Scaling Up Nutrition: A Framework for Action

Introduction and executive summary

In January 2008, The Lancet—one of the world’s most highly respected medical journals—issued a special five-part series on nutrition.* This series filled a longstanding gap by marshalling systematic evidence of the impact of undernutrition on infant and child mortality and its largely irreversible long-term effects on health and on cognitive and physical development. It also demonstrated the availability of proven interventions that could address these problems and save millions of lives. The Lancet set of interventions focused on the “window of opportunity” from minus 9 to 24 months (i.e. from pregnancy to two years old) for high impact in reducing death and disease and avoiding irreversible harm. Other studies drawing on a similar set of interventions have demonstrated very high cost-effectiveness, with high returns to cognitive development, individual earnings and economic growth.

The Lancet lamented, however, that nutrition was regarded for the most part as an afterthought in development priorities, and that it has been seriously underemphasized by both donors and developing countries. This assessment is widely shared within and beyond the nutrition community. There is also widespread agreement on a broad framework for action to counter this neglect and a growing partnership for collective action among key stakeholders — United Nations (UN), multilateral and bilateral development agencies, foundations, developing countries, nongovernmental organizations and other civil society organizations, researchers, and the private sector.

This policy brief has two main purposes. The first is to provide an outline of the emerging framework of key considerations, principles and priorities for action to address undernutrition. The second is to mobilize support for increased investment in a set of nutrition interventions across different sectors. Thus,

the intended audience is principally policymakers and opinion leaders, rather than nutrition specialists.

The main elements of the framework for action are:

- **Start from the principle that what ultimately matters is what happens at the country level.** Individual country nutrition strategies and programs, while drawing on international evidence of good practice, must be country-“owned” and built on the country's specific needs and capacities.

- **Sharply scale up evidence-based cost-effective interventions to prevent and treat undernutrition, with highest priority to the minus 9 to 24 month window of opportunity where we get the highest returns from investments.** (See Table 1 in Section 4). A conservative global estimate of financing needs for these interventions is $10+ billion per year.

- **Take a multi-sectoral approach that includes integrating nutrition in related sectors and using indicators of undernutrition as one of the key measures of overall progress in these sectors.** The closest actionable links are to food security (including agriculture), social protection (including emergency relief) and health (including maternal and child health care, immunization and family planning). There are also important links to education, water-supply and sanitation as well as to cross-cutting issues like gender equality, governance (including accountability and corruption), and state fragility.

- **Provide substantially scaled up domestic and external assistance for country-owned nutrition programs and capacity.** To that end, assure that nutrition is explicitly supported in global as well as national initiatives for food security, social protection and health, and that external assistance follows the agreed principles of aid effectiveness of the Paris Declaration and the Accra Agenda for Action. Support major efforts at the national and global levels for strengthening the evidence base — through better data, monitoring and evaluation, and research — and, importantly, for advocacy.

The remainder of this policy brief is organized as follows:

- Why a major focus now on reducing undernutrition?
- A multi-sectoral approach
- Scaling up a set of direct nutrition interventions
- Benefits of Scaling up the set of interventions
- Moving to action
- Conclusion

**Why a major focus now on reducing undernutrition?**

Simply stated, undernutrition* is one of the world's most serious but least addressed health problems. The human and economic costs are enormous, falling hardest on the very poor and on women and children. In developing countries nearly one-third of children are underweight or stunted (low height for age). Undernutrition interacts with repeated bouts of infectious disease, causing an estimated 3.5 million preventable maternal and child deaths annually.** And its economic costs in terms of lost national productivity and economic growth are huge.

There are additional reasons for a major effort to address malnutrition now. First, undernutrition is largely preventable and the evidence of exceptionally high development returns to a number of direct nutrition interventions is conclusive. Also, success in addressing undernutrition is essential to meeting the Millennium Development Goals (MDGs) and equally in contributing to agreed human rights for health and freedom from hunger.

Second, while there is also a need to encourage faster progress on underlying socio-economic determinants of undernutrition like income growth, reliance on these underlying determinants alone would be a serious mistake and would serve only to prolong further international development's long-standing neglect of nutrition. It will take many decades to eliminate severe poverty in most low income countries. In addition, the evidence shows not only that improvements in nutrition lag far behind income growth*** but that families with ample incomes for adequate food intake also suffer from surprisingly high rates of undernutrition.****

Third, it is the world's poor who suffer most from international economic disruptions. The recent global crises in food, fuel and finance are but further demonstrations that such crises cause undernourishment to worsen and death rates to rise. This underscores the importance of addressing undernutrition as part of donor support for social safety nets (social protection programs).

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* The term malnutrition includes both undernutrition and over-nutrition or obesity. This brief focuses exclusively on undernutrition. Country nutrition strategies will normally also address obesity as well.


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Fourth, much has changed since early 2008 when The Lancet concluded that "the international nutrition system is broken... (and) leadership is absent"*. Numerous organizations have recently launched new nutrition strategies and initiatives, including: ECOWAS**; NEPAD***; the European Commission; the Bill and Melinda Gates Foundation; the World Bank; UN agencies; and bilateral development agencies — including Britain, Canada, Denmark, France, Ireland, the Netherlands, Norway and Spain. These efforts have been supported by major international civil society organizations, including, among others, Bread for the World, Helen Keller International, Médecins sans Frontières and Save the Children. Of particular importance is that there is now increasing acceptance of the imperative of shared advocacy for collective action. These signs of progress augur well for efforts at broader international collective action to combat undernutrition.

Fifth, the private sector has become more actively engaged in solutions to undernutrition. This comes partly through production of high quality foods — including those fortified with micronutrients.**** In addition, new public-private partnerships for food fortification have been formed internationally and in many developing countries, including National Fortification Alliances, International Business Alliances, the International Business Leaders Forum hosted at Harvard University, and the Flour Fortification Initiative. These are complements to public sector and NGO nutrition programs. The private sector can also help by applying its marketing skills to "social marketing" of positive nutrition messages. There is also growing recognition of the broader role of the private sector in fighting undernutrition through food production, employment and income generation. Partnership with the private sector also should include means to address issues of products, mislabelling or misleading advertising, that contribute to poor nutrition.

Sixth, new initiatives in the closely related areas on food security, social protection and health systems offer opportunities to raise the profile of nutrition in these areas (as discussed below) as well as to obtain financing for nutrition through them.

In sum, today's context for scaling up global nutrition is a new and far more favorable one. It is characterized by demonstrable and increasing proof of interventions with high development and health returns, increased recognition of the need to scale up such interventions, increased potential for public-private partnerships and increased will by the international nutrition community to agree on a common framework for action. It is this nexus that provides an opportunity for the global community to reverse past neglect and to take effective action now to combat undernutrition.

A multi-sectoral approach

There are two complementary approaches to reducing undernutrition — direct nutrition-specific interventions and a broader multi-sectoral approach. Action on both is urgent. Multi-sectoral approaches can help reduce undernutrition in three ways.

One, already mentioned, is by accelerating action on determinants of undernutrition like inadequate income and agricultural production or by improving gender equality and girls’ education, which are known to have a powerful impact over time in preventing undernutrition. Similarly, improved water supply not only helps address the cycle of disease and malnutrition but lets mothers spend more time on nutrition and health of their children. There are also deeper underlying determinants such as the quality of governance and institutions and issues relating to peace and security. Nutrition strategies that do not take account of the constraints and opportunities these underlying determinants present are less likely to achieve results on the ground. To cite the important example of gender inequality, the design of nutrition strategies needs to take account of the extent of maternal education and of intra-family food distribution.

The second is by integrating nutrition — in other words, by including specific pro-nutrition actions — in programs in other sectors. For example, school curricula should include basic knowledge of good nutrition, including family nutrition practices. The closest links, though, are to food security and agriculture, health and social protection, which are three sectors in which the international development community recently launched high priority initiatives and in which there are opportunities to contribute directly to better nutrition outcomes. To take the case of agriculture, there is a need to incorporate nutrition interventions into smallholder agriculture and rural livelihoods programs, for example through encouraging home production of foods like fruits and vegetables and animal products that are rich in nutrients. Similarly, research should be intensified on biofortification as well as on increasing yields of nutrient-rich foods and of staple foods of the poor.***** One powerful way to encourage more

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** The Economic Community of West African States.
*** The New Economic Programme for African Development.
**** Some, like iodized salt, are affordable for almost all income groups. Others are affordable only for those families which, while still at risk of undernutrition, have the means to pay.

emphasis on nutrition objectives in related sectors and to hold those sectors accountable for nutrition results is to include an indicator of undernutrition as one of the set of indicators used to judge overall progress in these sectors.

The third is by increasing “policy coherence” through government-wide attention to unintended negative consequences on nutrition of policies in other sectors. This applies both to donors and developing countries. Well-known examples for donors and other food exporters are subsidies for biofuels and food exports. What is required is both better and timelier analysis of nutritional consequences and inclusion of nutritional consequences in “all of government” mechanisms for policy co-ordination.

Those urging more attention to nutrition are not, however, in a position to impose unilateral demands for higher priority to nutrition in other sectors. Experience shows that getting higher priority for nutrition or other cross-sectoral objectives requires both high level political support and partnerships that build buy-in by the sectors concerned; the need for “ownership” applies to ministries as well as to governments as a whole. Capacity development for nutrition in related sectors is also important.

### Scaling up direct interventions

The Lancet series examined evidence from hundreds of studies in a variety of country settings and identified a range of efficacious nutrition interventions. Building from this, a study* carried out for the World Bank in 2009 examined programmatic feasibility and cost-effectiveness. It identified a more selective package of 13 highly cost-effective interventions, again concentrating on the window of opportunity for children under two but including some components with broader benefits, including for maternal malnutrition.** The study then estimated the annual costs of the 13 interventions

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production contributes to food security, and hence indirectly to addressing undernutrition, both by increasing food availability and by increasing livelihoods and incomes of the poor, so increasing their capacity to feed their families.


** The package was identified through a consultative process with partners. Eleven of the thirteen interventions are taken, by a process of further screening, from the Lancet list. There are two others: micronutrient powders for children under two, which have an unusually high benefit-cost ratio; and complementary feeding for children under two, which focuses on improving cognitive and physical development of moderately malnourished children in this window of opportunity. Some others, such as Vitamin A supplements for neonates, are excluded since the evidence is being re-examined, and others are not costed for now because programmatic guidance (how much, under what conditions) is yet to come.

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in the 36 highest burden countries covered by The Lancet, which account for 90 percent of undernutrition of children under five. These high-return interventions would improve family nutrition practices and supplement foods and micronutrients provided by families, whether through market purchases or through home production. These interventions, which complement the multi-sectoral approach, would be delivered as part of broader public health programs or, in the case of fortified foods, through private markets, are summarized in Table 1.

The study also called for $1.2 billion in related support for capacity development and for strengthening the evidence base. Both are crucial. Expansion to full scale requires major strengthening of capacity both on nutrition and on nutrition-related aspects of country systems — for example financial, procurement, human resources, and accountability systems. It is also vital to strengthen the evidence base, particularly at the country level, with investments in better data, monitoring and evaluation, and research.

The total cost of these direct interventions is estimated at about $11.8 billion annually at full implementation, of which it is assumed that affected households that are better off financially could pay about $1.5 billion of the food-related costs, (through additional market purchases). This would leave $10.3 billion annually to be financed from other sources, domestic and external. The best way to think of the $10+ billion is as the de minimis annual financing need. This is partly because of the overall conservative assumptions made in costing the 13 interventions.*** It is also because national strategies, even while giving priority to the most cost-effective programs and the window of opportunity for children under two, will need to consider nutritional needs beyond age two.

This is not to suggest that capacity exists for an immediate scale-up to $10+ billion annually. Human and institutional capacity in nutrition is very weak in many countries, thus limiting the pace of scaling up. However, given how little is being done now, current capacity across countries — including that of civil society organizations — far exceeds current financing. And some countries, including the most populous ones, have capacity for very rapid increases that could multiply the size of current programs.

*** The projections in the Costing Study assume only 90% rather than 100% coverage, given that marginal costs rise substantially as coverage gets closer to target levels. Furthermore, the estimates cover only the Lancet set of 36 countries, accounting for 90% of cases of undernutrition. Also, importantly, countries will also want to include undernutrition (and overnutrition) of those over two in their nutrition strategies.
Benefits of scaling up the set of direct nutrition interventions

Results from field studies indicate that, at full implementation, the package of 13 interventions would result in a child mortality decline by about 1 million deaths per year, equivalent in the case of young children to 30 million life years (or, more precisely, what is referred to in public health as “disability-adjusted life years” or DALYs) saved.* Even partial progress would bring extraordinary results. For example, when 50% coverage is attained, 500,000 children's lives would be saved. But, as already noted, the benefits of childhood nutrition interventions go far beyond mortality reduction to include cognitive and physical development, better health and higher earnings. A rigorous longitudinal study in Guatemala, for example, found that boys receiving a fortified complementary food prior to age 3 grew up to have wages 46% higher than those in the control group. The study estimated an increase in GDP of at least 2–3 percent**. These substantial benefits are why it is important to address mild as well as severe undernutrition.

Nutrition interventions are critical to achieving the MDGs. A recent United Kingdom consultation paper on nutrition made this point emphatically, underscoring the “clear evidence of the critical importance of nutrition to the achievement of all MDGs and in maximizing the effectiveness of all development interventions”***. The following Table 2 illustrates the impact on the MDGs of the 13 interventions — and other cost-effective interventions for nutrition.

The costing study is unique in pulling together a wide variety of data on cost-effectiveness. The package of recommended interventions shows excellent results, ranking high in comparison in costs per DALY to other public health interventions. Micronutrient supplementation and fortification scored particularly high. Even more striking are the inter-sectoral comparisons reflected in the “Copenhagen Consensus 2008”, which summarizes the views of a panel of leading economists, including five Nobel Laureates, on the top ten development investments overall. Nutrition interventions, from micronutrients to community based nutrition, ranked 1, 3, 5, 6, and 9 — far higher than for any other sector.

In sum, investment in the $10+ billion package of

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* These estimates are approximate. If maximum feasible coverage is 90% then the reduction in child mortality would be 10% lower. However, if the countries with the remaining 10% of undernourishment were included, the reduction in child mortality would be 10% higher. So the two essentially cancel each other out. Further, if additional interventions were added as capacities are built, reductions in child mortality will increase, as would financing requirements.


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TABLE 2: impact of undernutrition interventions on Millenium Development Goals

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<tr>
<th>MDG</th>
<th>Description</th>
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<tr>
<td>MDG 1: “eradicate extreme poverty and hunger”</td>
<td>Reducing “prevalence of underweight children under five years of age” is an agreed target for MDG 1. Reducing undernutrition increases economic growth.</td>
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<tr>
<td>MDG2: “achieve universal primary education”</td>
<td>Reducing undernutrition increases cognitive development and contributes to learning and school completion rates.</td>
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<tr>
<td>MDG 3: “promote gender equality”</td>
<td>Promoting better nutrition practices contributes to empowering women and to reducing discrimination against girls in family feeding practices.</td>
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<tr>
<td>MDG 4: “reduce child mortality”</td>
<td>Enormous impact, explained in text, of lower undernutrition on child mortality</td>
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<tr>
<td>MDG 5: “improve maternal health”</td>
<td>Improved maternal nutrition and reduced maternal mortality through programs of behaviour change and iron and folic acid supplementation.</td>
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<tr>
<td>MDG 6: “combat HIV/AIDS, malaria and other diseases”</td>
<td>Reduces maternal and child mortality caused by the interaction of undernutrition with HIV/AIDS and other infectious diseases.</td>
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<td>MDG 7: “ensure environment sustainability”</td>
<td>Better nutritional practices mean more effective use of available food and so better adaptation to environmental stress (Target 7A), increased health impact from improved access to water and sanitation ((Target 7C), and improvement in lives of slum dwellers (Target 7D).</td>
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<td>MDG 8: “global partnership for development”</td>
<td>Addressing hunger and malnutrition around the world is a key element of, and argument for, the global partnership for development. This applies particularly to the least developed countries (Target 8B), where levels of undernutrition are highest.</td>
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Direct nutrition interventions recommended in the costing study promises exceptional payoffs in terms of mortality, morbidity, physical and mental growth, contributions to MDGs, lifetime earnings and overall development. Indeed, these core interventions offer among the very highest rates of return feasible in international development.

**Moving to action**

Progress in moving the proposed interventions to scale will require actions at the global and country levels, deriving from the following principles:

1. **Sharply scale up support for nutrition programs and capacity development**: The extraordinary development returns to addressing undernutrition furnish unequivocal justification of a fast track to scaling up both domestic and external investment. More detailed work will be needed to determine the share of the estimated $10+ billion in annual public financing that can reasonably be provided by developing countries. But, as in comparable international initiatives, the share of external assistance would need to be significant, particularly taking account of past neglect of nutrition by both donors and developing countries. A 50-50 split would, for example, require $5 billion annually of donor financing. Yet OECD data indicate that only about 6 percent of that amount (approximately $300 million) was provided for “basic nutrition interventions in 2006”.* This is only 3% of the $13 billion for health in the

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*The Lancet, January, 2008, and “Review of the Global Nutrition Landscape” a discussion paper prepared by Ruth Levine and Danielle Kuczynski, Center for Global Development. These estimates are based on OECD data for “basic nutrition”, which cover concessional assistance from bilateral donors and most relevant multilateral donors, with the exception of WFP. The estimates of $300 million does not include food aid used for basic nutrition interventions, for which data are not available.
same year and 15% of the $2 billion in emergency food aid. The challenge is how first to narrow and then to close this huge gap.

2. Use Paris-Accra Principles of Aid Effectiveness to Support Country Strategies: In the longer run what is accomplished in nutrition will be determined not by the projects or programs of international development agencies but by the ownership, commitment to results and capacity of each developing country. It is this basic realization that led to the Paris Declaration (2005) and the Accra Agenda for Action (AAA) (2008). They focused on: ownership, alignment of donors with country strategies and systems, including making financial assistance more predictable and sustainable; harmonization of external assistance, including pooled funding, joint analysis and missions, reduction in fragmentation, division of labour, management for results, and mutual accountability. These principles are integral parts of achieving sustainable improvements in nutrition. In keeping with the Paris-Accra principles, the focus in this Framework is overwhelmingly at the country level — with $9 of the $10+ billion in estimated cost for support for country strategies. Modalities for external support at the country level would also follow Paris-Accra, with use of both overall programmatic support and targeted projects, and “use (of) country systems as the first option for aid programs in support of activities managed by the public sector”.

3. Mobilize key stakeholders in an inclusive approach to country ownership: The history of development tells us clearly that successful country-wide strategies and programs usually require “ownership” not only by governments, but also by civil society, parliaments and the private sector. The government leadership role goes well beyond the nutrition services provided by the public sector to include formulation of strategic policy directions, an appropriate regulatory and enforcement framework for private as well as public provision of services, and monitoring to measure progress and ensure accountability. The role of civil society is crucial in advocating and sustaining political will for government action, in monitoring and accountability of both the public and private sectors, as well as in service delivery. The role of the private sector, as described above, is in fortified and other nutrition-related products, public-private partnerships, social marketing, and, more broadly, in generating growth in food production, income and employment.

4. Use the “Three Ones”: Country nutrition strategies, and key national stakeholders in nutrition, should apply the “Three Ones” that have been widely endorsed in the global effort to combat HIV/AIDS, as recommended in a recent background paper on nutrition of the European Commission.** The “Three Ones” are: “one agreed … framework that provides the basis for co-ordinating the work of all partners; one national coordinating authority, with a broad multisectoral mandate; and one agreed national monitoring and evaluation system”.

5. Develop strong, prioritised country strategies: The nutrition strategy of each country should be grounded in the specificity of its unique needs, constraints, capacities, challenges and priorities. Many past efforts at developing country strategies, often drafted by donor-financed consultants, have not respected this necessity. The nutrition strategy should also have strong political “ownership”, which also means coverage of nutrition in overall national poverty reduction strategies. While grounded in country specificity, country nutrition strategies should take particular account of international evidence on the exceptionally high return “window of opportunity” of under age two. This should not, of course, preclude consideration of nutritional needs beyond the age of two, including of breadwinners and other family members, as well as multi-sector interventions and components with broader benefits. In keeping with good practice, strategies should cover both nutrition-specific and cross-sectoral nutrition interventions, including linkages with agriculture and food security, social protection, and public health. Similarly, they should cover relevant cross-cutting issues like gender, social exclusion and accountability. And they should include requirements for capacity development, monitoring and measurement of results. An example of efforts to support development of country strategies is the “REACH” program, sponsored by FAO, WHO, UNICEF and WFP.

6. Draw on support from related international initiatives: Scaling up external assistance to the extent needed cannot come from new support for nutrition alone. Rather, support for overall country nutrition strategies needs to be integrated into global initiatives in closely related areas: food security and agriculture, health and vulnerability protection programs. There is growing scope for such integration. The UN High Level Task Force on Global Food Security — including in its Comprehensive Framework for Action — and the Committee on World Food Security of the FAO both drew attention to the importance of nutrition and

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** Background document to stimulate the debate for a Reformed Nutrition leadership and global coordination: A Working Paper prepared for the EU Donors Meeting, Monday 15th June, Brussels
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7. **Pay attention to the special needs of fragile states:**
Aid effectiveness in nutrition, as in other sectors, needs to take account of the special needs of situations of state fragility. In many, but by no means all, such cases, it is not feasible to develop or implement country-owned strategies. In such cases, donors and CSOs need to take a more activist role on basic nutrition interventions (as well as on emergency nutrition programs). But, as spelled out in donor guidelines on aid effectiveness in fragile states, there should still be agreed interim strategies where feasible and an emphasis on development of sustainable national programs in the future.

8. **Support the evidence base:**
Strengthened global support is needed for development and dissemination of knowledge on undernutrition and on the efficacy and cost-effectiveness of steps to address it. This would include support for rigorous evaluation of projects and country programs, and for fine-tuning and developing guidelines for the spread of additional cost-effective nutrition interventions — including those in agriculture or other related sectors. The objective is both to provide reliable information for national nutrition strategies of likely cost-effectiveness and to contribute to improvements in quality of programs and projects. Corresponding support is also needed at the country level, as part of support for country strategies, for strengthening of data collection (including baseline data), monitoring and evaluation.

9. **Support advocacy and political mobilisation for addressing undernutrition:**
Strengthened global support is also needed for advocacy and political mobilization in order to move nutrition to the center stage of policy and action at the national and global levels. The insufficient attention to nutrition at the global level that is evident in the aid data has been a major theme of this policy brief. The same point applies at the country level. Since the recent evidence on high development returns to selective nutrition interventions is generally not well known outside nutrition circles in many developing countries, donors and civil society organizations can help in the dissemination process at country level. This effort at advocacy, including communications and political mobilization, would involve civil society and opinion leaders in both donor and partner countries, with a focus on reaching decision-makers beyond the nutrition community. The issues are by no means just technocratic, though. What is needed is high level political champions and leadership on nutrition at the national and global levels, including for example in the G20 and G8. Similarly, to turn that leadership into sustained action, agreed frameworks will be required to ensure accountability on commitments made — and to be made. This effort at advocacy, including communications, would involve civil society, philanthropic organizations and opinion leaders in both donor and partner countries, with a focus on political mobilisation and building support among decision-makers beyond the nutrition community.

**Conclusion**

The answer to the question “why scale up domestic and international support for nutrition at a time of severe global recession?” should be clear from this policy brief. It is, most importantly, because the problem is so serious; because the evidence is so overwhelming that the proposed package of interventions offer exceptionally high development returns; and because the MDGs cannot be achieved without urgent attention to nutrition. The costs of inaction — as measured by increased child mortality, compromised life chances and reduced economic productivity — are unacceptably high. This policy brief should generate a strong sense of urgency and facilitate preparation of a detailed collective action plan by developing countries, external partners, civil society and the private sector.

Despite the global recession, developing countries and donors have recommitted themselves to achieving the MDGs, and most donors reaffirmed their pledges to increase financing for development. There is now a
window of opportunity for the global community to take effective action to reduce global undernutrition, particularly among the youngest and most vulnerable children. The stakes are high and so are the returns. The time to act is now.

The call to endorse “A Framework for Action for Scaling up Nutrition” has already resulted in more than 60 agencies signaling their support. To view the full list of endorsing agencies and to add new endorsements, please go to http://www.inffoundation.org/publications/fnb.htm or http://www.unscn.org/.