDGs) has further galvanized support for social and economic development. The MDGs include nutrition as an indicator, and many of them are interrelated and so encourage multisectoral analysis and action (Gillespie and Haddad 2003). Some observers have predicted that a collective initiative like the MDGs that explicitly recognizes the cross-sectoral and synergistic causalities will motivate increased interaction among sectors and ministries to treat problems as a set rather than individually (Gentilini and Webb 2008).

In addition, at the level of development of national strategies, many of the prevailing development tools, such as the World Bank's PRSCs (Poverty Reduction Strategy Credits), use a cross-sectoral focus. Even donors' sector-wide approaches, or SWAps, require significant coordination among programs and agencies, giving countries more experience in managing complex programs, an element that proved a major constraint to the success of MNP.

Other social initiatives are also pushing to better understand how to work multisectorally. Increasingly popular conditional cash-transfer programs, for example, are usually located in ministries of social welfare or social development or are operated by independent agencies. They frequently use nutritional status as an indicator and require coordination across other sectors, particularly health and education. More holistic, open-ended thinking is also infiltrating local and national programs and planning. Flexible but more holistic community-driven development initiatives are increasingly replacing isolated, single-sector, top-down projects.

In this environment, donors and international lenders, already pushing hard for aid harmonization, can urge the examination of ways to link and align sectors to improve efficiency. Now aware of the multisectoral nature of malnutrition, they may easily inquire whether a multipronged attack on the

causes of malnutrition is less costly and more effective than uncoordinated independent projects. Governments, now more aware of the importance of nutrition to economic growth and labor productivity and facing tight budgets, are likely to ask the same questions. Instead of small nutrition-planning cells with minimal clout and influence being responsible for identifying and generating multisectoral action, governments themselves may now take on this accountability (Levinson 2006).

The institutional and operational environment for working multisectorally seems to be more promising than before. One might argue, then, that success in working multisectorally in nutrition now depends more on creating a vision and managing innovatively and on changing ways of thinking and acting across a complex institutional landscape than on not having the basics in terms of human, financial, technical, or even conceptual resources.

Rigorous analysis of existing evidence and new cases can provide useful insights for such a reconsideration and contribute to its success. (Alternatively, it could suggest that the environment is not yet friendly enough or that the approach itself is flawed.) Such a review could also provide framework and principles for analysis and action.

This sort of analysis is badly needed. Some of the most effective nutrition advocates have been individuals who conquered the challenges of compartmentalized organizational structures and processes to work in a truly multisectoral way—but we have little documentation or analysis of what they did or how they did it (Gillespie, McLachlan, and Shrimpton 2003). The goal of this book is to provide concrete suggestions, based on an examination of experiences, on how to work multisectorally. Such work involves forging partnerships at different levels and promoting integration and intersectoral convergence of relevant programs to address the multiple causes and consequences of malnutrition.