

Nutrition agenda setting, policy formulation and implementation: lessons from the Mainstreaming Nutrition Initiative

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Accepted 9 December 2010

Undernutrition is the single largest contributor to the global burden of disease and can be addressed through a number of highly efficacious interventions. Undernutrition generally has not received commensurate attention in policy agendas at global and national levels, however, and implementing these efficacious interventions at a national scale has proven difficult. This paper reports on the findings from studies in Bangladesh, Bolivia, Guatemala, Peru and Vietnam which sought to identify the challenges in the policy process and ways to overcome them, notably with respect to commitment, agenda setting, policy formulation and implementation. Data were collected through participant observation, documents and interviews. Data collection, analysis and synthesis were guided by published conceptual frameworks for understanding malnutrition, commitment, agenda setting and implementation capacities. The experiences in these countries provide several insights for future efforts: (a) high-level political *attention* to nutrition can be generated in a number of ways, but the generation of *political commitment* and *system commitment* requires sustained efforts from policy entrepreneurs and champions; (b) mid-level actors from ministries and external partners had great difficulty translating political windows of opportunity for nutrition into concrete operational plans, due to capacity constraints, differing professional views of undernutrition and disagreements over interventions, ownership, roles and responsibilities; and (c) the pace and quality of implementation was severely constrained in most cases by weaknesses in human and organizational capacities from national to frontline levels. These findings deepen our understanding of the factors that can influence commitment, agenda setting, policy formulation and implementation. They also confirm and extend upon the growing recognition that the heavy investment to identify efficacious nutrition interventions is unlikely to reduce the burden of undernutrition unless or until these systemic capacity constraints are addressed, with an emphasis initially on strategic and management capacities.

Keywords Nutrition, policy, formulation, implementation, commitment, capacities

KEY MESSAGES

- Strengthening the full spectrum of policy activities is necessary if large-scale and sustained reductions in undernutrition are to be achieved.
- Within this policy spectrum, high priority should be given to strengthening strategic capacities because these are fundamental for advancing commitment-building, agenda setting, policy formulation, capacity-building for operations, and all other aspects of a long-term nutrition agenda at country level.
- These conclusions are especially relevant for major global initiatives currently under development that seek to address nutrition through country-led processes and convergence among multiple organizations.
- The extensive investments in documenting the efficacy of nutrition interventions are unlikely to produce sustainable reductions in undernutrition unless or until these weaknesses in the policy spectrum are better understood and addressed.

Introduction

Undernutrition is the single largest contributor to the global burden of disease, accounting for 10% of disability-adjusted life-years lost in the general population and 35% among children under 5 years of age (Black *et al.* 2008). This is roughly two to four times greater than the global, general-population (i.e. all-ages) burden due to pneumonia (5.6%), HIV/AIDS (4.7%), diarrhoea (3.9%), malaria (2.6%) and tuberculosis (2.3%) (Lopez *et al.* 2006). In addition, undernutrition has documented effects on cognitive development, educational outcomes, work capacity and gross domestic product (World Bank 2006). The full implementation of proven, direct interventions could reduce the mortality and disability due to undernutrition by about 25% (Bhutta *et al.* 2008). Despite this knowledge, progress in reducing undernutrition and improving the coverage of key interventions remains low (Bryce *et al.* 2008; UNICEF 2008), and financing from the international community is not on par with that seen for other global health problems (World Bank 2006; Morris *et al.* 2008).

In reviewing country-level efforts to reduce undernutrition, the Lancet Nutrition Series identified several key challenges: building and maintaining priority for nutrition, choosing context-appropriate actions and implementing them at scale, reaching those most in need, making data-based decisions, and building strategic and operational capacity (Bryce *et al.* 2008). The series suggested that a large reservoir of experience and expertise exists at country level for addressing these socio-political and operational challenges, and urged that greater efforts be made to gather these experiences, formalize the knowledge base, and facilitate the exchange of experience across countries. These recommendations were considered especially important because of the documented imbalances in current health and nutrition research agendas. Those agendas have emphasized the development and testing of new technologies and interventions (Leroy *et al.* 2007), or the problems of greatest concern to researchers and funding agencies in developed countries (Morris *et al.* 2008), rather than the more complex and practical challenges facing policy makers and implementers in developing countries (Rudan *et al.* 2007a; Rudan *et al.* 2007b).

There currently are several major initiatives being planned or underway related to nutrition, including the global Scaling Up

Nutrition initiative and a number of bilateral and private efforts (Bezanson and Isenman 2010). These investments are unprecedented in terms of their scale and potential impact on nutrition and most of them signal intent to foster country ownership and broad stakeholder engagement in policy development and implementation. The present paper is highly relevant to these efforts. It examines the experiences from five developing countries in relation to three basic issues: agenda setting, formulating programmes and policies, and implementing programmes and policies. In keeping with an emergent form of policy research described in recent publications (Buse 2008; Walt *et al.* 2008), this paper is based on a prospective and engaged research in which external researchers acted as participant-observers in selected countries, providing selective technical assistance to the nutrition effort while simultaneously observing and learning from the country's experiences.

The Mainstreaming Nutrition Initiative

The Mainstreaming Nutrition Initiative (MNI) was a three-year project funded by the World Bank from 2006 to 2009, administered through a grant to the International Center for Diarrheal Disease Research, Bangladesh (ICDDR,B) with sub-contracts to Cornell University, the University of South Carolina, the Aga Khan University, the International Food Policy Research Institute (IFPRI) and other collaborating institutions. A major aim of MNI was to acquire a base of experience at country level for moving nutrition more into the mainstream of national policies and programmes, especially in the health sector. This paper presents the main findings from MNI's country-level activities.

MNI engaged with selected countries based on a combination of country characteristics and partnership opportunities in addition to the high prevalence of undernutrition in each country (Table 1). Bolivia, Peru and Guatemala were chosen because in each the head of state had made some commitments to address nutrition, thereby offering the opportunity to document the commitment-building processes and the factors that may enable or inhibit the subsequent processes of policy formulation and implementation. Bangladesh was chosen because the leadership of BRAC, a major implementer of health programmes in the country, had expressed interest in

Table 1 Level and type of involvement of mainstreaming nutrition in each country

Country, % stunting	Country nutrition focus	Key MNI partners	MNI roles and activities	Primary level and forms of engagement and dates
Bolivia 27%	National Zero Malnutrition Program (multisectoral)	MOH, PLAN International	<ul style="list-style-type: none"> - Institutional analysis - Stakeholder assessments - Assess implementation issues - Document commitment building 	<ul style="list-style-type: none"> - One year expatriate - Two trips by other MNI staff - Hire local consultants, 8/07–4/09
Peru 30%	National 5-in-5 Stunting Reduction (multisectoral)	World Bank	<ul style="list-style-type: none"> - Augment World Bank missions - Capacity assessment - Document commitment building 	<ul style="list-style-type: none"> - Expatriate consultant (on 4 missions) - Hire local consultants, 12/06–7/09
Guatemala 54%	National Program for the Reduction of Chronic Malnutrition (multisectoral)	Food & Agriculture Organization (facilitative)	<ul style="list-style-type: none"> - Explore policy formulation process - Document commitment building 	<ul style="list-style-type: none"> - One month study (6/07) - One week follow-up study (6/08)
Vietnam 34%	Plan of Action to Accelerate the Reduction of Stunting (health sector)	Save the Children (US)	<ul style="list-style-type: none"> - Map nutrition activities - Co-create and participate in partnership group - Assess provincial planning processes - Catalyse hosting of international meetings in Hanoi 	<ul style="list-style-type: none"> - One year expatriate - Five trips by other MNI staff - Hire local office of international NGO to facilitate activities 3/07–12/08
Bangladesh 43%	Integration of nutrition into BRAC's programmes (health sector); Placing anaemia on the national agenda	BRAC	<ul style="list-style-type: none"> - Formative research - Assist BRAC's integration - Advocacy and technical leadership regarding anaemia 	<ul style="list-style-type: none"> - Four meetings with BRAC staff by expatriate staff - ICDDR,B ongoing support to BRAC 3/07–12/31/09 - Advocacy and technical leadership on anaemia by ICDDR,B staff

integrating nutrition into its maternal and child health programmes, again offering the opportunity to learn about the integration process by engaging in the effort. Later, MNI staff in Bangladesh also played key roles in placing anaemia on the national agenda. In Vietnam, by contrast, there was no prior expression of strong interest in nutrition at the senior administrative level, but the potential of collaborating with several interested international organizations and the National Institute of Nutrition offered the opportunity to study the agenda-setting process in a prospective fashion. As shown in Table 1, the varied needs and circumstances in each country created diversity in the MNI partnerships, roles, activities, levels and forms of engagement, and, thus, in the particular features of the policy process most amenable for study.

The research process

The policy process making is a complex and dynamic process (Buse 2008; Walt *et al.* 2008). As noted in recent papers, efforts to study the policy process in a prospective and engaged fashion are fraught with theoretical, practical, political, ethical and methodological challenges, and these papers note that the research community is only now beginning to address these challenges (Buse 2008; Walt *et al.* 2008). MNI encountered many if not all of these challenges, and our management of them is briefly summarized here.

Emergent research questions and guiding frameworks

Two of the distinguishing features of this study are the use of an engaged and prospective research design and the use of several explicit conceptual frameworks to guide our efforts. From the outset, MNI staff were committed to engaging with our in-country partners first as consultants, advisors and/or collaborative problem-solvers, rather than researchers, thereby allowing the most salient research questions to emerge in the process and to understand the context, actors and interests in greater detail. We used several general frameworks to guide our inputs into the evolving policy process and to analyse and organize our observations. These included Shiffman's frameworks for agenda setting (Shiffman 2007; Shiffman and Smith 2007) and the policy sciences framework (Clark 2002) to help us attend to the full spectrum of activities in the policy process. The latter includes agenda setting (generating policy attention to an issue), policy formulation (deciding interventions and implementation strategies), legitimation (generating authoritative endorsement for the interventions and strategies), implementation (translating policy intent into effective inputs, activities and services for the population) and monitoring and evaluation (tracking progress and making adjustments).

Positionality, data sources and inferences

As noted in Table 1, MNI staff varied widely across the five countries in terms of identity, role, partnerships and relationships (i.e. positionality, as discussed in Walt *et al.* 2008). These factors can influence the positions and strategies we employed to affect the policy process as well as our ability to observe, comprehend and draw conclusions about the process. To reduce the risk of drawing self-serving conclusions related to our own

efforts, we have emphasized all aspects of the policy process under study including those that were largely under the influence of actors other than MNI staff. In addition, to strengthen our interpretation of local processes and events, we employed semi-structured interviews in Bolivia, Peru, Guatemala and Vietnam with selected stakeholders and key informants, in addition to participant observation; we engaged several staff members in discussions of emergent findings, to maintain some reflexivity and cross-checking of interpretations; and we held a week-long workshop with partners from Bolivia, Peru, Bangladesh and Vietnam during the final year of the project.

Presentation of findings

Findings and interpretations are organized according to frameworks and indicators that have proved useful in earlier work. Specifically, for describing commitment we adapted a set of indicators developed by Heaver (2005). Heaver defines commitment as ‘the will to act and keep on acting until the job is done’ and he applies it to all actors in a system, not only those at the top. We adapted Shiffman’s frameworks as an initial basis for understanding the progress in agenda setting within and across countries (Shiffman 2007; Shiffman and Smith 2007). Finally, we drew upon Shiffman’s work as well as other literature to understand the difficulties experienced by the mid-level actors in these countries in taking advantage of the political openings to formulate concrete policies and operational strategies to reduce undernutrition.

Results

Levels and forms of commitment

Table 2 presents the indicators of commitment in the five countries based on Heaver’s framework (Heaver 2005). The most consistent indicators of commitment are related to the emphasis on undernutrition in high-level speeches, and the establishment of laws, decrees, national strategy papers or institutional structures. These indicators are present to varying degrees in all countries. Some indicators are seen in two countries each: mobilization of political attention at sub-national levels (Bolivia, Peru), creating a video or television spots (Peru, Vietnam), establishing quantitative targets (Peru, Guatemala), and creation or utilization of a full-time secretariat or technical team (Bolivia, Guatemala), an existing institution (National Institute of Nutrition in Vietnam) or hiring of a staff member dedicated to nutrition (Bangladesh/BRAC, not shown).

The indicators most rarely observed are the development of concrete operational plans, translation of plans into budgets, allocation of budgets commensurate with the size of the problem, implementation of actions, and active oversight by politicians or senior officials with the authority to take action.

Although these data represent a ‘point in time’ assessment of an on-going process in each of these countries, an understanding of the contextual factors in each country helps explain these results. In Bolivia, Peru and Guatemala the largely symbolic actions taken by the heads of state (speeches, targets, coordinating structures) brought political benefits because they resonated with the political discourse during electoral

campaigns on the social conditions in the country (i.e. poverty, social exclusion, gross inequity). These symbolic actions entailed little or no political cost because, in the absence of sustained pressure from civil society in any of these three countries, there was limited accountability for producing nutrition results. In addition, in all three countries there were more pressing national issues that overtook nutrition in the symbolic agenda after the elections.

In Vietnam and Bangladesh, there were no comparable efforts from advocates or policy entrepreneurs to create *political* attention to nutrition during elections, such that the symbolic actions noted above are not as pronounced in these two countries. Instead, as revealed in all the other indicators in Table 2, a variety of actions were taken by ministry officials, donors or non-governmental organization (NGO) actors. These actions reflect the interests, entrepreneurial activity, capacity and bureaucratic politics of and among these actors. Thus, public campaigns and sub-national awareness-raising activities were instigated by these actors, and the Ministry of Health (MOH) and its partners were able to take more initiative than the other sectors. Meanwhile, efforts to develop operational plans, budgets and effective coordination across sectors encountered political and bureaucratic difficulties in all countries that have attempted it so far. In principle, these difficulties could have been resolved with greater oversight and intervention by politicians, but such actions did not occur and likely would have incurred higher political costs.

This ‘snapshot’ view provided in Table 2 suggests that commitment can be quite ‘patchy’, when viewed from a system-wide perspective. Important distinctions exist between the political versus the bureaucratic sphere, the MOH versus other sectors, electoral versus non-electoral contexts, and actions with high versus low political costs. In an overall sense, the results suggest a major distinction should be made between the generation of political *attention* (via the political or symbolic agenda) versus the translation of that attention into effective action (policy formulation and implementation). The first does not necessarily lead to the second. The dynamics underlying each of these is examined in greater detail in the following sections.

Agenda-setting factors

Table 3 summarizes findings concerning the influence of several agenda-setting factors on political attention, using indicators developed by others (Shiffman 2007; Shiffman and Smith 2007). Of the 12 factors in this table, only the existence of credible indicators of the problem (stunting in four countries and anaemia in Bangladesh) was found to be a crucial factor in all countries. In four countries the important factors were promotion of external norms (e.g. regarding stunting and anaemia); the promotion of a salient external frame (e.g. the ‘stalled progress’ in reducing stunting in Peru and Bolivia, and very high anaemia rates in Bangladesh); the ability to form and maintain *advocacy cohesion* within the core policy community (e.g. the coalition of NGOs and United Nations agencies in Peru); and the ability to overcome or re-frame competing policy priorities (e.g. framing in relation to poverty, food insecurity and a right to food in Guatemala). The remaining indicators are more uneven in their distribution across countries, but notable

Table 2 Indicators of system-wide commitment to chronic undernutrition in four countries and anaemia in Bangladesh (adapted from Heaver 2005)

Forms of commitment	Bolivia	Peru	Guatemala	Vietnam	Bangladesh
Reference period	2006–08	2006–08	2004–08	2007–08	2008–09
1. Undernutrition is emphasized in high level political speeches to raise awareness	President, Minister of Health	President, Prime Minister	President, Vice-President	Senior ministry officials	Senior ministry officials
2. Awareness raising and promotion across levels and departments of government	Very limited TV and radio spots	Video and TV spots	Video produced on food insecurity and chronic malnutrition	No	No
3. Public campaigns are implemented	In 52 priority municipalities and their regions; only MOH at national level	Workshop with Regional Ministers convened by Prime Minister	Limited	MOH	Plans for doing so are under development
4. Specific goals and targets are established	No ('Zero Malnutrition' with a focus on 2–23 months)	Reduce under-5 stunting 5–10 points in 5 years	Reduce under-5 stunting by 50% by 2016	Not yet	Not yet
5. Laws, regulations, policies, coordinating structures and/or other institutions are created or amended	Presidential Decree National Program as part of National Development Plan, multisectoral committees at national, dept and municipal levels	National multisectoral strategy on paper and part-time team to operationalize it in the Ministry of Economics and Finance	National law and policy authorizing a high level, multisectoral council, full-time secretariat, and structures for civil society and international organizations	National Nutrition Policy (2001) Plan of Action to Accelerate the Reduction of Stunting (PAARS)	Ministerial directives have been given to address anaemia and a steering committee has been established
6. National staff are assigned to operationalize, support and oversee commitments to the nutrition agenda	Five member central team for Zero Malnutrition Program, separate MOH Nutrition Unit, but part-time and limited staff from other ministries	Part-time staff from some ministries plus local consultants	Full-time secretariat for coordination, support and oversight	Existing MOH and National Institute of Nutrition (NIN) staff and structures	Existing government staff and structures
7. Government departments take initiative and/or collaborate in developing concrete operational plans specifying actions, roles, responsibilities, etc.	MOH well-advanced; other ministries having difficulties defining Plan of Operations; roles and responsibilities still unclear	MOH has taken some steps; other ministries having difficulties defining Plan of Operations; roles and responsibilities still unclear	MOH well-advanced; other ministries having difficulties defining Plan of Operations; roles and responsibilities still unclear	PAARS in process of being officially approved	MOH and Family Planning are collaborating with ICDDR,B, UNICEF and UNFPA on an ad hoc steering committee
8. Operational plans are translated into investment plans and budgets and donor support is sought when necessary	Concrete Plan of Operations not yet developed but general budget requests were made and were partially met by government and donors	Operational plans are not yet sufficiently advanced to permit development of an investment plan	Concrete Plan of Operations not yet developed but general budget requests were made and were partially met by government and donors	Development of operational plans and budgets is still underway	Development of operational plans and budgets is still underway
9. The size of the budget devoted to nutrition is commensurate with its priority in policy statements	Current central budget is not adequate to eradicate under-nutrition but may correspond to current absorptive capacity; municipal budgets are well below the need	n.a.	Current central budget is not adequate to eradicate undernutrition	Current budget for nutrition is 25% of the National Target Programs (NTPs) budget (when nutrition is 1 of 10 NTPs). Still, probably not adequate for scale or necessary operations	Unclear as yet
10. Government departments take initiative and/or collaborate in implementation	Only MOH, Education and Planning initiate action; some ministries collaborate when approached by donors	Initiative and collaboration is mostly limited to MOH and a conditional cash transfer programme	Multisectoral council (SESAN) has formal authority to coordinate sector efforts, but lacks the informal authority or in reality has limited authority to do so	MOH and NIN appear committed to developing an operational plan fully integrated with current provincial admin. procedures	The intent is there but results are unclear at present
11. Politicians regularly review progress	Unclear Little overt evidence	Unclear Little overt evidence	Unclear	Unclear	Unclear
12. Senior civil servants regularly review progress	Yes, but only in MOH and only under the first Minister	The lead coordinator and cabinet member appears to do so but has limited authority over ministries	The full-time secretariat regularly reviews progress but has limited authority over ministries	Unclear	The intent is there but results are unclear at present

Table 3 The role of agenda-setting conditions in creating *political attention* to chronic undernutrition in four MNI countries and anaemia in Bangladesh^a (adapted from Shiffman 2007, Shiffman and Smith 2007)

Factor	Bolivia	Peru	Guatemala	Vietnam	Bangladesh
1. Norm promotion	Not crucial	Directly influential	Facilitative	Crucial	Crucial
2. Resource provision	Not crucial Attention was generated internally and resources were offered later	Not crucial	Not crucial Attention was generated internally and resources were offered later	Facilitative	Not crucial Anaemia gained attention without regard to resource provision
3. Focusing events	None	None	Crucial Hurricane Stan (2005) (reinforced on-going commitment building work)	Crucial International conferences strategically hosted in Vietnam drew attention and support of high-level officials	Crucial One-time, front page lead story in top national newspaper drew attention from Health Minister
4. Political transitions or other policy windows	Crucial Incoming President Morales represented a clear break with the past and a commitment to addressing poverty and social exclusion	Crucial Coalition advocacy began during the presidential campaign and reached all leading candidates; the nutrition goal helped President Garcia express a concern for social policy and results-based governing in his campaign and administration	Crucial After decades of neglecting the rural, indigenous population and passage of the Peace Accords, undernutrition, food security and the Right to Food resonated with the political climate across two administrations	Not crucial Agenda setting for stunting initially took place mainly at the bureaucratic level rather than in electoral or high politics; as such, several high profile international meetings hosted in Vietnam proved very useful	Not crucial Agenda setting for stunting has taken place mainly at the bureaucratic level rather than in electoral or high politics, with media coverage and advocacy playing key roles
5. Civil society mobilization	Not crucial Has not played a role in agenda setting or policy formulation but is envisioned as part of programme implementation	Not crucial Has not played a role in agenda setting or policy formulation; unclear if it will be part of programme implementation	Not crucial Civil society organizations have played an active part in national strategy discussions and have seats on high-level coordinating structures. Lower level mobilization in the future is unclear	No role at the national level; lower level mobilization in the future is unclear	Not crucial Media coverage played a key role but otherwise it was advocacy by a respected research institution (ICDDR,B) and an international partner (UNICEF)
6. National political entrepreneurship	Crucial A single, trusted, high-level nutrition champion in the MOH (with support from a second MOH ally) succeeded in convincing the incoming president and overcoming resistance from senior officials in the ministry of planning and other officials in the MOH	Not crucial A coalition of international NGOs and UN agencies was the entrepreneur at first, then followed by the Prime Minister with World Bank encouragement	Crucial A prominent local businessman with political connections led the consensus process and high-level advocacy	Not crucial The partnership was the initial entrepreneur and collaborated with committed government officials to advance the issue, with a government champion emerging in the process	Crucial After learning more about anaemia, the Minister of Health and Director General of Family Planning (DGFP) played key roles in advancing the issue
7. Credible indicators	Crucial Indicators revealed stunting as the major problem and heaviest burden in the highlands	Crucial Indicators showed 10-year stagnation in stunting after years of decline, despite rapid economic growth	Crucial Indicators revealed Guatemala as one of the most heavily affected countries in the world	Crucial Indicators revealed high burden of stunting, out of line with Vietnam's social and economic progress	Crucial The finding of anaemia in 92% of infants, 68% of preschoolers and half of pregnant women immediately captured attention
8. Internal frame and policy community cohesion for agenda setting	Not crucial Attention was generated by one senior MOH official and support from a few others in the MOH but otherwise with little input from the broader policy community	Crucial The coalition of international NGOs and UN agencies supported common advocacy messages	Crucial The development of a formal policy and law required gaining consensus <i>at a general level</i> among major government and non-government actors	Crucial A small but tight-knit partnership of international organizations helped government identify stunting as a major problem	Crucial The Minister of Health chaired a meeting of nutrition and health experts, government officials, NGOs and development partners, moving the issue further into an action agenda

(continued)

Table 3 Continued

Factor	Bolivia	Peru	Guatemala	Vietnam	Bangladesh
9. External frame (i.e. public portrayals that resonate with political leaders controlling resources)	Crucial Presidential interest was generated via inter-personal communications rather than public framing, but chronic malnutrition had natural resonance with the President's childhood and concern for hunger, poverty and social exclusion	Crucial Framing was in relation to poverty, social and geographic disparities, lack of improvement even during rapid economic growth and lack of access to basic services	Crucial Framing was in relation to social and geographic disparities, Right to Food, irreversible effects on cognitive development and implications for national development	Not crucial Agenda setting was at the bureaucratic and technical levels rather than in national politics. Nonetheless, Vietnam's high stunting rates in relation to other countries and its state of national development were important political concerns weighing on bureaucrats	Crucial The sensational national media coverage resonated powerfully with senior bureaucratic officials and led to expert consultations and deliberations on solutions
10. Appearance of clear policy alternatives	Unclear role for agenda setting Alternatives were clear but not simple; broad multisectoral strategy was politically attractive, despite considerable implementation challenges; fortified complementary foods as a key component also attractive	Unclear role for agenda setting Alternatives were clear but not simple; successful NGO projects at small scale in Peru suggested the problem was tractable, despite the complexities of multisectoral programmes and the recently initiated decentralization	Unclear role for agenda setting Alternatives were clear but not simple; broad multisectoral strategy was politically attractive despite considerable implementation challenges; fortified complementary foods as a key component also attractive	Important role for agenda setting Confidence exists that alternatives are available, though they have not yet been discussed in detail or endorsed; launch of the Lancet Nutrition Series in Hanoi and advocacy by international partners suggested clear policy alternatives	Not crucial for initial agenda setting but crucial for maintaining political commitment and policy formulation. Strong evidence for efficacy of direct interventions was presented, and maintained interest and commitment to moving forward
11. Competing policy priorities	Present but overcome A crucial step was for the champion to assure that the Zero Malnutrition Program would be positioned high in the National Development Plan despite the existence of competing priorities	Present but re-framed Chronic undernutrition was framed as a multisectoral problem to motivate and show results from public action in many sectors; the issue also was used to promote reform in expensive, poorly targeted food distribution programmes	Present but re-framed Chronic undernutrition was framed as a multisectoral problem linked to poverty, food insecurity and Right to Food, thereby further justifying investments in those sectors	Present but not yet reconciled; actions to reduce stunting will require reform in existing nutrition programmes and prioritization of nutrition in provincial budgeting processes, neither of which has yet taken place	Present but did not inhibit the rise of anaemia on the agenda Given the more limited nature of anaemia interventions, compared with undernutrition, competing priorities were not a factor in agenda setting but may become so during policy formulation and implementation
12. Guiding institutions or governance structures	Not crucial for initial agenda setting, but informal MOH working group was crucial for continued health sector implementation plans	Crucial The informal coalition was crucial for agenda setting	Not crucial Not crucial for initial agenda setting but crucial for continued commitment building	Crucial The partnerships group was crucial for agenda setting, along with NIN	Not crucial for initial agenda setting, but a steering committee was later formed for policy formulation and to monitor implementation

^aAs used here, the term *political attention* is a more limited concept than commitment or political priority as used elsewhere (Heaver 2005; Shiffman 2007). It refers to the expression of concern about the problem by high-level politicians and varying degrees of enabling actions taken to allow or encourage the government to address malnutrition. However, it does not include the most critical elements of commitment such as regular oversight, establishing accountability for progress and allocating the necessary human, financial and organizational resources.

for their lack of salience *for political agenda-setting* in most of the countries are external resource provision and civil society mobilization.

The findings for Bolivia, Peru and Guatemala versus Vietnam and Bangladesh were examined in greater detail in light of the distinctions noted in the previous section between the political and bureaucratic sphere, electoral versus non-electoral contexts, and MOH versus multisectoral settings. This distinction reveals different dynamics in the two sets of countries. In Bolivia, Peru and Guatemala, political transitions, credible indicators and an effective external frame all were universally crucial, while norm promotion, resource provision, civil society mobilization, appearance of clear solutions and the existence of competing policy priorities were not. This reflects that fact that the advocacy messages to politicians were aimed at documenting the existence of a problem and connecting it to broader political themes (poverty, inequity, etc.) without the need to offer clear solutions, appeal to international norms, or make use of (or create) focusing events. This advocacy was undertaken by different constellations of actors in each case (described in row 6, Table 3) and led to high-level political attention in each case, but only required a general level of internal consensus among a restricted number of advocates. There was little or no involvement of the many other mid-level actors that later would become involved in policy formulation, which may be one of the reasons for the difficulties experienced at that later stage.

In Vietnam and Bangladesh, by contrast, the strategizing took place among mid-level actors for the purpose of advocating to higher levels within the MOH, for a national stunting reduction strategy in Vietnam and a national anaemia control strategy in Bangladesh. As a result, a cohesive internal advocacy frame was developed, and there was greater use of focusing events (international conferences hosted in Vietnam), credible indicators and international norms. In these two countries, the appearance of clear solutions also was important either from the outset or soon after the issue moved into a discussion of solutions. These differing dynamics in the two sets of countries were successful in generating either political or high-level bureaucratic attention for the nutrition issue.

Policy formulation

In contrast to their success in generating political or bureaucratic attention to nutrition, these countries experienced difficulties in policy formulation. Policy formulation is defined here as the process of translating the political or bureaucratic openings for nutrition into concrete operational plans that include specification of interventions and technical choices, targeting, delivery mechanisms, roles and responsibilities, human and financial resources, etc. The reasons for these difficulties can be seen in Table 4, which is based on two of Shiffman's factors. Although the specifics differ across the countries, two major findings stand out.

First, the lack of agreement within the core policy community on the choice, priority and sequencing of interventions—and on institutional roles and responsibilities—has resulted in significant delays and risked eroding sustained political interest. In Bolivia and Guatemala, there was disagreement over the role, if any, for fortified complementary foods as part of a national

Table 4 Factors related to policy formulation

	Bolivia	Peru	Guatemala	Vietnam	Bangladesh
<i>Internal frame and policy cohesion for policy formulation</i>	Crucial for policy formulation Strong differences existed re: the priority of stunting versus wasting, choice of indicators, role of fortified complementary food and choice of community-based nutrition model. Key MOH staff made executive decisions on these issues. There has been lack of clarity or detailed discussion concerning the roles of other sectors.	Crucial for policy formulation Differences existed re: the roles or sequencing of multisectoral versus more focused strategies such as counselling and conditional cash transfers (CCT), the scalability and relevance of earlier successful NGO projects, and the roles and responsibilities of various ministries and organizations.	Crucial for policy formulation Strong differences existed re: a multisectoral strategy (including fortified complementary food) versus a women's empowerment strategy, with the former eventually being adopted in a new administration in 2008. Conflation of food security and nutrition further complicated policy discourse.	Crucial for agenda setting Strong internal agreement on the need to focus on stunting and to deploy proven and promising interventions to address it; detailed discussions on intervention choice, design, implementation strategies and roles and responsibilities have not yet taken place.	Crucial for policy formulation Strong differences existed among stakeholders re: the best interventions to control anaemia. Executive decisions eventually were made by MOH and DGFP based on evidence presented by ICDDR,B.
<i>Guiding institutions or governance structures</i>	Not yet effective A high-level, multisectoral council chaired by the President was formed but did not meet; a parallel lower level technical council met regularly but delegates lacked authority and commitment from their ministries, with MOH being the exception. MOH is secretariat and seeks to provide motivation and leadership.	Not yet effective A multisectoral technical team was formed to formulate a strategy and operational plan, reporting to senior (cabinet) official. The team has been unable to develop a national implementation plan. It now is focusing on articulating a more limited strategy based on counselling and a CCT.	Not yet effective A high-level, multisectoral council chaired by the Vice-President was formed but seldom met; a parallel lower level technical council met regularly but delegates lacked authority and commitment from their ministries. The technical secretariat lacks formal authority over ministries.	Unclear as yet Current discussions envision interventions being implemented within existing MOH and provincial structures. No discussion as yet of higher level or multi-sectoral structures.	Promising A steering committee has been formed with representation from DGFP, ICDDR,B, UNICEF, and UNFPA. The committee is charged with developing a detailed implementation plan, mobilizing funds and monitoring and evaluation.

preventive intervention strategy. In Peru, there was disagreement over central leadership for the President's new nutrition initiative, with some actors favouring the ministry that was historically responsible for the politically popular but poorly-targeted food distribution programmes and others favouring the MOH. Policy formulation in Peru was further complicated when a major donor agency that was not part of the original advocacy coalition entered the policy dialogue at a high political level, marginalized the advocacy coalition and promoted a different intervention strategy.

In all three Latin American countries, a major source of disagreement or ambiguity related to the focus on broad, multisectoral strategies (and defining the precise role of each sector) versus more narrow, often health-sector-based interventions. These examples illustrate that the disagreements often could not be resolved through appeals to technical evidence, and more often were related to questions of institutional leadership, expertise, agenda control, the promotion of contrasting intervention models by various institutions, differences in problem definition (e.g. malnutrition as a food insecurity and right-to-food issue vs. a child care and feeding issue), and differing perceptions or ideological positions regarding the feasibility and/or desirability of broad-based multisectoral approaches versus more narrow, selective interventions.

Differences and disagreements of this type are a common feature of the policy process, and can be an asset if they stimulate a more in-depth and systematic analysis and deliberation of various policy alternatives (National Research Council 1996; Hajer 2003). This occurred in Bangladesh, in relation to the choice of interventions to control anaemia, and the tentative choice of interventions was made in light of evidence presented by ICDDR,B concerning efficacy of various interventions. The second major finding in Table 4, however, is that there do not appear to be *effective* fora or institutional mechanisms for discussing, negotiating and resolving these differences in relation to multisectoral strategies. Multisectoral structures were established in Bolivia, Guatemala and Peru but, consistent with experience in earlier decades (Levinson 1995), these were unable to resolve these differing perspectives, disagreements and ambiguities. In the absence of such mechanisms, those decisions that were taken tended to be resolved through the exercise of formal authority (e.g. key MOH decisions in Bolivia) and informal power relationships (e.g. among government actors or between government and international actors). The exercise of formal authority allowed some of the institutions, such as the MOH in Bolivia, to formulate portions of their operational plans and begin implementation, but it is still too early to assess whether these authoritative decisions were 'the correct' ones in the sense of generating reductions in malnutrition.

Policy implementation

None of the countries studied here had implemented new interventions, programmes or other actions at a national scale during our period of engagement. However, the extensive discussions and initial activities (e.g. trainings and roll-out of selected structures and activities in pilot or high priority regions

or districts) do provide insight into the range of factors likely to influence the implementation process and the types of capacities required to manage them effectively.

The Potter and Brough framework provides a useful way to summarize the implementation and capacity issues observed in these countries by recognizing a four-tiered hierarchy of needs (tools; skills; staff and infrastructure; and structures, systems and roles) and nine component capacities (material supplies and resources, personal capacities, workload and supervisory capacities, facilities and support services, administrative systems, coordination and decision-making capacities, and authoritative role definition) (Potter and Brough 2004). These four tiers and nine components are relevant at each administrative level, from national, to regional, municipal/district and local.

The strengths and weaknesses of these capacities vary widely according to sector (MOH and BRAC vs. others) and intervention type (e.g. micronutrient powders vs. growth promotion vs. food security interventions), in addition to varying across administrative levels and countries. In all five countries, the MOH (or BRAC, in the case of Bangladesh) has at least the basic staff, infrastructure, administrative systems and authority to implement selective (i.e. direct) nutrition interventions. For that reason, they have made more progress in formulating and taking some initial implementation steps in some countries, such as training, developing materials, purchasing equipment and procuring supplies. Nonetheless, implementation in these cases is hampered by a variety of systemic weaknesses, including staff and supervisory workload, remuneration and job satisfaction; mastery of tools and skills for new or strengthened interventions; limited outreach beyond health facilities; limited finances for supporting interventions at national scale; weak accountability of staff at all levels; and limited resources and attention for addressing these systemic weaknesses. This is illustrated in the case of Bolivia and Bangladesh in Box 1.

These same limitations exist outside of the health sector (e.g. agriculture, education, social welfare) but, as seen in Bolivia, Guatemala and Peru which sought multisectoral approaches, these sectors tend to be even further constrained in three ways. First, they have less developed staff and infrastructure for supporting nutrition-related interventions (e.g. limited numbers of agricultural extension workers). Second, there are weaknesses in the horizontal coordination, planning and decision-making structures and processes at each level (municipal, regional and national) and in the vertical coordination among these levels. Thus, the advocacy for nutrition at the municipal and regional levels (conducted by national staff) has at times been effective in raising local awareness and a desire to address malnutrition, but the staff at these decentralized levels do not possess the knowledge and skills needed to design and implement interventions in various sectors, and they had not received adequate guidance from the national level. Finally, there are severe limitations in the performance capacity and workload capacity for basic programme planning, management, monitoring and evaluation at national levels. This latter constraint is especially important because it limits the ability to anticipate, detect and address the many specific capacity constraints noted above.

Conclusions and policy implications

This paper has examined nutrition commitment, agenda setting, policy formulation and implementation based on experiences from five developing countries. The strengths of the study include the use of explicit conceptual frameworks for inquiring into various facets of these complex processes, the opportunity to study these processes in a prospective fashion and as a participant-observer, the opportunity for the research team to challenge and refine each other's emergent interpretations from each country, and the contextual diversity across the five countries. The weaknesses include the relatively limited time frame (1–2 years), the varying level of engagement in each country, and the limited capacity to inquire in greater depth into the wide range and complex nature of the issues inherent in these three aspects of the policy process. With these strengths and limitations in mind, the study has implications for the current global and national efforts to improve nutrition and future research.

Commitment

There are important distinctions to be made between political attention, political commitment and system-wide commitment. The use of a framework adapted from Heaver's work (Heaver 2005) reveals that nutrition can receive impressive *political attention* when high-level officials address it through speeches, executive directives, setting of targets and establishment of coordinating structures, but this appears to be insufficient. Evidence of deeper *political commitment* would include allocation of the necessary authority, accountability and resources to relevant ministries; and the exercise of oversight to ensure progress in developing strategies and operational plans (policy formulation). The latter appears particularly important because of the difficulties the mid-level actors experienced in policy formulation, including those in government and in the donor and NGO communities, and the many capacity gaps that will limit the reach and effectiveness of interventions. In addition, high-level political champions may be the only actors capable of generating *system-wide commitment* on the part of mid-level ministry officials and staff, and the managers and implementers at regional, municipal and local levels. The commitment of the managers and implementers is crucial for effective implementation, but they are unlikely to prioritize nutrition over the many other issues for which they are responsible unless they receive sustained and meaningful signals and incentives from higher levels in their organizations (as illustrated in Bangladesh, Box 1).

These distinctions among political attention, political commitment and system-wide commitment are seldom recognized in discourse or practice. The mid-level policy entrepreneurs (Kingdon 1995; Mintrom 2000) who typically are responsible for the behind-the-scenes work of advocacy and commitment building could address this issue by formulating and promoting a more comprehensive set of action steps for senior politicians and senior ministry officials, including the need to send appropriate signals and incentives to managers and implementers.

Agenda setting

The experiences related to agenda setting suggest three important conclusions:

- (1) There are many potential strategies for getting nutrition onto the government's agenda (e.g. the efforts of a single trusted MOH official, a single well-connected businessman, or a coalition of international NGOs and United Nations agencies in partnership with government officials);
- (2) Agenda setting can be accomplished even when only a few of the 12 influential conditions are present (Shiffman 2007; Shiffman and Smith 2007); and
- (3) It does not appear necessary to identify a clear, evidence-based solution in order to get nutrition onto the agenda [contrary to the proposition in Kingdon and other models (Kingdon 1995)].

In all four of the countries where national pronouncements were made to address chronic undernutrition (Bolivia, Guatemala, Peru and Vietnam), the most influential factors appear to have been clear evidence for the size and urgency of the problem, the framing of the problem that had political resonance, and some strategically placed and effective 'messengers'. The proposed solution in Bolivia, Guatemala and Peru (multisectoral strategies) is most notable for its resonance within the prevailing political discourse in the country rather than its appearance of feasibility or the evidence for its effectiveness. Indeed, the evidence from similar attempts in earlier periods reveals it often can be a problematic strategy (Field 1977; Levinson 1995). This is in contrast to Bangladesh where evidence concerning the efficacy of a relatively simple intervention was crucial for sustaining interest in addressing anaemia (along with the involvement of credible national institutions and individuals). These experiences suggest that evidence concerning solutions can be of great value for setting agendas and sustaining interest, when such evidence exists, but it also is possible for issues to rise on policy agendas even in the absence of such evidence.

These conclusions pertain specifically to the process of getting nutrition onto the national policy agenda, but they need to be viewed within the larger policy process. That larger process includes the building of deeper political commitment and broader system-wide commitment, formulation of specific strategies and operational plans, capacity-building initiatives and implementation of effective actions at large scale. Success in agenda setting and advocacy to senior policy makers does not guarantee success in these other aspects of the policy process. It is likely that many of the 12 factors identified by Shiffman are important for these other aspects of the policy process (Shiffman 2007; Shiffman and Smith 2007), especially for sustaining attention and effective action over time, and therefore should be part of a longer-term strategic approach for addressing nutrition.

Policy formulation

One of the most striking observations in this study relates to the difficulties experienced by the mid-level actors in formulating and agreeing upon concrete intervention strategies, roles and responsibilities, and in developing concrete operational

Box 1 Implementation accomplishments and constraints in Bolivia and Bangladesh**Bolivia**

Intervention: Fortified Complementary Food (Nutribebe).

Policy intent: Municipalities will use national funds and local procedures and institutions to purchase, distribute and monitor the distribution of Nutribebe to all children aged 6–23 months, along with counselling of mothers concerning its correct use.

Accomplishments: After agreeing early in 2007 to develop a free, complementary food, by July 2008, coordinators of Bolivia's Zero Malnutrition (ZM) Program had issued a national directive requiring local governments to initiate the intervention, secured national hydrocarbon tax (IDH) funds municipalities could use to pay for the initiative, developed a micronutrient formula for Nutribebe, certified a national firm to begin producing the product, and had 66 municipalities buying and/or distributing the product (20% of all municipalities, 31% of ZM priority municipalities).

Capacity constraints and concerns: Challenges that developed during implementation included: (1) limited advocacy beyond health staff to ensure that municipal officials were aware of the programme, convinced of its need and informed of procedures to allocate funds and purchase the product; (2) weak local capacity to supervise counselling for correct use and monitor children's product use (as opposed to coverage); (3) no guidance regarding how to store or distribute the product effectively and efficiently; (4) no product quality control standards or monitoring; (5) lack of higher-level support staff to establish and maintain systems to detect and address problems.

Bangladesh

Intervention: Counselling of mothers concerning appropriate infant and young child feeding (IYCF).

Policy intent: BRAC will integrate IYCF counselling within its existing maternal, newborn and child health (MNCH) programme, with a focus on exclusive breastfeeding for 6 months and appropriate complementary feeding from 6–23 months.

Accomplishments: In early 2007, BRAC's research and evaluation division conducted a formative study and convened a stakeholders workshop to develop a strategy for addressing undernutrition through BRAC's programmes. Following this, decisions were made to experiment with integrating counselling for infant feeding in BRAC's MNCH programme. Behaviour change communications (BCC) materials and training plans were developed, and pilot implementation was begun in a few villages in one district in northern Bangladesh. Baseline and endline surveys were done to track progress, and qualitative operations research and programme process documentation/monitoring was undertaken to establish progress and identify key constraints. Pilot activities were then scaled up throughout the district and BCC materials were used in all intervention areas covered by the MNCH programme. BRAC district staff as well as district level Government of Bangladesh staff were oriented to the approach. A national level workshop was held to present this approach to national stakeholders. BRAC is now scaling up its efforts related to IYCF counselling in non-MNCH programme areas as well, to cover one-quarter of the entire country.

Capacity constraints: Some constraints identified through the implementation process were: (1) inadequate counselling skills, particularly of low literacy frontline health workers; (2) lack of incentives for sustaining motivation of frontline staff to prioritize IYCF counselling; (3) lack of support staff to problem-solve key issues related to IYCF. These constraints related mainly to workload, skills and supervisory capacity. Some of these constraints are being addressed in scaled-up programming that BRAC is rolling out in 2010.

plans, even in those cases where a rare window of opportunity was created by the head of state. These difficulties arose, to varying degrees, due to differing professional views about the most effective or appropriate intervention strategies (e.g. whether to distribute fortified complementary food to all children 6–24 months), differing institutional positions concerning these strategies, rivalries concerning leadership or agenda control, and genuine uncertainties concerning the roles of various ministries other than the MOH. The net result has been significant delays in moving the nutrition agenda forward in most countries, and, most worrying, the risk of eroding the interest, support and confidence of the political champions and donors. These difficulties and disagreements were not as salient in the literature on multisectoral nutrition planning in the 1970s, which instead stressed the importance of political commitment and implementation capacities (Field 1977; Pines 1982; Berg 1987; Field 1987), with one notable exception (Iverson *et al.* 1979).

These difficulties and disagreements in policy formulation parallel the dynamics observed within nutrition policy communities in recent years at the global (Morris *et al.* 2008) and national levels (Pelletier 2008; Natalicchio 2009), and in health policy and other sectors more broadly (Mills 1990; Kingdon 1995; Shiffman 2007; Shiffman and Smith 2007; Walt *et al.* 2008). The appropriate response depends fundamentally on the specific source of the problem and the context. For instance, differing professional views might sometimes be addressed through various collaborative problem-solving methods

(Holman 1999; Senge 2006; Innes and Booher 2010). Genuine knowledge or evidence gaps might sometimes benefit from consulting trusted experts, seeking guidance from authoritative sources (e.g. WHO guidelines, *Lancet* series), and reviewing or gathering relevant evidence (Mulrow 1994; Bowen 2005).

However, the experience in these countries and the broader literature (Wildavsky 1979; Rogers 1988; Majone 1989; Barker and Peters 1993; Rochefort and Cobb 1994; Stone 2002; Huxham 2003; Atkins 2005) suggests that differences in professional views and interpretations of knowledge or evidence typically are intertwined with professional and institutional values, incentives, agendas and rivalries, i.e. they relate to competing interests rather than purely intellectual or knowledge constraints. As such, responses that only seek to address intellectual, knowledge or evidence issues are unlikely to succeed (Black and Donald 2001; Behague *et al.* 2009). Similarly, the establishment of multisectoral councils or other formal decision structures are unlikely to be sufficient by themselves, as seen in these countries and earlier experiences (Levinson 1995). One approach for overcoming these difficulties and disagreements in the policy-formulation process is to strengthen the strategic capacity within the nutrition policy community, referring to the individual and institutional capacity to broker agreements, resolve conflicts, build relationships, respond to recurring challenges and opportunities, and undertake strategic communications (Mintrom 2000; Agranoff 2007; Pelletier 2008). Such capacities have not yet received systematic attention from the global nutrition community and will be

crucial as countries make greater efforts to achieve alignment on goals, strategies and implementation in the coming years.

The above suggestions for how to resolve disagreements in policy formulation all accept the current institutional architecture and governance system as a given. These consist of ministries, donors, NGOs, coordinating councils and others interacting to promote their preferred problem definitions, interventions and delivery strategies, with no single authority charged with making and enforcing final decisions. When the authority did exist for certain decisions, as in the case of the MOH for decisions on growth monitoring indicators in Bolivia and anaemia interventions in Bangladesh, the competing actors tended to direct their advocacy towards those authorities rather than each other, and authoritative decisions eventually were taken. This suggests the problem is only partly related to the existence of competing interests and perspectives among the policy actors (though these clearly do exist) and the absence of effective fora for reconciling these in a collaborative or deliberative way. It also is related to the absence of effective mechanisms for *legitimation* as a crucial feature of the policy process (Clark 2002). This is an aspect that is not explicitly covered by the current concept of 'guiding institutions and governing structures' shown in Table 4. Future efforts to improve nutrition at country level would benefit from greater clarity on how the legitimation function is to be accomplished, especially in the context of multisectoral strategies. This likely is another issue that will require the involvement of politicians.

Implementation

The application of the Potter and Brough capacity framework (Potter and Brough 2004) in this study revealed that all of the potential implementing institutions have capacity constraints that will limit the reach and effectiveness of interventions. The framework also revealed the important linkages among the nine component capacities in these countries and the need to adopt a systemic view of capacity strengthening, rather than focusing on some capacities and neglecting others. Given the broad implications of this conclusion, the most important insight is the need to strengthen: (a) the individual and institutional *operational* capacities, for basic programme planning, management, monitoring and evaluation at regional and national levels; and (b) the higher-level leadership and *strategic management* capacities at national level. Given the largely uncoordinated and fragmented landscape for capacity building in nutrition, some valuable first steps would be to undertake an inventory of current activities in all three regions, seek agreement and resources for a prioritized 10-year strategy, and monitor the implementation of that strategy.

Overall conclusions

This study has systematically applied multiple conceptual and analytical frameworks to better understand the processes of nutrition commitment, agenda setting, policy formulation and implementation in five developing countries. Three overall conclusions are warranted. First, this full spectrum of policy activities, in addition to monitoring, evaluation and programmatic adjustments not addressed here, requires substantial

attention if large-scale and sustained reductions in undernutrition are to be achieved. The country experiences documented in this study underscore the inter-connected nature of these policy activities and the need for all of them to be strengthened. Second, within this policy spectrum, high priority is warranted to strengthening strategic capacity (Pelletier 2008) because it is fundamental for advancing commitment-building, agenda setting, policy formulation, capacity-building for operations, and all other aspects of a long-term nutrition agenda at country level. Our conclusions are relevant for the major global initiatives currently under development that seek to reduce undernutrition (Bezanson and Isenman 2010). We conclude that the extensive investments in intervention efficacy research (Leroy *et al.* 2007; Rudan *et al.* 2007b; Bhutta *et al.* 2008) are unlikely to produce sustainable reductions in undernutrition unless or until these constraints in the policy process are better understood and addressed.

Acknowledgements

This study was part of the Mainstreaming Nutrition Initiative funded by a Development Grant Facility from the World Bank and hosted by ICDDR,B. We also acknowledge the support of collaborating and implementing institutions in each country including BRAC (Bangladesh), Plan International and the Ministry of Health (Bolivia), FAO and the Food Security and Nutrition Secretariat (Guatemala), the World Bank (Peru) and Save the Children and the National Institute of Nutrition (Vietnam).

Funding

The Mainstreaming Nutrition Initiative was funded by a Development Grant Facility from the World Bank.

Conflict of interest

We declare that none of the authors or their organizations has any conflict of interest in the publication of this paper.

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