Stakeholder Perceptions Analysis

TEN YEAR STRATEGY FOR THE REDUCTION OF

VITAMIN AND MINERAL DEFICIENCIES
Stakeholder Perceptions Analysis

TEN YEAR STRATEGY FOR THE REDUCTION OF VITAMIN AND MINERAL DEFICIENCIES

MESTOR ASSOCIATES CANADA
Acknowledgments

GAIN and the authors wish to thank the members of the Ten Year Strategy Reference Group for their time and expertise in guiding the development of this work. The Group comprises Robert Auger, Jean Baker, Shawn Baker, Horwarth Bouis, Frances Davidson, Bruno de Benoist, William Dietz, Darren Dorkin, Kerr Dow, Rainer Gross, Katharine Kreis, Idamarie Laquatra, Venkatesh Mannar, Jane Nelson, Tina Sanghvi, Meera Shekar, Sally Stansfield, Admassu Tadesse, Tina Van den Briel, Paulus Verschuren, and Anne Whyte.

Stakeholder Perceptions Analysis

Copyright © The Global Alliance for Improved Nutrition, 2006. All rights reserved.

Any use of information contained in this report is subject to a permission request to be addressed to GAIN, the Global Alliance for Improved Nutrition, to the attention of the Manager, Communications, P.O. Box 55, 1211 Geneva 20, Switzerland, by e-mail at: info@gaingeneva.org or by fax at + 41 22 749 18 51.

Design by Inís—www.inis.ie
Contents

Acronyms and Abbreviations ........................................ i
List of Figures .................................................... ii
Foreword ............................................................ iii
Executive Summary ............................................... v

PART 1: Main Findings

1 Introduction ....................................................... 1

2 Support for a Global Strategy ................................ 3
   2.1. Is a global strategy needed?
   2.2. What should the goal be?
   2.3. What should the scope be?

3 Support for a Global Alliance ................................ 11
   3.1. Interest in joining an alliance
   3.2. How to make alliances work
   3.3. Working together at national level

4 Challenges and Opportunities ................................ 21
   4.1. Challenges to make a strategy work
   4.2. Key areas for investment
   4.3. Criteria for priority countries

PART 2: Stakeholder Roles and Expectations

5 Intergovernmental Perspectives .............................. 29
   5.1. How would a strategy link to your programs?
   5.2. What are your expectations of a strategy?

6 National Perspectives ........................................... 33
   6.1. Lessons from national experience
   6.2. Views on global health initiatives

7 Industry Perspectives ........................................... 39
   7.1. What can industry contribute to a strategy?
   7.2. Is there a business case?
### Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AED</td>
<td>Academy for Educational Development</td>
</tr>
<tr>
<td>AED-FANTA</td>
<td>Food and Nutrition Technical Assistance Project, housed at AED</td>
</tr>
<tr>
<td>BAFF</td>
<td>Business Alliance for Food Fortification</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CIDA</td>
<td>Canadian International Development Agency</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DANIDA</td>
<td>Danish International Development Agency</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development, UK</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
</tr>
<tr>
<td>FFI</td>
<td>Flour Fortification Initiative</td>
</tr>
<tr>
<td>GAIN</td>
<td>Global Alliance for Improved Nutrition</td>
</tr>
<tr>
<td>GFAAC</td>
<td>Global Folic Acid Advocacy and Advisory Group, Emory University</td>
</tr>
<tr>
<td>GTZ</td>
<td>German Agency for Technical Cooperation</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome</td>
</tr>
<tr>
<td>HKI</td>
<td>Helen Keller International</td>
</tr>
<tr>
<td>IBLF</td>
<td>International Business Leaders Forum</td>
</tr>
<tr>
<td>ICCIDD</td>
<td>International Council for Control of Iodine Deficiency Disorders</td>
</tr>
<tr>
<td>ICRW</td>
<td>International Center for Research on Women</td>
</tr>
<tr>
<td>IDD</td>
<td>Iodine deficiency disorders</td>
</tr>
<tr>
<td>IFAD</td>
<td>United Nations International Fund for Agricultural Development</td>
</tr>
<tr>
<td>IFPRI</td>
<td>International Food Research Policy Institute</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illnesses</td>
</tr>
<tr>
<td>INACG</td>
<td>International Nutritional Anemia Consultative Group</td>
</tr>
<tr>
<td>IUNS</td>
<td>International Union of Nutritional Sciences</td>
</tr>
<tr>
<td>IVACG</td>
<td>International Vitamin A Consultative Group</td>
</tr>
<tr>
<td>JICA</td>
<td>Japanese International Cooperation Agency</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MI</td>
<td>Micronutrient Initiative</td>
</tr>
<tr>
<td>MOFA</td>
<td>Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>MOST</td>
<td>Micronutrient Project funded by USAID</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>OECD-DAC</td>
<td>Organization for Economic Cooperation and Development—Development Assistance Committee</td>
</tr>
<tr>
<td>PAHO</td>
<td>Pan-American Health Organization</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Agency</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1 Support for a global strategy for micronutrients
Figure 2 How could a global strategy best support national efforts?
Figure 3 Interest in joining an alliance to promote micronutrient nutrition
Figure 4 Key attributes of a successful multi-stakeholder alliance
Figure 5 How can national coordination for micronutrient programs be achieved?
Figure 6 Challenges to make a strategy work
Figure 7 Main challenges to a micronutrient strategy within countries
Figure 8 Priorities for strategic investment
Figure 9 Criteria for selecting priority countries for action
Figure 10 What can industry contribute to a micronutrient strategy?
The need for a comprehensive strategy to reduce vitamin and mineral deficiencies grew out of a critical analysis of the current international response. On the positive side, those working in the field could see the potential to make a significant impact on a problem affecting 2 billion people, worldwide. Effective solutions, such as food fortification, had been demonstrated to improve health and cognitive function and if only these solutions could be applied on a widescale basis, those most at risk, especially the poor in developing countries, could reap real benefits. On the negative side of the ledger, however, was the realization that the lack of funding for this neglected problem was a limiting factor. Further, while much good work was being done, the sheer number of players in the sector introduced risks of duplication or lack of coordination.

In 2005, a number of agencies agreed to collaborate on the development of a Ten Year Strategy for the Reduction of Vitamin and Mineral Deficiencies. GAIN—the Global Alliance for Improved Nutrition—was asked to coordinate the development of this work and a phased approach was proposed. The first stage, “Phase 1”, focused on the need to develop a comprehensive understanding of the current situation. In September 2005 the Academy for Education and Development in Washington DC was commissioned to undertake an extensive review of the technical situation, including the science and economics of vitamin and mineral deficiencies and how to address them. Their review, titled “Vitamin and Mineral Deficiencies Technical Situation Analysis” contains a wealth of knowledge not just about what is known, but also about the gaps in our knowledge. This work was complemented by a study of the expectations and suggestions of those working in the field of micronutrient deficiencies, from all sectors including private industry. To gather this information, GAIN commissioned Mestor Associates to design a survey and interview over 150 key informants. Their findings are published in this document, the “Stakeholder Perceptions Analysis”.

Together, these two documents position us to move ahead to the next stage of the strategy development—the preparation of a framework including a range of targeted interventions where the nutrition community, in partnership with the private sector, can address vitamin and mineral deficiencies in a coordinated, rational and effective way.

This work has been undertaken with the guidance of the Ten Year Strategy Reference Group. Each member of this Group, leaders in their field from the public and private sectors, as well as civil society, has generously given their time and expertise to this process. On behalf of GAIN I am glad to take this opportunity to thank them for their efforts and commitment to this process. I am also grateful to those at AED and Mestor who have created these excellent analyses.

The challenge now is to put this information to good use. Too many people around the world suffer the adverse effects of vitamin and mineral deficiencies. For their sake, we cannot allow these documents to be academic works that sit on shelves gathering dust. I look forward to working with each and every one of you in the hope that, in a decade’s time, we may look back and know that we really were able to make a difference.

Marc Van Ameringen
GAIN Executive Director
May 2006
Executive Summary

This is the report of a stakeholder survey to seek views on a proposed ten year plan to combat vitamin and mineral deficiencies. Interviews were conducted early in 2006 with 155 stakeholders from developing and developed countries, intergovernmental organizations, business and industry, nongovernmental organizations, university researchers, donors and financial institutions.

We found that there is broad support for the idea of a strategy on the basis that it was needed to:
- Raise the profile of vitamin and mineral deficiencies within national governments and international agencies
- Improve coordination between public sector agencies and with business and industry
- Strengthen donor support.

However concerns are expressed about developing special initiatives for micronutrient nutrition that are not integrated into national nutrition programs and how the proposed strategy would add value to the many existing strategies and programs already underway.

According to the stakeholders the strategy should:
- Have goals that are tied to the UN Millennium Development Goals approved in 2000 and those agreed for micronutrients at the UNGA Special Session on Children 2002
- Encourage additional investments in operational research, especially tools for rapid assessment of prevalence of vitamin and mineral deficiencies; and in producing more evidence-based advocacy to convince national governments, donors and intergovernmental agencies to invest more in micronutrient programs
- Bring supplementation, fortification and other food-based approaches within a single strategic framework
- Target poor populations especially infants under two, children under five and pregnant and lactating mothers as key target groups
- Focus on vitamin A, iron, iodine, zinc and folate deficiencies providing there are agreed WHO guidelines and that the ‘goalposts’ do not change within the ten year period
- Focus on countries where there is a high burden of vitamin and mineral deficiencies combined with significant government commitment for action so that there are reasonable expectations for success and sustainability
- Use the capacity and expertise of industry to leverage a market-based approach to make and distribute quality fortified foods that can improve the nutritional status of the poor.

The main challenges that stakeholders see to making the strategy work are: managing the relationships between the stakeholders themselves; being able to make strategic choices that leave some components and some stakeholders out; and the difficult national situations in which the strategy must be applied.

Industry stakeholders, particularly multinational companies, are cautiously optimistic that there is a business case to be made for providing fortified foods to the poor and that over the period of the ten year strategy the reach of the market will shift significantly towards making such a strategy more effective. But it will take concerted effort to help national industry and small entrepreneurs to become engaged in the process and to assist them with the financial and
technical support that they will need as many said that their profit margins were too low to cover any additional costs.

There is broad interest in joining an alliance to support a cross-cutting strategy although the majority of stakeholders would want to know more about it before they can commit themselves or their organizations. Their main concerns about multi-stakeholder alliances are that they rarely meet all the necessary conditions for success—which are to have effective and transparent governance; clear roles and responsibilities; and proactive ‘relationship management’ between stakeholders—particularly where there may be initial mistrust. Communications must be clear and efficient time management including the management of stakeholder meetings is essential.

The lessons from national experience are that putting policies in place for fortification takes years and that the roll-out of programs across the country can also take years. These long time lines must be built into any strategy. Many countries have devolved or are undergoing rapid decentralization of government responsibilities for supplementation and fortification programs to lower levels of government including state/provincial and municipal levels so any strategy must consider the realities of this situation and not just focus on national level mechanisms.

Multi-stakeholder coordinating mechanisms within countries need similar conditions for success to those at international level and here national stakeholders stressed the need for external agencies to be less competitive and to have more of a partnership mentality as well as showing more flexibility to respond to local conditions in implementing their externally funded programs.

While many stakeholders saw benefits in externally funded strategies and programs targeted at specific problems (so called vertical programs or global health partnerships) in that they fast-tracked results and attracted attention and money to the problem, they also saw a number of disadvantages. These included inflexible conditions imposed at national level, lack of sustainability once the external funding ended, little attention to endemic problems like weak government systems, and additional burdens in terms of accounting and ‘servicing’ the programs.

The overall view of the strategy is that it will be positioned upstream from many of the existing programs being implemented by the intergovernmental agencies, NGOs and national governments today. It will focus on developing evidence (science)-based advocacy that will help to mainstream support for micronutrient programs as integral parts of other development efforts including other health programs such as for HIV/AIDS, malaria, and
IMCI, but also in development areas such as trade and tariff reform, industrial sector development, agriculture and environment.

Equally important, the strategy must enable the right messages about the costs of vitamin and mineral deficiencies—and how cost-effective it is to solve them—to be integrated into central government planning decisions; the negotiations between aid donors and national governments, and the internal resource allocation decisions of key intergovernmental organizations like WHO, UNICEF, FAO and WFP. Stakeholders do not expect that this will happen overnight or that it will happen without some additional investment in providing more convincing evidence, crafting the messages and finding champions who will take the messages to where they can be effective.

The strategy that stakeholders want to see is one that will focus on a few actions that will help other programs to be more effective. To do this it will need some funds for coordination, supporting a priority research agenda and similar agreed actions. Despite the fragility of donor support to combat vitamin and mineral deficiencies, most stakeholders do not want to see a global fund set up for micronutrients and would be opposed to any new mechanism for disbursing major funding to countries to implement programs.

The outlook for the strategy is positive but there are many challenges ahead, of which bringing industry and civil society on board the same ship that is likely to be captained by intergovernmental organizations is only the beginning.
TEN YEAR STRATEGY FOR THE REDUCTION OF VITAMIN AND MINERAL DEFICIENCIES
A number of the international agencies working with countries to combat vitamin and mineral deficiencies in vulnerable populations have come together to jointly consider the need and opportunity for more concerted action towards the elimination of micronutrient malnutrition.

These organizations are UNICEF, the World Bank, the World Health Organization, the World Food Programme, USAID, US Centers for Disease Control and Prevention (CDC), Harvest Plus, the Micronutrient Initiative (MI), the Academy for Educational Development A2Z Project, the Global Alliance for Improved Nutrition (GAIN), Helen Keller International (HKI) and the GAIN Business Alliance for Food Fortification (BAFF).

The initial planning phase is being funded by the Gates Foundation and facilitated by GAIN. It has two parallel tracks:

1. A situational analysis conducted by the Academy for Educational Development (AED) on the nature and magnitude of micronutrient deficiencies; the current coverage of intervention programmes; current investments by governments, donors, industry and others; and evidence on what works.

2. A stakeholder survey conducted by Mestor Associates Canada through interviews with key experts in intergovernmental organizations, national governments, industry, donor agencies and financial institutions, civil society including nongovernmental organizations and networks, and universities and research institutions.

This is the report of the stakeholder survey. Interviews were conducted from January to March 2006 with 155 people including national stakeholders, intergovernmental organizations, private industry, nongovernmental organizations (NGOs), university researchers, donors and financial institutions to seek their views on a proposed ten year plan on vitamin and mineral deficiencies. The interviews with industry included 40 stakeholders from across the supply chain in the food industry—from equipment makers, vitamin and mineral and premix producers, grain millers and staple and packaged food producers, packaging manufacturers and food retailers.

See the box ‘About the research’ for more detail on the survey. Annex 1 lists the names and organizations of the people who contributed to this report through the interviews. We would like to thank all those who gave generously of their time and their ideas. We also learned that many of those interviewed have followed career paths that have taken them from one type of organization to another so that their insights reflect a richness of experience at national and international levels that goes far beyond the mandate of the organization in which they presently work. In that sense, there is a micronutrient community of shared expertise and experience, and interpersonal recognition.

This report is in three parts. Part 1 (sections 1-4) presents the main findings about stakeholder views on the strategy and the alliance. Part 2 (sections 5-10) develops the perspectives of different stakeholder groups in more depth. In Part 3 (sections 11-12) we take various themes raised by stakeholders and develop the arguments further.
The interviews were conducted by telephone during an eight week period in January-March 2006. Interviewees were primarily drawn from names provided by GAIN. Some people were unreachable through inadequate contact information and others did not respond to several requests for an interview. Southern based respondents were much more difficult to reach within the limited time frame for the interviews. For example, in the industry sub-sample, the response rate for international companies is 77% compared to a response rate of 33% for southern national companies, despite several attempts to reach them by both phone and e-mail. Most of the university researchers interviewed were also based in the north.

The final sample of 155 stakeholders interviewed was structured as follows: intergovernmental organizations (17); national stakeholders (21); NGOs and projects (21); industry (40); universities, CDC and private consultants (19); networks and associations (5); international financial institutions (10); bilateral donor agencies (17); and philanthropic foundations (5). The complete list of interviewees is given in Annex 1.

Interviews consisted of 10-14 open questions that were sent to interviewees beforehand. Annex 2 lists the questions. They vary slightly by stakeholder group but cover the following main themes:

**Role**
- Individual’s role and experience in micronutrient sector
- Role and mandate of organization

**Strategy**
- Whether a new global strategy is needed
- What the 2015 goal should be
- Key challenges
- Links between stakeholder organization and global strategy

**Alliance**
- How to make multistakeholders alliances work
- Role of industry in a micronutrient alliance

**Country**
- Coordination and harmonization of effort in country

**Implementation**
- Criteria for priority countries for action

Most interviews took between 40 minutes and one hour. It was clear that many people had taken the time to prepare their answers carefully. A few interviewees sent written answers before their interviews which permitted more in depth questions by phone. Less than ten stakeholders made written responses only.

Responses were analysed using content analysis to develop coding categories and then coded and tabulated. About 1,700 responses were analysed and form the principal evidence base for this report. Electronic files sent by interviewees, web site surveys, Mestor reports and other documents provided additional sources of information. The research was conducted by Robert Auger and Anne Whyte of Mestor Associates Canada.

---

1 There are several factors at work to reduce response rates from southern based organizations. One is the difficulty of reaching them by phone or e-mail. Another is that they are less familiar with GAIN and the subject matter of the interview so the request is perceived by them to be less relevant. In follow-up surveys, it is suggested that approaches to southern national organizations and companies be made at the country or regional levels.
Support for a Global Strategy

2.1 Is a Global Strategy Needed?

There is broad support for a global strategy on micronutrients. The majority of international stakeholders interviewed (74%) responded positively to the idea—some very enthusiastically (Figure 1). National stakeholders interviewed are also supportive of a global strategy although a few pointed out that there are already global strategies for vitamin A and for iodine deficiency disorders (IDD). About 90% of stakeholders interviewed from industry are supportive of a global strategy but significantly, the smaller national producers and processors do not see how they can participate.

The majority who expressed themselves in support of a global strategy for micronutrients did so for one or more of the following reasons:

1. It would draw needed attention to micronutrient malnutrition within the Millennium Development Goals (MDG)

Figure 1: Support for a global strategy for micronutrients
(Numbers of international stakeholders interviewed)

[Bar chart showing support for a global strategy by different groups: Donors, Universities, NGOs, Industry, Intergovt Orgs.]

---

2. For the purposes of this report, ‘international stakeholders’ is used as a collective term to contrast the views of intergovernmental organizations, industry, NGOs, consultative groups and networks, university researchers and donors/financial institutions with those of ‘national stakeholders’ as listed in Annex 1. The specific international groups included are identified each time in the text. Within the international stakeholders, the term ‘public sector’ stakeholders is used to refer collectively to intergovernmental organizations, NGOs, consultative groups and networks, and university researchers to distinguish them from ‘donors’ (bilateral aid organizations, foundations and international financial institutions) and ‘industry’ (the for-profit private sector).

3. Due to differential response rates from national and international industry representatives, our industry sub-sample of industry is weighted towards the larger multinational companies.
2 It would assist national governments to address micronutrient and macronutrient malnutri-
tion more strategically

3 It would improve coordination and information exchange between agencies, which is still
inadequate—there are still too many gaps and overlaps and lack of respect for agency roles,
responsibilities and comparative advantages

4 Existing strategies do not sufficiently take account of the increasing role of the private sector
and the new international bridging structures needed

5 Donor support for micronutrients (and nutrition generally) is fragile; there is too much depend-
ence on a few donors (and a few people within them) and a strategy might change this.

Overall only 5% expressed themselves as opposed to the proposed strategy. They were either
NGO or donor stakeholders. Their main reasons were:

1 There are already adequate strategies in place

2 They oppose “special pleading” for micronutrients resulting in yet another vertical health program

3 They believe that strategies should be developed on a country-by-country basis without the
need for any international coordinating mechanisms

4 A global strategy might facilitate donors to drive national programs.

A third group of stakeholders was either uncertain about the strategy (9%) or expressed some
doubt about the merits of a strategy (12%) for one of two main reasons:

1 Rather than develop a new strategy, current strategies should be fine-tuned

2 The strategy should include micronutrients within a broader strategic framework for nutrition.

This group included a few stakeholders from the intergovernmental organizations, NGOs, uni-
versity researchers and industry.

National stakeholders see the main value of a global strategy to lie in its power to bring micro-
nutrient malnutrition to the attention of national governments—at the highest levels (Figure
2). Nutrition programs have to compete with other health programs and most see their govern-
ments as not making the link between investments in micronutrients and reaching their national
MDG goals. They said that the strategy could best support national efforts to provide micronutri-
ents through:

1 Advocacy with national governments

2 Support to national social mobilization programs

3 Continued support for ongoing programs especially vitamin A distribution
4 Technical support and capacity building to government in monitoring and evaluation
5 Technical support to local industry for food fortification and marketing

Figure 2: How could a global strategy best support national efforts?
(Percentage of national stakeholder responses)

2.2 What Should the Goal Be?

There is a broad consensus among stakeholders on how the goal of the strategy should be framed. It should be linked to the Millennium Development Goals (MDGs) and to the UN goals agreed at the United Nations General Assembly Special Session (UNGASS) on Children in 2002. Many stakeholders stressed that it had taken countries several years to develop their plans to meet national MDGs and that only by positioning itself within an MDG/UNGA framework already agreed to by governments would the strategy have any chance of implementation by national governments and support from UN agencies and aid donors.

Within this UN framework, three quarters of stakeholders believe that the strategy should set itself targets for substantial or significant reductions of micronutrient deficiencies that are specified quantitatively by individual micronutrient.

For iodine and vitamin A deficiencies, a few stakeholders think that it would be reasonable to have the target set as ‘elimination by 2015’ but not for other micronutrient deficiencies4. Very few

---

4 The initial target in the folic acid strategy is prevention of 50% of the cases of folic acid-preventable spina bifida and anencephaly by 2010 and total prevention by 2015 providing mandatory and voluntary folic acid fortification of foods and supplement programs are in place. (GFAAC)
stakeholders think that taking the high road of having ‘elimination for all micronutrient malnutrition by 2015’ is a good idea—although several people discussed the value of having an ‘aspirational’ goal for the strategy.

In addition to the main goals relating to the reduction of micronutrient deficiencies, it was suggested that the strategy should spell out a specific goal relating to ‘nutritional literacy’ as this affects both consumer behavior and mother and child care—both of which will influence the success of the micronutrient strategy.

There are four main themes running through the discourse of stakeholders regarding the goals of the strategy: measurability with accountability; sustainability; flexibility; and integrated approaches.

1. **Measurable goals** First and foremost that the goals must be measurable in terms of outcomes for nutritional status, despite the challenges that would represent for establishing prevalence baselines and for measuring progress over time both within countries and globally.

   This also means that there need to be milestones to track progress within the ten year period and some of these can be process rather than outcome defined. Measurable goals mean more accountability on the part of governments and others.

2. **Sustainability** The strategy should aim for achievements that are sustainable over time and specifically are able to be sustained in a country when externally funded programs end.

3. **Flexibility** The strategy must be flexible and allow targets to be specified by country, region or target populations such as infants 6-24 months. The goals should be rolled up from country targets and not imposed from above. We heard the phrase “one size does not fit all” many times.

4. **Integrated approaches** The strategy should clearly link its goals to those of other programs such as nutrition, child health and water and sanitation.

### 2.3 What Should the Scope Be?

Almost all stakeholders who commented on the scope supported the proposal that the strategy should include supplementation, food fortification and food-based approaches. Many recognized that this would be a challenge but said that it would characterize a lot of what would be “new and different” about the proposed strategy. At the same time, it is evident from the interviews that many see food fortification as the centerpiece of the strategy if a sustainable approach to micronutrient nutrition is to be reached—certainly on the part of the food industry but also among other stakeholders.

Some international stakeholders saw population-wide supplementation provided through the health system as a short-term strategy that could be phased out once mandatory food fortification is implemented and quality is assured. However, it was recognized that some supplementation programs such as iron supplements for pregnant and lactating women would always be needed as they require higher doses than are acceptable for fortifying foods for the general population.
National stakeholders also emphasized the need for all three approaches to be integral to national nutrition programs. They saw supplementation programs as part of a long term strategy to reach ‘the hard to reach’ populations who will remain geographically and economically beyond the market penetration of fortified foods for many years—and certainly after 2015.

A number of stakeholders said that the strategy should specifically highlight and support actions for three areas which tend to be neglected at both national and international levels:

1. Home fortification where fortificants are added to complementary foods or other home-prepared foods
2. Home administered supplementation where micronutrients obtained through the health system or the food supply system were given to family members
3. Nutrition education especially targeted to mothers and children, including hygiene, food storage, food preparation and cooking so that micronutrients are not lost in the cooking process.

There is broad support for having food-based approaches as an integral part of the micronutrient strategy despite the challenges in widening the scope of the strategy. If the strategy does not include the need for dietary changes such as increased protein and increased calorific intake it may lose the support of some key players such as FAO and a number of NGOs. The strategy would also have less credibility with governments and the public in both donor countries and developing countries since a malnourished child is seen first and foremost as needing macronutrients. A number of people said that fortification is a food-based approach and that the language of the strategy should reflect that.

Not many of those interviewed knew much about bio-fortification and some questioned whether it should be a component within the micronutrient strategy. It was seen as a research area that was unlikely to be implemented at scale within countries within the ten year time frame laid out for the strategy and therefore unnecessarily complicated the strategy action plan and the organizational structure of the alliance. There is also some nervousness about linking the micronutrient strategy to any broader debate about genetically modified crops. Although it is recognized that not all bio-fortification results from genetic modification the distinction is likely to be lost on many people.

Which Target Groups?

Almost everyone interviewed believed that the strategy should be targeting developing countries and particularly the poor within those countries. However within some of the UN agencies, a few people put forward the case for the strategy to be positioned as a universal strategy for all countries, including industrialized and developing countries. This approach fits better with their agency mandates but also responds to the reality that micronutrient deficiencies exist in some industrialized countries—iodine deficiencies in Europe is one example—and some government policies are opposed to mandatory fortification even where such deficiencies are known. So there is also at least advocacy work to be done in industrialized countries.
Within developing countries, there are some key target groups identified that both international and national stakeholders believe merit higher profile and more urgent attention within the strategy. These are:

- Infants 6-24 months
- Children under 5 years
- Pregnant and lactating mothers.

**Which Deficiencies?**

Most international stakeholders (70%) agreed with the proposal to focus the strategy on the five main micronutrient deficiencies of vitamin A, iron, iodine, folic acid and zinc. They felt there was enough of a consensus in the international community about the importance of these five deficiencies to include them as main elements in the strategy.

However about 10% of those interviewed questioned the inclusion of zinc or folic acid or both in the strategy on the grounds that not enough was known about the prevalence of these deficiencies, particularly in developing countries and in malnourished populations, and that their potential interactions within the human body was not sufficiently understood. These concerns were raised by stakeholders within the research community and among NGOs.

Another 20% believed that the strategy should be flexible depending on the vitamin and mineral deficiencies prevalent in populations or should go beyond the main five micronutrients and include other deficiencies (vitamins B12 and D were the most frequently mentioned). Many of these stakeholders stressed that the strategy should encourage countries to implement policies that would facilitate different formulations for food fortification as indicated by the prevalence of deficiencies in their target populations. The multinational food companies pointed out that if the enabling environment is right, they can prepare appropriate formulations to combat the micronutrient deficiencies within each country and in many cases were already doing so.

National policies for supplementation generally include vitamin A for children and iron for pregnant mothers with a few countries also providing folic acid with the iron and zinc (for treatment of diarrhoea in children). Food fortification policies are more variable. Most national stakeholders report they have mandatory policies for iodized salt for human consumption, and a range of policies for fortifying staple foods such as wheat flour, maize meal, sugar and, more rarely, oil and margarine.

Whatever the status of their current policy and practice, one concern for national stakeholders is that the micronutrient goalposts should not be moved during the ten years of the strategy. Those who have led and championed supplementation and fortification for iodine, iron and vitamin A within countries find that adding the latest “pet” micronutrient to what is recommended to countries can backfire and increase political resistance to investing in micronutrient programs which are then seen by policy-makers as open-ended demands for health investments.

---

5 As reported by national stakeholders for their countries: Ghana, Nigeria, Zambia, South Africa, China, Indonesia, Nepal, Philippines, India, Turkey, Guatemala, El Salvador, and Brazil
or policy changes. Thus the planners for the strategy would have to weigh very carefully the
health advantage of recommending to countries adding another micronutrient to their national
arsenal against the political repercussions within countries for existing supplementation and
fortification programs. In other words, the strategy should stick to its last throughout the ten
year period.

Some stakeholders felt strongly that the strategy must avoid trying to be all things to all people.
It should identify some major activities or thrusts and run with them. In other words, the strat-
egy should be based on choices and leaving some things out. This is a view of the strategy that is
less a ‘road map’ and more a set of directions to a destination.
It’s mind boggling how so many people of good intent can be so inefficient and wasteful while trying to be more coordinated and communicative.

**Industry**

There is no need for a global strategy dealing with micronutrients. The more you separate micronutrients from the larger problem of nutrition, the more it becomes a ‘boutique’ program.

**NGO**

The time has come where you have to move away from single institution solutions.

**Industry**

There’s no comprehensive framework that allows us to document need or potential benefit of one strategy versus another.

**Donor**

The global strategy has to look at advocacy. It needs to get governments to understand and commit funds to nutrition. We have to relate micronutrient deficiencies to economic development. People will sit up if you tell them about the economic or developmental impact of good nutrition.

**National stakeholder**

The value added of a strategy for us would be donor coordination so that we are all singing from the same song sheet to create an enabling environment.

**Donor**

It would be politically stupid to have any new goals than the MDGs.

**International Organization**

The global strategy would be helpful in giving nutrition the visibility it deserves. The goals have to be aligned with the MDGs.

**National stakeholder**

The goals must be realizable and not so lofty that they are impossible to meet so that no one feels accountable.

**Researcher**

We must avoid individual micronutrient strategies. Their day is over.

**Donor**

Nutrition is a total package. You have to see the interaction of micronutrients with the total diet.

**NGO**

I’m leery of the supplementation component. It’s expensive and has less long term sustainability. For fortification each additional person reached costs less per unit whereas for supplementation it is the opposite.

**Donor**

We’re doing micronutrients rather than malnutrition because it is technically more doable. This is ethically unacceptable. And why expend all this energy to focus a strategy on just five micronutrients?

**University researcher**

It’s easy to argue for food fortification benefits but don’t get over-enthusiastic about micronutrients when people don’t have food. For health and political reasons you can’t distribute micronutrients when people are starving.

**Donor**

Why are we not talking about a strategy for malnutrition? It’s only because micronutrients is technically more doable and that’s ethically unacceptable.

**International Organization**

What has happened to all the strategies that are already in place—for IDD or for vitamin A? We’re not starting from scratch here. We should finish what we have set out for ourselves before we embark on new goals.

**National stakeholder**

A micronutrient strategy will be easier to ignore if it stands alone.

**NGO**

To convert the unconverted the goal should focus on the benefits of the strategy such as brighter children. A focus on micronutrient disorders is unappealing.

**International Organization**

Different Perspectives on the Strategy
Support for a Global Alliance

3.1 Interest in Joining an Alliance

There is a broad interest in joining an alliance to combat micronutrient malnutrition (Figure 3). Only 7% across all groups interviewed indicated that they would be unlikely to join compared to 18% who said that they were enthusiastic to join or were already involved in some way. The remaining three quarters indicated they were positive about the idea but wanted to hear more.

About a third of stakeholders are interested in the strategy but would need more details or had some conditions of their own, such as including a focus on infants < 2 years. For the university researchers the conditions are primarily that the strategy have some research component and is clearly science-based. Some of the intergovernmental organizations and NGOs expressed concerns about needing their role to be clearly defined within the alliance and wanting to know first who the other alliance partners would be.

Figure 3: Interest in joining an alliance to promote micronutrient nutrition
(Percentage of responses from intergovernmental organizations, industry, NGOs, university researchers and donors)

Another third of stakeholders, particularly those speaking on behalf of public sector institutions and private sector companies said that they are willing to join the alliance as long as it is consistent with their own organizational policies and strategies and/or it added value to what they already do. Only about 10%, especially among the NGOs, also added that they would be attracted to the alliance if it came with funding.
Thus it seems that the content of the strategy and its alignment with the organizational strategies already in place for reducing vitamin and mineral deficiencies are the key incentives that will determine the nature of the alliance that can be put together.

3.2 How To Make Alliances Work

Almost all international stakeholders interviewed and many national stakeholders said that they had experience of multi-stakeholder alliances. Many spontaneously commented on how difficult they were to make succeed, especially those that involved government, civil society and industry—the “iron triangle” as someone put it. Less than 4% of those interviewed took the opportunity to question whether there should be an alliance for micronutrients. But all saw the alliance as succeeding only if certain conditions were met. The key ‘dos and don’ts’ fell into six groups with ‘good governance and management’ and ‘managing relationships and expectations’ topping the list (Figure 4).

Figure 4: Key attributes of a successful multi-stakeholder alliance
(Percentage of responses from international stakeholders)

The winning combination appears to be a governance structure that is accountable and transparent combined with an efficient organization in which partners share a common goal and have mutual respect for one another, and the whole enterprise is run on clear communications and good time management.

Funding is not specifically mentioned except by a few donors. Some stakeholders even went so far as to say that giving an alliance the task of managing and allocating a central fund is counterproductive to having successful relationships between the partners as it creates competition rather than cooperation.

Another strong message is that alliances take work and time. They need champions not only leading the alliance but within each of the participating organizations who can keep the partner
onside and engaged. It cannot be assumed that the alliance is going well because there are no major fights breaking out. The alliance must be carefully constructed in the first place to create a win-win-win dynamic and then must be actively managed to anticipate and deal with problems before they arise. Going into dormancy between meetings is a recipe for failure.

We heard comments about meetings surprisingly often. They are the lens through which the partners see the image of the alliance. If meetings are inefficiently run, and lead to no clear action, they reflect poorly on the strategy and seem to be a number one reason why people lose enthusiasm for the alliance even while they still come to the meetings.

While there is considerable consensus about what is needed to make the alliance run successfully we heard the same words being used with different meanings and thus detected the seeds of future miscommunication. What ‘transparency’ and ‘trust’ and ‘conflict of interest’ means to various stakeholders is very different. And we suspect that even more difficult than agreeing on the ‘what’ is likely to be agreement on the ‘how’.

Good Governance and Management

Good governance was the overriding concern for donors (30% of their responses), international organizations (28%), and NGOs (24%). It was much less on the minds of the industry stakeholders (11%). The key words for good governance are ‘transparency’, ‘accountability’ and ‘participatory’. We were told that there needs to be shared ownership of the alliance combined with accountability and that these depend on clear rules, measurable goals, and transparency through good communications for those around the table and those outside the room.

Particular concerns are how to handle conflict of interest in relation to the private sector through an agreed code of conduct, together with the challenge of balancing the public sector requirement for transparency with a perceived industry need for confidentiality. While everyone agreed that the alliance needs good management and leadership, it is not clear to them how that might translate into any legal status or organizational structure. Questions about how to select representatives of constituencies and the relative powers given to an executive committee versus a general stakeholder assembly were raised by only a few.

Managing Relationships and Expectations

One of the most difficult challenges is seen as managing the relationships and expectations of the various parties to the alliance. Stakeholders will enter the alliance with different expectations of their own role and responsibilities compared to how others see them and the resulting patchwork of expectations does not necessarily add up to a workable platform for common action. The end point of initial discussions must be clear and agreed objectives, mutual respect between the parties, and clear division of roles and responsibilities for all—including the leadership and secretariat. This aspect of making alliances succeed was much more frequently mentioned by the NGOs (32% of their responses), international organizations (28%) and donors (27%) than by industry (14%) and university researchers (17%).

People told us that it is much better to invest time and energy to build mutual understanding at
the outset than to try to make it up later. In addition to mutual understanding there needs to be clear rules negotiated, agreed and written down. Other downstream decisions are more easily agreed to if there is a sense of trust between the parties early on and a sense of clarity about the rules of the alliance.

The time and commitment needed to build trust and mutual respect between the partners represent some of the highest transaction costs in building alliances. This is one reason why they are often shortchanged and partners can discover only at the end of a joint venture that they were pursuing different goals all along. Stakeholders said that there is no substitute for good interpersonal chemistry when an alliance meets major challenges and the management of the alliance has to facilitate this at every opportunity.

**Effective Organization**

By having an effective organization, stakeholders mean three things:

1. Ensure that all the key players and constituencies needed to reach the goal are involved
2. Don’t bring on board any more players than are needed to do the job
3. Match the teams to the tasks to be efficient with everyone’s time.

One of the challenges is to create an organization that includes the right partners and maintains a reasonable balance between them so that the enterprise is not captured by any smaller group. For a micronutrient alliance, stakeholders stress that the alliance must provide a balance between three main constituencies and ensure adequate representation of national level players within each major constituency:

1. National governments and their intergovernmental bodies
2. Industry—national as well as multinational companies across the value chain
3. Civil society—national organizations and their international NGO counterparts.

We were told that the alliance must be at least three-sided by including civil society as well as government and industry. NGOs are seen as having an important role in helping to create demand for micronutrients through advocacy and public education at national and community levels. They are also regarded as playing an honest broker role in a strategy where everyone recognizes that industry must play a major role if it is to succeed. About 10% of stakeholders overall raised concerns about giving too much power in the alliance to industry; for the NGO stakeholders it was 20%. Even industry stakeholders recognized that the alliance must be structured to deal with a lingering mistrust of the food industry, whether the mistrust is justified or not.

The more challenging counterpoint to having all the right players involved is to exclude people or organizations that do not have something to offer the alliance. Just as the alliance must be prepared to make choices about priorities and focus in its strategy, it has to set boundaries for itself that make it an effective organization.

Stakeholders say that they have experienced too often the danger of people being asked to join
an alliance in the name of participation or consultation or political correctness or in hope of getting money. If these people are not given clear roles and get ‘turned off’, they may end up more negative than if they had not been invited in the first place. Better to have a clear and efficient organizational structure from the outset and put in place outreach and communication mechanisms to engage those parties that are less critical to success of the alliance. In other words, we were told that the alliance should have a clear organizational structure linked to tasks and responsibilities and not be a consultative alliance.

Several stakeholders argued for a clear structure within the alliance so that people do not spend time endlessly at meetings. They suggested that there should be technical committees and ‘product teams’ according to the tasks at hand. Within the governance structure a small committed executive committee should reduce the need for many larger stakeholder meetings.

Clear and Common Goals

No one argued with the prescription that you need to have clear and shared goals that bring members of the alliance together. We were told that the goals should be measurable so that stakeholders and the alliance itself can be held accountable and that milestones along the way can be checked off as they are reached. Everyone needs to agree on the goals of the alliance at the outset even if their own organization has somewhat different goals to what is agreed in common. In this respect the alliance is a separate venture from those of each stakeholder—it is an additional joint venture for all. While many people referred to the need for industry to make profit, others pointed out that the alliance has to provide benefits for all parties. The nature of the benefit may vary but without any perceived benefit, organizations will not continue to work within an alliance. That is the meaning of a win-win-win situation.

We also heard that when the going gets tough, the key is to bring the team back to the goals and remind them why they joined the alliance in the first place. The focus should always be on the work to be done and not on the alliance—its problems, inconsistencies and difficult members.

Good Communications

The corollary of much of what we heard about the need for an efficient organization is that there are excellent communications across the alliance structure and beyond. In addition to a call for clear communications, industry stakeholders wanted to know what is expected of them—something they feel they do not get from other alliances in which they are currently engaged. They do not have the time to endlessly consult, they want to know what actions the strategy needs and then they will let the alliance know what they as partners can or cannot do. At the same time, industry stakeholders do not want to be segregated into their own sub-alliance group for industry. The challenge is to keep them at the main table and make the communications across it efficient and effective.

Time Management

A related challenge for a micronutrient alliance is time management. The alliance will involve
players who do not know one another at either interpersonal or organizational levels, some of whom are likely to be initially mistrustful of one another. The main recipe offered above is to take the time needed to build trust and develop interpersonal relationships. At the same time, stakeholders recall negative experiences with alliances that spent too much time talking and planning before they actually undertook any action. About 7% of stakeholders overall and nearly 20% of those from industry emphasize that the alliance must not waste their time.

**Funding**

Only 3% of stakeholders’ responses on how to make alliances successful mentioned funding. The funding aspect of alliances was mentioned by 12% of donors and international financial institutions whereas others, even though they might recognize the need for funding, see organizational and process issues as more challenging to solve.

### 3.3 Working Together At National Level

International organizations, NGOs and university researchers were asked for suggestions about how to achieve more harmonization and shared ownership for micronutrient activities within countries. Their responses are compared to a similar question asked of national stakeholders (Figure 5). Almost every response from all stakeholder groups fell into one of seven categories but the weight of responses varies quite significantly between the international and national stakeholders. This indicates that there are two different perspectives at play.

![Figure 5: How can national coordination for micronutrient programs be achieved? (Percentage of responses from national and international stakeholders)](chart)
Most stakeholders discussed the importance of having a national coordinating body or mechanism and the advisability of getting all the key constituencies represented on it from the outset. People stressed that this must include representation from civil society—both NGOs working at national and community levels and consumer associations—and from business and industry. Many also added that government must lead the coordinating body; it should be task-oriented and not just see its role as coordination; and that the role of local champions is important. Where there is a difference between the international and national perspectives is in the need for the coordinating body to have the right mandate or scope. This was raised by many national stakeholders and hardly at all by the international people.

In Ghana, for example the challenge is that there are many coordinating committees—one for iodine, one for vitamin A, one for anemia and one for fortification. These committees are chasing too few experts who run from one committee meeting to another. In Indonesia, some provinces have coordinating committees for IDD but not all; some local governments provide vitamin A supplementation but not all; and generally in provinces there are coordinating mechanisms for nutrition but not for micronutrients specifically.

The second most frequently mentioned recommendation from international stakeholders is that they need to change their own behavior within countries. Many of them told us about too much duplication and competition between external agencies at national levels and the need for them to develop more of a partnership mentality between their country offices. The interagency spirit of collaboration achieved in Geneva or New York does not always permeate down to country offices (and we heard in response to other questions, not always vice versa). One positive example we heard was that in India, UNICEF, the Micronutrient Initiative (MI), MOST® and CARE agree on the overall goals and then work in different geographic regions with frequent discussions to achieve harmonization between them. National stakeholders rarely made comments on this rivalry.

Another area where international stakeholders were outspoken was in the need for countries to take ownership of national actions to combat vitamin and mineral deficiencies. In this context, the national stakeholders for the most part assumed that they had ownership.

International stakeholders made the link between what happens at global level and harmonization within countries. On the one hand they think that countries look to international agencies for clear advice and accepted guidelines about vitamin and mineral deficiencies (and not to endless scientific debate), especially about the safe levels for supplementation and food fortification. On the other hand, countries do not need a straitjacket approach to implementation of international recommendations.

National stakeholders are more likely to mention the need for capacity building if harmonization is to be achieved for micronutrient programs—both capacity building in nutrition and in advocacy and public education.

Another striking difference between the international and national perspectives is that while the
former are thinking mainly in terms of harmonization at national level, the national stakeholders emphasize the challenges in achieving harmonization at provincial, state or municipal levels within countries. Many countries are in the process of massive decentralization of government services and responsibilities to more local levels, including health services. In India, implementation of national micronutrient standards and regulations are a state responsibility. In Brazil municipalities are responsible for the delivery of health services. Getting harmonization across these lower levels of government is clearly a major preoccupation for national stakeholders.

A few people among both the international and national stakeholders made the case for not forgetting the regional level in developing national strategies. Regional offices of international organizations and NGOs are more likely to have nutrition expertise than many country offices and national stakeholders saw a value in sharing best practices between countries in the same geographic region.
## Different Perspectives on the Alliance

### Governance

**Be very clear on roles, outcomes and expected milestones from the outset. Establish trust on all sides and understanding of what each partner brings. Establish ground rules for when the going gets tough.**

**University researcher**

You have to have a secretariat and people who are available to do the necessary work. Within the Group we all agree to exchange information but when it comes down to actually doing it the people are too busy with their daily tasks to take on these extra ones.

**NGO**

The alliance must be careful how it manages conflict of interest but don’t be so obsessed by it that it becomes paralyzed. It is very important that when companies are involved that commercial confidentiality be respected but that there is also transparency and openness. A fine balancing act!

**University researcher**

It is important to have the beneficiaries of the interventions represented in the alliance. If they are not present academics will represent (and sometimes misrepresent) the public interest.

**NGO**

---

### Communication

**It is important to clearly communicate the objectives of the alliance. All should have a clear understanding of what each brings to the alliance and of the sensitivities of other members.**

**Industry**

People use very different language to say the same thing and to describe the same goal. Miscommunication is common.

**University researcher**

We don’t want to spend all day in planning or evaluation meetings. Tell us what you need to have done in simple, clear terms, and what problem needs solution. We’ll come up with suggestions, and if it’s agreed we’ll go ahead and do it.

**Industry**

---

### Time Management

**There’s a tension between having all parties at the table and the time needed. It’s important to have the same representatives at the meeting or a new person comes in and isn’t up to speed.**

**University researcher**

Get the right team together without wasting time.

**Industry**

Our people go to these alliance meetings and wonder why they’re there. They come away with no idea what is expected of them. They see it as a waste of time.

**University researcher**

Governance of the coalitions is one challenge—actually handling the meetings is another. Meetings must be managed to be respectful of people’s time. Best way is to minimize generic high level discussions.

**NGO**

---

### Structure

**The alliance should be inclusive. There is a lot of insecurity in the nutrition field. We have to create a sense of security within the alliance.**

**NGO**

Don’t have the private sector on board because this is the thing to do. Have them on only if they have something to do... if they are essential to what you want to achieve. Many private sector individuals are miffed if they feel that the international organizations consult with them but behave as if the private sector input was irrelevant.

**UN agency**

Have less general multistakeholders platforms. Having all actors at the table is not the most efficient.

**Industry**

There needs to be lots of separate discussions. Coordinating everything will just slow things down.

**University researcher**

Invite people who will invest time in the alliance and come to meetings—not just the big names.
TEN YEAR STRATEGY FOR THE REDUCTION OF VITAMIN AND MINERAL DEFICIENCIES
Challenges and Opportunities

4.1 Challenges to Make a Strategy Work

All the international stakeholders except the donors/financial institutions were asked to identify the challenges that they saw in implementing the strategy. National stakeholders were asked about the challenges they face within their countries. Some interesting patterns and differences emerged. The challenges as seen by international stakeholders fall into six categories (Figure 6).

**Figure 6:** Challenges to make a strategy work
(Percentage of responses from international public sector stakeholders compared to those from industry)

Managing the Alliance

Challenges in managing the international alliance itself loom large in the minds of public sector stakeholders. The main challenges are seen to be how to deal with potential conflicts between the different parties that arise when they seek to defend their own ‘turf’. Past conflicts among public sector stakeholders are cited as having harmed attempts to mainstream nutrition. Stakeholders among the international organizations and NGOs think a major challenge will be to get enough buy-in from current players to any proposed strategy that cuts across their own plans.

Several stakeholders said that the fractious nature of the nutrition ‘community’ is a major barrier to finding the common platform that is needed to mount any strategy. The issue of trust between players is raised by public sector stakeholders both in relation to trust between themselves and even more so when private companies are added to the alliance equation. Building a strategy that foresees a major role for the private sector is identified as a challenge in itself and both public and private sector stakeholders feel the problem lies more in the court of the intergovernmental organizations and NGOs.
Making the Right Strategic Decisions

The next group of challenges most frequently mentioned by public sector stakeholders is whether it is possible to make the decisions that are needed for the strategy to succeed. These concern getting the right strategic balance—such as between the three approaches (supplementation, fortification and other food-based approaches); between partnering with big multinational companies and small and medium national enterprises; or between activities conducted at international, regional and national levels. The challenge is also to keep the strategy focused when the tendency is to embrace everything to maximize buy-in and then find it impossible to move forward. A third set of decision challenges identified relate to how to effectively mainstream nutrition into other national and donor funded programs such as HIV/AIDS.

Challenges at National Level

At national level, both the public and private sector stakeholders identify a lack of political will by national governments to implement micronutrient programs as a major challenge. The two most commonly cited reasons for this are a lack of government understanding of the importance of micronutrient nutrition to achieving the MDGs together with a lack of nutrition education at the community level. At the national level, nutrition programs, including those for micronutrients must compete with other health programs. At the community level, even when supplements are provided free, those most in need do not always take them. This is especially a problem with iron supplements given to pregnant mothers.

International organizations, NGOs and researchers point to poor infrastructure and inadequate health systems. Supplementation programs require well functioning health systems. The private sector stakeholders frequently cite systemic corruption and a lack of a level playing field for producing and selling fortified food. This problem is seen to be exacerbated by poor or non-existent capacity within many countries to undertake quality control or to monitor compliance with regulations for food fortification. The private sector also identifies the need for public education about nutrition which is linked to a lack of public demand for fortified foods.

Although the public sector stakeholders rarely mention regulatory barriers beyond the need to have national policies and legislation, the private sector and national millers’ associations identify a series of regulatory challenges at national level from poor or inadequate standards for food fortification to economic disincentives ranging from import duties for vitamins and minerals, trade barriers for fortified food and competition from imported unfortified or under-fortified products, smuggled staple goods and even competition from food reaching the market from donated flour from international aid.
The view from national government stakeholders shows similarities and differences from those expressed by external agencies (Figure 7). It more closely parallels the view of industry. Challenges high on the list for national stakeholders are reaching the rural poor with supplementation programs, especially infants under two. These same populations are least likely to be reached by fortified foods either because of dietary habits or the cost of fortified food, or both. The difficulties of ensuring compliance by industry for supplements and fortified foods as well as poor government monitoring and evaluation generally are other major challenges for national governments.

There are two other messages for the strategy in what we heard from national stakeholders. One is that it is important to not keep adding new micronutrients to the list of those that countries must deal with while they are still struggling with the “big three” of vitamin A, iron and iodine. Secondly, some more leadership is needed from the international community that micronutrients are indeed a priority for development. Here it was pointed out that there is a need for more leadership from WHO and UNICEF who do not give as much priority to nutrition as to their other programs in countries.
Financial Constraints

Constraints in funding are less frequently mentioned as challenges. For the public sector agencies the challenge is seen mainly in terms of how to increase financial resources from the international donors and development banks into nutrition programs generally and micronutrient programs in particular. For the private sector stakeholders, the financial challenge is how to make a quality food product at the right price for poor consumers when the margins are low and the volumes are not yet large. A few stakeholders mentioned the challenge of capital investment costs for fortification equipment.

Gaps In Research and Information

Research and information gaps were cited by the university researchers. They raise a number of scientific debates and uncertainties as challenges to implementing a strategy. These included safety and efficacy issues around iron, disputes about the importance of folic acid and zinc, interactions between micronutrients in the human body and the relationships between micronutrient deficiencies and diseases such as AIDS, malaria, diarrhoea and worm infestations.

Many researchers stress the need to develop rapid assessment tools to measure the prevalence of micronutrient deficiencies among populations before implementing any large scale supplementation or fortification programs. They also believe that without good baseline prevalence data you cannot measure the results of any intervention or strategy and you may also be in danger of designing an inappropriate or ineffective intervention.

4.2 Key Areas for Strategic Investment

Four of the stakeholder groups were asked where they would make strategic investments if resources were raised for the strategy. Although the same eight areas were identified by all stakeholders there are some interesting differences in the responses between the stakeholder groups (Figure 8). The priority most frequently given by researchers, donors and financial institutions is operational research but for NGOs it is to fund implementation. As might be expected, researchers give higher priority to research than the other stakeholders. NGOs stand out from the other groups in the priority they give to food-based approaches other than fortification. For donors and financial institutions, after operational research, the most frequently mentioned priorities are advocacy with governments to get their buy-in and mainstreaming micronutrients into other health programs and development sectors.

---

7 This was also mentioned by one national stakeholder
8 University researchers, NGOs, consultative groups and networks, and donors and financial institutions
In considering where the strategy might allocate its resources—particularly any additional resources raised—the area identified in 35% of all responses is that of operational research. Many researchers, donors and NGO stakeholders point to the urgent need for better tools for rapid assessment of vitamin and mineral deficiencies among populations before any interventions are scaled up. This is also stressed by the major food companies. Another priority identified was better surveys to measure food intake at individual and household levels since commonly used measures such as whether iodized table salt is present in households or diet surveys based on people’s recall are regarded as not accurate enough to scale up nutrition programs.

Small scale fortification and fortification within communities and at home are all cited as promising areas that deserve further investment. The economics of micronutrient programs are highlighted particularly by donors and financial institutions as needing more work to sort out the costs and benefits of alternative approaches and see which programs are the most cost-effective. Better guidelines and tool kits aimed at national and community levels are also seen as something that the strategy could help to develop.

Advocacy is identified as a priority in 12% of all responses, particularly to encourage national governments to give higher priority to vitamin and mineral deficiencies. A few also mentioned the need for advocacy to raise the profile of micronutrient deficiencies at the international level.

Basic research is singled out for investment mainly by university researchers (21%) and the more technical NGOs but represents only 11% of all responses. The research areas needing more attention are cited as severe anemia and iron deficiencies more generally, zinc, folic acid, interactions...
between micronutrients in the human body, and more data on the relationship between disease status and the role of micronutrients.

Many NGO stakeholders, especially those working at community level are clearly more in the camp of “Let’s get on with it” and 28% of their responses urge that the strategy should invest immediately in implementation programs especially for high risk groups like infants under two and pregnant and lactating mothers. Overall implementation is mentioned as a priority by 15% of all responses. The same NGOs urge more attention to food-based approaches generally.

In contrast, NGOs do not often mention the need to do more work on mainstreaming micronutrient activities into other programs—both health programs like nutrition and mother and child care and also into other sectors, such as water and sanitation programs, income generation and small business development. While mainstreaming represents 9% of all responses and only 2% of NGO responses, it accounts for 16% of donor responses.

When faced with selecting strategic priorities, monitoring and evaluation was not often mentioned by international stakeholders although 7% say they would invest in better prevalence data for vitamin and mineral deficiencies and better measures of program coverage. Perhaps more surprisingly national capacity building is only seen as a priority for the strategy itself by 6% of international stakeholders (10% of donors), presumably because that important work is seen as an integral part of implementation programs.

### 4.3 Criteria for Priority Countries

All stakeholders across the intergovernmental organizations, universities, NGOs and donors believe that the burden of vitamin and mineral deficiencies linked with high numbers of people at risk must be the fundamental criterion for selecting priority countries for action within the strategy. Beyond that, 65% of all stakeholders asked said that there must also be evidence of government commitment and political will in a country to support micronutrient programs, and more than half of these stakeholders would also add the criterion of a reasonable expectation of success (Figure 9).

---

9 All stakeholder groups were asked to identify the criteria for priority countries except for national stakeholders and industry. Industry stakeholders were asked in which countries they were positioned to enter the market. Industry responses are not included in these statistics.
Stakeholders from the intergovernmental organizations and university researchers are more likely to identify the need for success as a criterion than are NGOs and donors/financial institutions. Several donors said that they were responsive to which countries identified micronutrient programs in their sector-wide approaches (SWAps) or budget proposals. About 13% of all stakeholders added as an additional criterion that it would be good to include leading countries in each region that could act as leaders and role models to their regional neighbors.

Another 10% suggested that countries should be selected where there are already ongoing micronutrient projects or where there is evidence of existing capacity to implement projects. Almost 17% of stakeholders advised that it would be important for the strategy to avoid “impossible situations”—that is, where the chance of success was low, where the costs would clearly outweigh the benefits or where there was no chance of sustainability. About half the stakeholders in intergovernmental organizations stressed the need for geographic balance across Asia, Africa and Latin America and even including industrial countries, reflecting their global mandates. No one else mentioned this.
<table>
<thead>
<tr>
<th>INTERNATIONAL PERSPECTIVES</th>
<th>NATIONAL PERSPECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a real debate in science about how much consensus already exists to go ahead and how much more is required. Nutritionalists bicker more than other disciplines.</td>
<td>We need champions for micronutrients in high places as there is a need for continuous advocacy. Ministers of Health and Director Generals change frequently and therefore they need to be educated when they come into their jobs.</td>
</tr>
<tr>
<td><strong>Researcher</strong></td>
<td><strong>Donor</strong></td>
</tr>
<tr>
<td>Good luck in getting the nutrition community to agree on any strategy.</td>
<td>The key is to have a strategy that is focused and realistic or else it all becomes too general.</td>
</tr>
<tr>
<td><strong>NGO</strong></td>
<td><strong>NGO</strong></td>
</tr>
<tr>
<td>The doctrine in industry is that products have to be affordable, available and applicable or they won’t sell. We can deal with affordable and available but consumer awareness is the most difficult. We need independent social marketing programs to educate people about nutrition.</td>
<td>Problem is low awareness at the grassroots. There is a low turnout at antenatal clinics and many pregnant women fail to take their supplements home.</td>
</tr>
<tr>
<td><strong>Multinational company</strong></td>
<td><strong>Multinational company</strong></td>
</tr>
<tr>
<td>We have to fortify but suffer from competition from flour smuggled in and donated flour. Our market share has gone from 70-40% in ten years.</td>
<td>Policy-makers get fed up when you come up with a new mineral. They complain that it started with iodine, then vitamin A, now iron and now it is being suggested that we deal with zinc.</td>
</tr>
<tr>
<td><strong>National company</strong></td>
<td><strong>National stakeholders</strong></td>
</tr>
<tr>
<td>We need champions for micronutrients in high places as there is a need for continuous advocacy. Ministers of Health and Director Generals change frequently and therefore they need to be educated when they come into their jobs.</td>
<td>One of the major obstacles that explain lack of government buy-in is the lack of commitment to nutrition from the development agencies. How much does WHO and UNICEF allocate to nutrition? If UNICEF and WHO rate nutrition high on their agenda it will trickle down to our governments. Nutrition is not an outcome of development; it is an input in development. UNICEF and WHO should lead by example.</td>
</tr>
</tbody>
</table>

**National stakeholders**
5.1 How would a strategy link to your programs?

Stakeholders from the intergovernmental agencies look positively on a proposal to develop a strategy for micronutrients. Agencies like WHO, PAHO and UNICEF have been long engaged in advocacy with governments and within their own organizations to get more attention paid to micronutrient deficiencies. At the same time the agencies are over-stretched in trying to implement micronutrient programs on the ground. They have wide field presence and contacts with governments through their country offices but suffer from a weak presence in nutritional expertise in many of those country offices.

UNICEF’s country offices are often the focal points for inter-agency coordination and donor missions on micronutrient activities because they play central roles in micronutrient procurement and program implementation. The result is that their staff resources are stretched to the limit. FAO faces similar challenges in its nutrition and food security work. Nutrition is a key part of its mandate but is under-resourced compared to other parts of the organization.

WFP has been distributing fortified food such as oil, blended foods and iodized salt for many years to the vulnerable people it serves. Its current strategy to support the processing of fortified food as close as possible to where they are consumed especially in emergencies brings with it new challenges in the procurement and distribution of fortificants and premixes, ensuring quality control along the supply chain and technical support to small scale food processors. They are therefore reaching out to new partners.

Regional nutrition officers in UNICEF, WHO and FAO as well as in regional organizations like the New Partnership for Africa’s Development (NEPAD) and the West African Health Organisation (WAHO) see the opportunities in having the strategy engage with countries at the regional level where exchange of experience as well as regional harmonization can best take place. WHO is also planning to build up its technical expertise in nutrition at the regional level so that country offices can call on them for support until strengthening of nutrition expertise in country offices can take place.

Based on practical experience and perhaps a growing acceptance that they cannot do everything implied by their aspirational mandates, the intergovernmental agencies recognize that they face problems of inadequate resources, gaps and overlaps in implementing nutrition programs at all geographic scales.

The staff of the international agencies told us of the difficulties in assessing nutritional status of populations without better rapid assessment tools before implementing large scale supplementation and fortification programs. They know how fragile many national health systems are since they are working with them every day. They know first hand how inaccurate some of the international micronutrient databases are because they see the poor and inconsistent reporting from districts on which the databases are built.

10 Interviews were held with 17 stakeholders from: WHO, FAO, UNICEF, WFP, PAHO, UN-SCN, UN-Global Compact, NEPAD, WAHO
11 Corn soya and wheat soya blends fortified with a mix of vitamin A, B-vitamins, iron and zinc
12 The need for rapid assessment tools for measuring nutritional status of populations was also stressed by NGOs and by industry stakeholders
These stakeholders recognize the negative impacts of lack of coordination, confusion and—yes—inter-agency competition. We were told of one extreme example in Banda Aceh, Indonesia in 2004 when victims of the Asian tsunami received two to three doses of vitamin A capsules shortly after the disaster struck provided by competing UN and NGO agencies on top of a full WFP fortified food basket!

So one clear set of messages from the international agencies is that they are already heavily engaged in nutrition advocacy and implementation programs; their nutrition human resources are stretched and they believe that interagency coordination could be strengthened.

Another somewhat contradictory message is that each agency has its separate organizational mandate and role and that their marching orders are already spelled out in numerous policy and strategy documents approved by their intergovernmental governing bodies. Thus international governmental agencies expect to broadly continue what they are doing and argue that any new strategy for micronutrients must be built upon whatever strategic policy base is already there.

5.2 What Are Your Expectations of a Strategy?

The intergovernmental agencies think the strategy could bring benefits and challenges at all geographic levels. They see the strategy as raising commitment and creating more demand for micronutrient programs within countries; and creating a higher profile and “buzz” around micronutrients in international forums. They think that there is an advantage in an international program that challenges governments to assess how well their own countries are doing in comparison to others in their region and globally.

International agency stakeholders would invest any additional resources raised by the strategy in scaling up micronutrient programs within countries and in mainstreaming micronutrients first into nutrition programs and also into other government programs in health, agriculture and education. They identified some roadblocks that the strategy must tackle early on including international aid policies and gaps in operational research.

Another set of expectations relates to the role of the private sector in the strategy. Everyone interviewed saw added value in having business and industry as key players in the strategy. They recognize that it is the private sector and not international agencies that will bring fortified food to scale. This role underscores the responsibility they believe that food producers have to make quality products available at affordable prices to poor populations even if it means lower profits over longer time frames.

The most frequently expressed expectation of the larger companies is that they should support smaller producers in developing countries to fortify food through technology transfer, shared know-how and training. The second area where they expect the food industry to play a stronger role is to use their leverage with national governments to create an enabling environment for mandatory food fortification and to assist governments with quality control and compliance. There was a hope expressed that the food industry would promote the micronutrient strategy among its own industry networks and might have a role to play in helping to create public demand for fortified products.
We have to avoid each agency—including us—trying to do everything. We’re more willing to let go now given the impossibility of doing everything anymore.

Everyone thinks that they can use the UNICEF country office to coordinate or to work out of but we need to rationalize the demands on them.

We desperately need more rationalization. The end clients are all the same and the processes involve all the same people.

We’re so decentralized a well articulated strategy for identifying roles and responsibilities between headquarters, regional offices and country offices would be welcomed but we can’t be told from outside how to do it!

It’s a big jigsaw. People focus on different parts of it. We need a global effort to develop a common strategy.

It has to be in line with our organizational goals and objectives.

It has to have added value—not just another layer.

The strategy has to be integrated into existing strategies.

It has to been seen as an initiative whose purpose is to take us from ‘good’ to ‘excellent’.

It must not distort our priorities but help us to follow our traditional role doing everything more strategically.

We want to be more than a partner—we want to be a champion for the global strategy.

They produce the food. We don’t. But we are responsible for public health. Our monitoring of them is in their interest. It helps to level the playing field.

You need not just donated resources but their shared know-how.

The private sector must be willing to take lower profit margins and longer time horizons to reach profitability or even break even point.

The private sector has an important role on the supply side but also on the demand side through advocacy and preventative health strategies.

The private sector must be a partner from the very beginning.
TEN YEAR STRATEGY FOR THE REDUCTION OF VITAMIN AND MINERAL DEFICIENCIES
6.1 Lessons from National Experience

The twenty-one national stakeholders interviewed represented 14 countries across Africa, Asia and Latin America. All had experience of supplementation, fortification and food-based programs for micronutrient nutrition in their countries. All the countries have national nutrition plans but they vary in which vitamin and mineral deficiencies are specifically identified. The most common ones are vitamin A, iron and iodine. They also vary in whether there is a national strategy to combat vitamin and mineral deficiencies. Mozambique for example developed such a strategy in 1999 but it reportedly needs updating. El Salvador is currently developing its national strategy for micronutrients.

Policies for food fortification also vary but most of the countries represented by our interviewees appear to have some foods requiring mandatory fortification and others under a voluntary regulatory regime. Mandatory iodization of salt is the most widespread and generally the earliest national regulation for fortification. In China this remains the only legislated food fortification. Brazil is reported to have legislation for salt iodization since 1953 and India has reinstated its earlier ban on the sale of non-iodized salt in May 2005. Other foods that are currently under mandatory regimes in many of the countries include wheat and corn flour, sugar, oil, and maize meal.

The countries represented in our interviews have food-based programs to improve micronutrient nutrition. Many of them include school feeding programs and school and home garden schemes. They also provide nutrition education that includes promotion of breastfeeding and consumption of foods rich in micronutrients especially vitamin A.

The stories we heard about the different national experiences in bringing in policies and implanting programs for micronutrients share some common themes that are relevant to a global strategy.

It takes time

Putting policies in place and then implementing them takes time and perhaps particularly so for food fortification where the interests of key sectors in the national economy—agriculture and the food industry—are at stake and the stakeholders need to be brought to the discussion table. In South Africa, it took six years for fortification legislation to get onto the books and work through the various technical discussions between government, industry and civil society. In Nepal one of the most successful vitamin A supplementation programs started implementation in a few priority districts in 1992 and took seven years to scale up the program to the 75 districts across the whole country.

The division of roles between levels of government has implications for the strategy

Many countries have delegated some responsibility for micronutrient nutrition to lower levels of government such as state/provincial level, and municipal/district level. For example, in 1992 the Philippines devolved responsibilities for nutrition to 78 provinces, 115 cities, 1500 local governments and 42,000 barangays (villages). National or federal governments develop policies, enact legislation and may issue program guidelines and training materials but implementation often lies...
in the hands of provinces and at local levels. This is the case in India, Nigeria and South Africa. The result is not only that there is usually a patchwork of programs actually implemented on the ground but that the bodies at provincial and locals levels responsible for micronutrient programs may have little or no expertise in nutrition available to them. It makes monitoring and reporting for the prevalence of vitamin and mineral deficiencies or quality assurance for food quality a nightmare. We also heard that in some countries the process of decentralization has reduced the priority accorded to nutrition because it competes for resources.

**The location of national responsibility for nutrition within government matters**

The responsibility for nutrition may be in Ministry of Health or Agriculture, or within a National Planning Commission or the office of the President. It may also shift around. In South Africa the Integrated Food Security and Nutrition Programme is interdepartmental and involves the Departments of Agriculture, Health, Education and Social Development. The budget for Poverty Eradication includes nutrition programs.

Where it sits within government affects the human resources the nutrition unit can call on and often, its budget. There are sometimes trade-offs between being located within a more central planning structure where the potential for integrating nutrition with other sector programs is greater but the human and financial resources available may be less than within a line ministry like health and/or agriculture.

**Reaching the poor is a major challenge**

Nutrition leaders are struggling to provide better nutrition to the poor through a variety of programs including social mobilization through person-to-person contacts, community education, through the schools and mass media campaigns. They carry nutrition messages and vitamin and mineral supplements through regular health system contacts like National Immunization Days and Child Health Weeks. Some, such as Zambia, provide routine supplementation by going door-to-door. Agricultural extension workers in Nigeria go out to remote rural areas to promote home and school gardens and carry nutrition messages.

The food industry is also trying to fortify the foods that the poor eat whether staples like maize meal and rice or condiments like salt and sauces. Some countries provide subsidies for fortified staples like rice or provide free food to the poor. In Brazil, nearly 9 million poor families are registered in a national database for a federal government cash transfer program. Many countries see the dietary habits of their populations changing, including the poor, so that it is a moving target.

**International conferences help to stimulate national action**

We heard several examples of international conferences such as the 1992 International Conference on Nutrition and the IDD Advocacy Meeting in Beijing in 2003 stimulating national actions on nutrition both through the preparatory papers countries made for the conferences and the follow-up action to conference declarations and agreements.
6.2 Views On Global Health Initiatives

We asked the national stakeholders what their experience was of global health initiatives. Most had worked with UNICEF, MI and others on Universal Salt Iodization (USI) and had either worked on or were familiar with the initiatives on polio eradication, malaria, HIV/AIDS and GAIN.

First, they saw positive benefits in the additional financial and technical support to governments that came with these funds and the capacity building and system strengthening that resulted through national participation in the programs as well as the results the programs achieved in improved health. The existence of a global program brought higher visibility to the health problems that it targeted and attracted greater government commitment and national funding. It helped to fast track national response.

However, national stakeholders pointed out weaknesses in the global programs which have some messages for the micronutrient strategy. The ten main problems identified are:

1. While they raise the profile of the health issue with government in the short term, vertical programs often do not sustain the advocacy message long enough and government attention turns to other priorities even while the program is being implemented.

2. Global programs tend to impose their own coordinating structures on countries so that national coordinating committees multiply; key stakeholders are expected to be involved in multiple initiatives and the few nutrition experts available are running from one multi-stakeholder meeting to another.

3. They have their own time frames and often require that program implementation starts before the capacities have been built locally to do it. This is particularly true for capacity at sub-national levels like provinces, municipalities and communities.

4. The health initiatives are not sustained or sustainable. Funding winds down just when measurable impacts or scaling up begins. Once the external funding ends so does the program implementation or at least any real scaling up.

5. The health initiatives are usually not well integrated with government planning processes so that the potential for sustainability through government budget processes is foregone.

6. They tend to be 'global to national' and do not take a regional approach which can bring advantages in learning from one’s neighbors, not neglecting small marginal states, and regional harmonization.

7. Global health initiatives are notoriously inflexible when it comes to implementation in very different country situations and this one size fits all approach has resulted in inefficiencies and distortions.

8. The initiatives are fast track affairs that do not deal with deeper rooted problems like corruption or weak local capacity so when they leave the national disabling environment is still pretty much in place.
Global initiatives want to measure their own results and require special accounting for funds which imposes challenges and more work especially when the funds are (sensibly) integrated with other national programs such as IMCI.

Proposals to global initiatives are extremely time-consuming for hard pressed government departments to prepare; they are very discouraging when the time invested yields nothing but a failed application; and they entail very slow grant processes if the application is successful.

In terms of involving the food industry in a global micronutrient strategy, the national stakeholders reported that their experience of working with the for-profit private sector for both fortification and (more rarely) supplementation is generally positive. They see industry as a key player and supportive partner for both existing health programs and in any future micronutrient strategy. We were told about a number of national multi-stakeholder bodies on which industry sits including National Fortification Alliances. The main concern expressed about the role of industry is the inability of government to adequately monitor the quality of the food or supplements being produced. But from the perspective of the national government stakeholders interviewed the overall picture for public-private cooperation seems positive.
Vitamin A supplementation started with key priority districts in 1992 and only in 1999 did the program cover the entire 75 districts. They didn’t hurry to scale up and they have a gradual approach to implementation throughout the country which has probably accounted for the success of vitamin A supplementation.

It took a long time to get the multi-sectoral Task Force going. At first people were not used to working together. When discussions became technical, it was clear that we didn’t talk the same language as industry. The key thing I drew from this experience was that the buy-in process takes time.

Generally we try to work with other programs—we use their structure to carry the nutrition message. In the national Plan of Action called Vision 2020 nutrition found itself in the national economic development plan. So the approach is to be constantly on the look out for opportunities and have a vision of where you want to go.

Reaching the poor is the challenge—it keeps me awake at night. We’re not reaching the poor as well as we should.

We reach the poor but not the poorest of the poor as they don’t eat processed food and in the cattle growing areas a lot of people use non-iodized animal salt.

It’s important to take a regional approach in international programs or else bordering countries are left out and they become vulnerable.

Talk to as many people on the ground before you start a program. Bear in mind that one size doesn’t fit all.

Global health initiatives have predetermined objectives and activity-based budgets. There are peculiar country situations that the global agendas have not and cannot address.

Industry is active in the manufacture and distribution of iodized salt. In fact it is one of the best examples of inter-sectoral coordination in India.
7.1 What Can Industry Contribute to a Strategy?

Industry stakeholders see themselves as able to be active participants in the strategy, especially the multinational food companies that have a major presence in developing countries through their subsidiaries and affiliates. In general, the business sector sees its strategic role as a continuation and intensification of what the companies are already doing with their partners at international and national levels.

Figure 10: What can industry contribute to a micronutrient strategy?
(Percentage of responses from industry and international public sector stakeholders)

For the most part, they see their contribution to the strategy in kind rather than in financial contributions although a few representatives of major multinational packaged food companies said they might consider making grants targeted to specific outcomes, similar to what they already do to support scientific research. They did not anticipate that they could contribute significant grants to a central fund.

However, the private sector stakeholders felt that there are many other valuable contributions that they can make to the strategy. In our interviews the most frequently mentioned are:

1. Product innovation and technical solutions
2. Research support, sharing research results and analytical data, providing laboratory facilities
3. Technology transfer and technical assistance to national businesses including training
4. Sharing business expertise including financing models to small and medium enterprises
5 Technical assistance to government especially for quality control
6 Sharing regulatory know-how and experience to government, business and civil society
7 Advocacy with government on nutrition and fortification
8 Consumer education and social marketing
9 Networking and transferring lessons at national, regional and international levels.

From our interviews it is clear that it is the multinational food and packaging companies together with their suppliers of vitamins and minerals and premixes that have the resources and technical capacity to develop technical solutions to bring supplements and especially fortified foods to reach broader sections of the public. These companies are already active in all regions of the world through their subsidiaries and have a depth of innovation and business experience to bring to the strategy. Many stressed that they are there for the long term.

In contrast, *national* producers and associations do not have the same financial or technical resources and express themselves as expecting to be more on the receiving end of the strategy to obtain technical support or influence with government to level the national playing field for them. Their main concerns are the initial costs to install the fortification equipment and to purchase sufficient quantities of fortificants for the first year at least of operation—money which most do not have available, given the low margins under which they operate. The national producers and associations also identify problems with prohibitive government tariffs in some countries on imported vitamins and minerals and distortions in the market created by other government import duties. In general, they are looking for more support from government although a few national companies expressed the view that government was part of the problem rather than the solution.

The major food companies have already entered into partnerships with their suppliers of vitamins and minerals and premixes to innovate and test new fortified nutritious products that will reach a larger segment of developing country markets. These include innovations in fortifying traditional staple foods and condiments that are consumed by rich and poor alike. For example, Akzo Nobel and Unilever are sharing the cost of a field trial to test the fortification of traditional maize porridge in Kenya. In Indonesia Akzo Nobel and Heinz are jointly proposing to undertake a large scale effectiveness trial for fortified soy sauce. Heinz, with the premix supplier Fortitech USA, has supported the development of *Sprinkles* for home fortification of complementary foods over many years. For companies like these a micronutrient strategy would provide opportunities for a wider set of strategic partnerships, not only along their own supply chains but with governments, international organizations and NGOs. They are therefore enthusiastic about a global micronutrient strategy.
7.2 Is There a Business Case?

Most international private sector stakeholders interviewed along the food supply chain believe that there is a business case to be made for providing micronutrients through fortified foods to the poor. Among multinational companies nearly 90% expressed confidence that the double bottom line of corporate social responsibility and profit could be achieved. However, most national food companies and millers and their associations for whom profit margins are already very low said they could not make a business case for fortification. This indicates that there are two very different business operating scenarios that any strategy must take into account; multinational corporations and their national subsidiaries on the one hand; and national companies and their national associations on the other.

Putting together what we heard in the interviews, the business strategies for making fortified foods for the poor that can create a sustainable business case are:

1. Associate the product and company with a public good—nutrition, bright and healthy children—and thus build a strong positive brand.
2. Lower the cost of micronutrients through larger volumes and moving from pharmaceutical quality to food quality.
3. Increase market share in some developing countries through a rapidly expanding market for industrial foods and contract farming through large retailers, particularly in Latin America.
4. Fortify foods that the poor eat—traditional staple foods such as cassava, maize meal and banana meal (matoke) in Africa and condiments like fish sauce and soy sauce which are consumed by almost everyone in some Asian countries.
5. Reduce the size of packages so that the unit price is affordable to the poor.
6. Get the product out to the poor beyond the commercial distribution system through strategic partnerships with NGOs and micro-entrepreneurs (mainly women).
7. Assist national partners (medium and small businesses and micro-entrepreneurs) in obtaining the technical, business and financial support they need to be strategic partners.
8. Operate under a business model that has a longer time frame to reach profitability by accepting lower profit margins for some segments of the market and/or for the short term.

For the multinational food companies the industrialized countries represent highly competitive markets where market share is hard won and lost but it is mainly at the margins. In comparison, the developing countries represent great potential for market growth and some like China and India represent enormous markets over the next ten years. The growth in the urbanizing middle class and the “working poor” who increasingly purchase food rather than grow their own enables industrial food companies to make profits on this market segment in a country and accept much lower margins or no profits in the short term to reach the poor. For example, industrialized fortified maize flour in Mexico represented only one-third of the maize flour market five years ago with one-third milled by small scale millers and one-third ground at home. Today industrial maize flour production has more than half the market and is still rising.
Food companies see the poor as future customers and can make a business case for reaching a
large and increasing proportion of the “bottom of the pyramid”. Moreover, they argue that they
must make the business case both to their internal management and to shareholders or pro-
ducing nutritious and fortified foods for the poor will not be sustainable. Thus there must be a
margin of profit even if it is very low. The private sector believes that over the course of the ten
years of the strategy it can provide fortified food to “the working poor” and those who purchase
at least their salt or condiments like soy sauce and fish sauce. These consumers represent a large
proportion of the population in some countries—arguably 90% in countries like China and
Vietnam, and much of Latin America.

One stakeholder provided the following analysis. In Vietnam, fish sauce is consumed by
almost everyone rich and poor although the market is divided between industrial producers,
small entrepreneurs and home producers. On average it costs one cent per capita per day to
purchase; that is, $3.50 per person per year. The additional cost of iron fortified fish sauce is
25 cents per year or $3.75 per person per year. Even people living on a dollar a day can afford
to eat fortified fish sauce and from initial trials appear willing to do so once they understand
its added nutritional value.

However, the poorest of the poor—those living on less than a dollar a day, those in the
rural areas and people displaced by war, famine and other disasters cannot be reached by
the private sector under any business model. For the poorest of the poor, the private sec-
tor is investing in the development of new products such as home fortification powders like
“Sprinkles” which is being made available on a non-commercial basis to 1.75 million children
in 2006.

Many companies are working on corporate social responsibility initiatives in partnership with
international organizations, NGOs and researchers. For example, the Grameen Group and
Groupe Danone announced in March 2006 that they have entered into a 50-50 joint venture in
Bangladesh to form the Grameen Danone Foods Social Business Enterprise. The joint venture will
launch a new fortified affordable dairy product designed for children’s nutritional needs and will
help create local jobs in livestock farming and product distribution by providing micro-financing
to members of local communities. Net profits beyond capital costs will be reinvested in scaling up
the model across Bangladesh.

It is important not to oversell the business case for reaching the poor with fortified food.
There are not only financial difficulties in getting a quality product to market at the right
price but also many technical challenges in fortifying food that is of high quality and
remains stable when production, distribution and storage conditions are far from ideal.
Medium- and small-scale producers and processors say that in their present circumstances
they cannot make a business case for fortifying food for poor people. But there is clearly
much innovation taking place within the private sector in a search for food vehicles that
have market penetration to the poor that live on as little as a dollar a day. There are long
term investments in product and brand development, social marketing and strategic part-

nnerships with suppliers and distributors as well as with civil society groups in an effort to reach the poor. There are major investments in upstream research and in downstream product effectiveness trials. In short, there seems to be a lot happening within the food industry and business sector that is of interest to a global strategy for micronutrients.

<table>
<thead>
<tr>
<th>INDUSTRY PERSPECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have a huge local presence worldwide and regulatory know-how—the do’s and don’ts of how to establish a national fortification program.</td>
</tr>
<tr>
<td>We’ve been sponsoring radio programs on good nutrition for seven years in Nigeria. We’ve held events and we’ve tried to motivate the press to focus on good nutrition.</td>
</tr>
<tr>
<td>We can help identify the right connections with government. We have the human resources, the technical and manufacturing expertise. We can bring a long-term view of things.</td>
</tr>
<tr>
<td>We have access to local politicians. If we close a plant with several hundred workers laid off the government has a crisis on its hands. Every job enables twenty to live in Africa. So politicians listen to us. We don’t mind giving them the credit of what we are doing.</td>
</tr>
<tr>
<td>We have a laboratory which is a reference laboratory for the region and accredited with ISO. Other countries in the region could use it.</td>
</tr>
<tr>
<td>We can help entrepreneurs to start production. We can help them with their business plans and with the financing of their equipment. It’s in our interest to see them succeed.</td>
</tr>
<tr>
<td>We have to be careful in dealing with poor people. We can’t be seen to be making profits from poor people.</td>
</tr>
<tr>
<td>Generally products lose money in the first year because it’s very expensive to educate the consumer about the need for the product.</td>
</tr>
<tr>
<td>Our marketing teams have a genius for inventing needs that people don’t really need but that strategy is not suitable for reaching the poor. We need to develop strong products that really meet their needs and at a very low price. This means reinventing the mindset and strategy of product marketing.</td>
</tr>
<tr>
<td>The poor have a low buying power and fortificants can be costly. Food has a very small margin. Adding that cost to the product means increasing the price. However the more we increase our sales the less we would need to increase the price.</td>
</tr>
<tr>
<td>If a person buys any food they can afford to buy fortified food. We have to get it to them at the right price.</td>
</tr>
<tr>
<td>These cubes are sold around the world. In Africa they are sold one cube at a time. They have tremendous market penetration and would be a good vehicle for fortification. We did fortify them and they became very popular. During a shareholders’ meeting the representative of a NGO stood up and asked how we dare fortify a product that had no nutritious value itself. There was enough of a fuss that we stopped fortifying them.</td>
</tr>
</tbody>
</table>
NGO Perspectives

8.1 How Would a Strategy Link to Your Programs?

The nongovernmental organizations we interviewed do not fall neatly into a single category. Although most of them would be regarded as international NGOs, their legal status ranges from national NGOs to major donor projects, to foundations, to networks. They vary in the scale at which they usually work on micronutrients—from community-based, national, to regional and international. They also range in the focus of their expertise from scientific and technical to social mobilization and the provision of care. These characteristics influence their views and expectations of the strategy.

Some like World Vision Canada, Africare, CARE-Canada and CARE-USA are implementing projects at the community level in which micronutrients are seen as part of nutrition projects that are often themselves embedded in broader community development initiatives. They tend to have a holistic, bottom-up view of what is needed. Others like HKI and Consumer Voice India have community-based projects but also play influential roles at national level on advocacy, social mobilization, education and capacity building.

Some NGOs are more technical and scientific in character. These include the AED-A2Z and AED-FANTA projects, MI and SUSTAIN. Harvest Plus is leading the way in research on biofortification of staple crops. ICRW and IFPRI are research based policy-oriented organizations working internationally and nationally.

Also linked closely to the NGOs are a number of networks which may vary in their exact legal status but are essentially acting as professional associations or consultative groups. These include ICCIDD, the Micronutrient Forum (which replaces IVACG and INACG), the Iodine Network, the Global Folic Acid Advocacy and Advisory Group, and IUNS. These groups include in their membership many of the leading scientists on micronutrients who also lead research groups in universities and technical institutions around the world. FFI is another network that is focused on advocacy of flour fortification rather than being a consultative body.

Some of the NGOs and networks include experts in industry or like IBLF are built around a public-private partnership concept. ICCIDD and the Iodine Network have members from the salt industry and SUSTAIN was explicitly set up as a catalyst organization to build partnerships across industry, the scientific community and governments. FFI includes flour fortification experts from industry and research institutions.

A few of the organizations also act as grant giving bodies. For example, MI is the main technical support and procurement conduit for vitamin A supplementation from Canadian CIDA and gives grants for technical projects on fortification as well as supplementation.

The bottom line is that NGOs are very different from one another. Given this heterogeneity of organizational missions, it is little wonder that it is difficult to find a pattern in the NGO perceptions of the strategy—other than a general expectation that it will support them to do what they are already doing; a hope that it might bring additional funding to support their work; and a concern on the part of many NGOs working at community level that a strategy focused on micronutrients might distort what should be a more holistic approach to nutrition, food security and social development.
There is a sense of disconnect on the part of many NGOs between what they are doing and what might be the value added of a micronutrient strategy. Compared to the international organizations, many of these NGOs do not have any clear idea of what a micronutrient strategy might be or how it might influence the work they do. As many of them work on food-based approaches that are broader than micronutrients, they tend to believe that their approach should influence the strategy more than that the strategy might change what they do.

In terms of what contributions they could make to the strategy, their responses are naturally enough in line with their current activities—national or community level social mobilization, program planning and implementation, capacity building of communities and national officers through the provision of training courses and training tools.

The networks and consultative groups see themselves as playing a role in advocacy in international forums and could offer their own networks as convening space for the strategy. Some of these groups welcome the idea of a higher profile for micronutrient malnutrition and better rationalization of efforts that a strategy might bring because they see it as helping them. Others are concerned about the implications of a strategy for a possible diminished role for their own network and increased competition for funding. For these groups the strategy is more likely seen as a zero-sum game than a win-win situation.

The more technical and scientific NGOs see more opportunity to engage in the strategy process and influence its direction. In addition to offering technical expertise and field presence, they can bring high level advocacy and policy influence with national governments in the countries where they work. Their attitude to the proposed strategy is generally positive compared to the more disconnected view of the NGOs working at community level and the wariness of some of the existing networks.

8.2 Views on Industry Involvement

The NGO stakeholders’ views of industry involvement in the strategy roughly correspond to their attitude to the strategy. Those working more at community level on social mobilization and care have a more neutral or negative view of industry’s motives and actions while the more scientific organizations and projects are more positive.

While the former accept that it is the private sector that actually produces supplements and fortified food many of them seem less familiar with what other roles industry could play. They recognize that industry could provide technical know-how but do not mention that industry have a role in research and development or might have leverage with national governments to bring in policies and regulations for mandatory fortification. They also seem unaware of the initiatives being made by industry to produce fortified products that will reach the poor and refer to legacy reasons for not trusting industry which relate to industry behavior several decades ago.

Scientific and technical NGOs and networks show a greater understanding of the role of industry and a more positive attitude towards their involvement in the strategy. Several already include industry partners in their activities and networks. They mention that industry has a role in
technology transfer and training as well as quality control, monitoring and improvement of procurement systems. In short, the more scientific NGOs and networks are already working with industry and say that they have benefited from the experience.

<table>
<thead>
<tr>
<th>NGO PERSPECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have an open mind about linkages but I’m not sure what the global strategy is going to look like.</td>
</tr>
<tr>
<td>Our first priority is to ensure that people have something to eat so addressing micronutrients might have to take second place.</td>
</tr>
<tr>
<td>We can link to a future global strategy through our work on food-based approaches and food security.</td>
</tr>
<tr>
<td>We’re looking for new donors.</td>
</tr>
<tr>
<td>All the technical expertise we have will be at the disposition of the global strategy.</td>
</tr>
<tr>
<td>The role of the private sector is fundamental at several levels. It is the product and service provider. It is the one creating markets. They have a way of doing business that brings freshness.</td>
</tr>
<tr>
<td>I’m positive but not naïve about the role of the private sector in the strategy... If the alliance doesn’t build the proper environment it will be forced into the business of conflict management.</td>
</tr>
<tr>
<td>All I know is that the market is not the answer to everything.</td>
</tr>
<tr>
<td>We deal with companies. They have all the technical knowledge and capabilities that we don’t have.</td>
</tr>
<tr>
<td>Why is it that the private sector is not more active in providing complementary food? Because there’s no profit in it!</td>
</tr>
<tr>
<td>Our concern with the private sector is quality control. There are no watchdogs in the developing countries.</td>
</tr>
</tbody>
</table>
9.1 Priorities for Research

The nineteen university stakeholders we interviewed include some of the world’s leading researchers on vitamin and mineral deficiencies with first-hand experience of the trials and tribulations in delivering micronutrients to the people who most need them. This group was the hardest to track down as many of them were in the field during the interview period January-March 2006. Many of these academics have also gone beyond their laboratories and field trials to push for public policy reform and to become leading voices in the various micronutrient initiatives and coordinating bodies such as IFF, IZiNCG, SCN, ICCIDD and the Micronutrient Forum. University researchers are also likely to have played advisory roles to government and industry and a good number have had prior experience in either government or industry.

Their priorities for research fall under three main areas:

1. Basic research on vitamin and mineral deficiencies
2. Operational research to improve delivery systems and monitoring
3. Social and economic research to underpin advocacy and create demand for micronutrients.

Most researchers emphasize that while there are still some basic research questions about vitamin and mineral deficiencies by far the largest and most urgent research tasks are in applied research to deliver micronutrients to those who need them. For this reason, they argue, most investments in research by the strategy should be linked to field programs. Some even suggested that the strategy should not invest in any “single micronutrient” research since interventions were more and more going in the direction of delivering multiple micronutrients.

The three research categories are not watertight since research in one tends to depend on the availability of results from research in the others. If there was any general message it was that strategic research over the next few years needed to focus on the real world of large populations and multifaceted interventions that better reflect the complexity of people’s lives and the trade-offs that they make on a daily basis. Thus the general direction being pointed out is towards multidisciplinary methods, complex systems frameworks, and practical results.

Priorities In Basic Research

Multiple micronutrients

We need to know more about the interactions between multiple micronutrients in the human body. This is a neglected priority compared with research on individual vitamin and mineral deficiencies and will become more important as the same populations receive micronutrients.
through supplementation and food fortification. UNICEF for example is reported to be providing multiple micronutrients to pregnant women in some countries. What are the interactions that affect bioavailability, safe doses and efficacy?

**Relationships between diseases and micronutrients**

Vitamin and mineral deficiencies are linked to mortality and morbidity from diseases such as HIV/AIDS and tuberculosis. For example, it is known that vitamin and minerals such as vitamin A, B-complex, C and E together with selenium and zinc are needed by the immune system to fight infections and that deficiencies in them are common in people living with HIV/AIDS. Clinical trials have shown that daily micronutrient supplementation has increased survival rates in HIV positive adults and reduced mother-to-child transmission and adverse birth outcomes although there are some contradictory findings which reinforce the need for further research.

Among other unknowns is the optimal formulation of daily multiple micronutrient supplements for HIV positive individuals and this is likely to vary across cultures and populations. More research is needed on the benefits of micronutrients for people with infections and disease.

However, many university researchers pointed out the disturbing report in the *Lancet* 16 about the increased risk of morbidity and mortality for children under three in Tanzania who received iron (and folic acid) supplements daily for 18 months and who were exposed to malaria. The study authors concluded that giving iron supplements to infants who are not iron-deficient can be harmful and need to be conducted along with programs to detect and treat malaria and other infections. This report has served as a recent wake-up call for the micronutrient community that we need to know more about both the risks and benefits of giving micronutrient supplements and fortified foods to populations who are also exposed to high prevalence of infections and diseases.

**Folic acid and zinc**

Researchers are divided about the importance of including folic acid and zinc in micronutrient interventions especially on their benefits at the level of populations rather than relying on targeted interventions to reach high-risk groups. However, with this proviso, we have included two areas identified by the experts in relation to folic acid and zinc:

- We need to determine a serum/red blood cell/blood folate concentration above which folic acid-preventable spina bifida rarely, if ever, occurs—similar to serum vitamin A levels used to evaluate vitamin A status in a community—that can be used to design folic acid implementation programs.
- We need to determine whether there is a population-wide benefit or if zinc supplementation is only beneficial for specific groups.

---

Operational Research Priorities

Rapid assessment surveillance tools

Stakeholders stress that better tools for monitoring prevalence and progress in eliminating vitamin and mineral deficiencies are urgently needed to be developed and tested. By ‘better’, respondents meant tools that are reliable and yet cheap and easy to use in rapid assessment for large populations. The present tools for each micronutrient are at different stages of development in terms of suitability for rapid assessment. In an ideal world, one blood spot or urine sample would yield information in the field on several micronutrient deficiencies that can be combined with some visual indicators that can be read by local health workers.

Prevalence surveys

Linked to the need for more cost-effective surveillance tools is the need to measure micronutrient (and disease) status among populations to determine the baseline against which to assess what supplements and fortified foods are needed. The university researchers and food industry both emphasized the need for these surveys before implementing large-scale programs and that we have extrapolated vitamin and mineral deficiencies from one population to another using heroic (and unjustified) assumptions.

Integrated delivery of multiple micronutrients

More research is needed on how to link zinc interventions with existing delivery systems such as routine immunization and growth monitoring visits.

Reaching high-risk groups

Operational research is needed to help design cost-effective programs that can rapidly reach high-risk groups such as infants under two and pregnant and lactating mothers. These programs can also be used to reach the ‘unreached’ groups such as the rural poorest of the poor. This research needs to not just look at the supply side whether through supplementation or fortification, but also how to create demand through education and linking micronutrients to other benefits. It should include community level fortification through simple technology and home fortification.

Social and Economic Research Priorities

Cost-benefit analysis

More evidence is needed on which interventions are most cost-effective for particular groups in order to mainstream them into broader health and socio-economic development programs and make the case to national governments and external donors.

---

17 The strategic plan for folic acid also includes a target of developing a surveillance tool for prevention of folic acid-preventable spina bifida and other folate preventable disorders. Global Folic Acid Advocacy and Advisory Center, Emory University
The benefits side of the equation also needs more research so that benefits such as increased IQ and work productivity can be measured at the level of populations.

**Food intake studies**

Not enough is known about what food people actually eat. Studies that observe what people eat are costly in time and ideally need to follow people throughout the day and not just observe mealtimes. It is known that there are gender, age and role differences within households regarding micronutrient deficiencies as well as in nutritional status more generally. There is growing evidence that in the same households different family members can be suffering from undernourishment and obesity and that there may be a link between childhood malnutrition and adult obesity and diabetes.

Studies have shown that even if iodized salt is available in a household (a key indicator for measuring universal salt iodization) it does not mean that people are eating iodized salt in sufficient quantities. In some societies, people get their salt from condiments like fish sauce and bouillon cubes rather than table salt and these are generally not fortified.

Food intake studies are also needed to measure what the combined intake of micronutrients is when people are receiving both supplements and several different fortified foods. When might intake levels get close to or beyond safe levels?

There are studies underway to observe what poor families eat by observers living with them for periods as long as five weeks. More of such studies are needed in their own right and to better calibrate the accuracy of more rapid assessments and surrogate indicators such as for USI.

**Building supplementation and fortification interventions into other development programs**

Too much emphasis has been placed on ‘stand-alone’ interventions for supplements and fortification and not enough on how to change the delivery system micronutrients from a cost to a benefit by integrating it into small enterprise development or other income-generating activities. More research on innovative ways to deliver micronutrients using market and social development initiatives is needed.

**Community and health education research**

There are many known social barriers that reduce the effectiveness of micronutrient interventions and more research is needed to know how community education can remove these barriers. For example, women delay the timely introduction of complementary foods because they are concerned about the onset of diarrhoea with weaning. This is an entirely reasonable concern which calls for specific health education messages which will have greater resonance if they are delivered within an IMCI or water and sanitation program.

Several times we heard that “Iron is a difficult micronutrient to get people to take”. Pregnant women do not always take iron supplements even when they are provided because they do not want a more painful birth with the delivery of a larger baby. It seems that this knowledge
stakeholder perceptions analysis

became widespread among African and Asian women long before it was recognised by most medical experts.

Some micronutrient programs are resisted because people are concerned that they will be made sterile. Clearly concerns about children’s diarrhoea and more difficult births are more justified than rumours that micronutrients will cause sterility but in all cases, social research is needed to understand the links between beliefs and behavior systems so that health messages and interventions can be designed appropriately.

A common message that we heard among the university researchers was to spend more research time among the people for whom the interventions are being developed to ‘get it right’. It was also proposed that one of the early actions of the strategy should bring together some of the main researchers in the field to review what is known and what is needed to help the strategy to identify research priorities.

9.2 Views on Industry Involvement

Nearly three-quarters of the university researchers interviewed expressed a positive view of the role of industry in the strategy. The rest said that there was a need to balance market mechanisms through involving other sectors of society. This is similar to the views about industry that we heard from the international organizations but contrasts with the concerns expressed by stakeholders from many NGOs.

The university researchers were the only stakeholders to identify a strong role for industry in doing research within their technical departments and in supporting research undertaken by the universities. Several university researchers would like to see industry support more “no strings attached” research as part of the strategy. They would also like to see more research jointly sponsored by companies that may be operating at different points on the value chain (and therefore not direct competitors) so that the research is likely to be accepted as free from undue influence from narrow industry interests.

University researchers would like the major food companies to provide technical assistance to smaller companies in sharing or adapting technology to smaller production units and in providing training—although they are somewhat skeptical that this would actually happen. They stress that it is industry more than any other group of stakeholders that has the technical knowledge and laboratory resources to support governments in developing the necessary regulatory and monitoring systems to underpin quality standards and enforce compliance in the marketplace.

Several researchers also identified a key role for industry in applying its marketing expertise to promote the ten year strategy among their own business networks and to assist the public sector in social marketing. It is interesting that while industry stakeholders agree they have the expertise in creating market demand, they feel they do not have the credibility to undertake social marketing for public goods unless it is in partnership with government and civil society.
I would invest resources where evidence shows interventions are cost-effective such as promotion of breast feeding, complementary feeding and zinc programs.

Why spend a million dollars on a trial for zinc? No one is just going to fortify with zinc alone. The focus now should be on multi-micronutrients and on trials designed to test outcomes and interactions.

We need a better understanding of what the high risk groups like infants need and shouldn’t focus all our resources on universal food fortification.

Women don’t like taking iron and folic acid supplements because of gastric upset but also because they increase the birth weight of the child. This is common lore in Nepal, Bangladesh and much of Africa but is just recently discovered by the medical fraternity.

Currently we are using a patchwork of local surveys, anthropological surveys, diet surveys and poverty indices. It’s very hit and miss. We urgently need rapid multi-micronutrient assessment survey methods at population level to produce timely data and inform decisions.

The private sector can help in legislation, advocacy, quality control, technical assistance—they have the best technical people in food fortification.

We need to get more support from big companies for small scale enterprises. Some of the appropriate technology now used by small millers was originally introduced by big companies. They’re not really competitors because the big companies won’t penetrate these local markets—for now.

I didn’t have the capacity to do the technical development so I involved industry and they developed the packaging that has a two year shelf-life for vitamin A.

They have an important role but they are limited by where their products are in the market and they’re not much anywhere in Nepal outside of Kathmandu Valley.

Industry should be advocates for evidence-based decisions. They should support ‘no strings attached’ research.
Donor and Financial Institution Perspectives

10.1 Tracking Current Investments

One of the challenges in mounting any strategy on micronutrients is to establish what current investments are being made by international donors and lending institutions. Financial data are available for many individual micronutrient and nutrition projects funded by international donors. Implementing agencies such as UNICEF have databases that could yield information on expenditures through their micronutrient programs. But the outlook for getting an overall picture of donor investments in micronutrient programs is bleak—and seems likely to get worse at least for the next few years.

Except for USAID, no bilateral donor reports that it systematically tracks support to micronutrient programs or nutrition programs. USAID’s support to micronutrients is subject to a Congressional “earmark” and therefore must be reported annually to the US Congress. At least 50% of the funds must be allocated to vitamin A programs. For that reason, USAID tracks its support to vitamin A, other micronutrient programs and to a lesser extent, to nutrition programs. It is also one of the largest donors to micronutrient programs.

MOFA/JICA does not currently fund many separate micronutrient programs although it has been supporting a few technical cooperation and grants for vitamin A, iron and iodine. Most of its support to nutrition is incorporated in the reproductive health programs of JICA. Japan also passes a considerable proportion of its ODA through multilateral organizations and through loans from the Japan Bank for International Cooperation. For this combination of reasons, it is not tracking its support to micronutrients or nutrition programs separately.

CIDA is a major donor to micronutrient programs and can obtain from its database information on its grant support to micronutrient programs. However, this accounts for grants made from the multilateral programs including those to MI but not for CIDA’s bilateral programs to developing countries for which CIDA reported similar tracking problems to those of the European bilateral donors.

The European bilateral donors (DFID, MOFA/DANIDA, GTZ, SIDA) do not systematically track their support to nutrition programs although DFID reports that it can identify its support to research on micronutrients and could do a broader database search in response to a special request, as it does if it is asked to respond to a question raised in Parliament.

The World Bank can retrieve information on its spending on nutrition activities including loans, concessiory loans and grants but does not track micronutrient programs. Nutrition is not a separate sector in the World Bank but is part of its investments in public health, education and poverty reduction strategies. Similarly, the regional development banks and IFAD reported that they do not track their support to micronutrient or nutrition programs separately as they are part of their overall investments in the health, agricultural and education sectors and in poverty reduction strategies.

The OECD-DAC donors have been increasingly harmonizing their grant support within the context of sector wide approaches (SWAPs) that are prepared by national governments. In the Paris Declaration on Aid Effectiveness agreed in March 2005, they have formally committed themselves
to provide more of their bilateral aid to countries on the basis of national development strategies including Poverty Reduction Strategies. The Paris Declaration also commits aid donors to strengthen and use the procurement systems and public financial management systems of developing (partner) countries and thus reduce their use of parallel donor systems for either procurement or accountability. The agreed targets for 2010 are to achieve at least 85% of aid flows to be within national budgets (that is, not for specific donor initiated projects); and to reduce reliance on external procurement and external financial management systems by one to two thirds of 2005 levels.

Another aspect of the Paris Declaration is harmonization of donor support to countries. The targets for 2010 are that 66% of aid flows are provided in the context of program-based approaches and that 66% of country analytic work is done jointly between donors and 40% of donor missions to the country are conducted jointly. While some European donors say that these trends may pose new challenges for them to secure continued public support for development assistance in their own countries, precisely because they cannot track what programs it has been spent on, they are also committed to reach the targets set in the Paris Declaration.

This means that responsibility for tracking investments in micronutrient and nutrition programs is shifted from most bilateral donors and development banks to the partner countries—as is the responsibility for giving priority to national micronutrient and nutrition programs funded by international aid.

Foundations are able to track their support to micronutrient programs through their own databases and the Gates Foundation does so. The Rockefeller Foundation does not track its support to micronutrients or nutrition specifically and does not have a nutrition program at present. It is funding food security programs including bio-fortification of rice and other staple crops and could undertake special analyses of its grants database to track its support to food security projects etc.

10.2 Views on Funding a Strategy

In the light of recent trends in bilateral approaches to development assistance and especially following the Paris Declaration, it appears that future decision-making about most aid supported micronutrient programs will take place within policy dialogues on national plans and poverty reduction strategies held between national governments and coalitions of aid donors. These are the forums in which micronutrient strategies will need to rise to the top of government agendas.

An alternative funding strategy might be to create a donor partnership for micronutrients. Donors have for decades collaborated with one another either in simple partnerships or more formalized donor consortia to pool resources, share risks, avoid duplication and build upon their different comparative advantages (or mitigate the negative effects of the limitations of their own geographic and program mandates). This trend to greater collaboration has reached a new high with the recent explosion in health sector funding through Global Health Alliances or Partnerships.
There are now at least 70 such alliances\(^a\), among the most prominent of which are the Global Polio Eradication Initiative, Global Fund to Fight AIDS, Tuberculosis and Malaria; the Global Alliance for Vaccines and Immunization (GAVI) and Roll Back Malaria.

While many of these alliances have been successful, from our interviews we found that there is clearly some donor fatigue with these vertical health initiatives, as well as concerns raised by researchers and implementing agencies. Many vertical health programs also present some major challenges to developing country governments (section 6.2). Even those stakeholders who are in favour of having some centralized fund to support a strategy for micronutrients feel that it would compete with other global alliances and with bilateral aid support that would otherwise go directly to support national plans and programs.

The general message we heard was that seeking to raise funds through another vertical program for large scale implementation programs should be avoided as this would (a) be difficult to achieve and (b) would require the alliance to have the infrastructure and mechanisms to re-allocate donor funds to countries and programs. **The advice from donors is not to envisage a strategy that manages and disburses large scale funds.** They see the governance and management costs as too high and therefore unattractive. Some donors also identified potential political problems for them if they contribute funds for country implementation through a vertical program for micronutrients. This might be construed by their governments as a way of circumventing the Paris Declaration commitments to go through national budget planning to help countries to meet their MDG targets. As one European donor told us “The Paris Declaration trumps all.”

The clear message from donors and financial institutions is that a strategy that requires major contributions to a central fund which is itself an allocation mechanism to country programs will be a very hard sell. However, there is a more positive reaction to the idea of a strategy that is more a roadmap than a funding vehicle and can help to strategically position major investments framed within national plans to help countries meet their MDG goals. There is general recognition of the value of having some central dedicated funds for micronutrient initiatives that could target roadblocks to progress. When asked where they would make such investments, the most frequent answers from donors were in operational research to develop planning tools such as rapid assessment methods for determining micronutrient deficiencies; meta-research studies to sort out some of the on-going scientific debates; public education; and other precursors to getting political commitment at national level such as fortification guidelines, model policies and advocacy.

Thus donors envisage a strategy that is upstream from large scale implementation but does not spend its all its time on strategic planning. This, we were told would be “the kiss of death”. Donors want to support actions that are strongly evidence-based; are focused on results—especially in terms of the MDGs; and are cost effective. They would like to see a strategy laying out directions for interventions that are sustainable and thus present clear exit strategies for donors. They are also attracted to a strategy that has the support of several donors rather than wanting to go it alone.

Current donors such as USAID and CIDA with major commitments to micronutrient programs would be prepared to discuss a donor partnership to support such a strategy as would the US foundations interviewed. Others, including SIDA and MOFA/JICA would consider it once they have more information but do not imagine that they would play a leadership role or make major changes to their funding patterns in the short term. Most European donors express uncertainty about a donor partnership although they are willing to consider it once they have seen what the strategy proposes.

Among the financial institutions, the regional development banks are generally favorable to considering a proposal for the strategy and would all be willing to come to an initial meeting if they had the staff available. The cost of ‘servicing’ vertical health initiatives by attending meetings was mentioned by several donors as a major deterrent to their involvement in yet another one. The World Bank stakeholders express more doubt about the value of a micronutrient strategy rather than a more general strategy to mainstream nutrition. Whether stakeholders in the donor and financial institutions looked on the idea of a micronutrient strategy with more or less favour no one said they did not want a seat at the table—although some were unsure whether they would actually be able to come.

---

**DONOR AND FINANCIAL INSTITUTION PERSPECTIVES**

<table>
<thead>
<tr>
<th>If you set up a new fund, it will not be well regarded. Who will fund it?</th>
<th>We should map existing donor flows and parse out some of the problems that donors might pick up.</th>
</tr>
</thead>
<tbody>
<tr>
<td>We would prefer not a global fund. There is a lot of donor fatigue with global funds.</td>
<td>You need some money or people will lose interest—but not too much.</td>
</tr>
<tr>
<td>Global funds are efficient in driving a specific agenda and in generating funds but they are often not well aligned with national systems and result in increased transaction costs.</td>
<td>A central fund makes sense but don’t create a monster.</td>
</tr>
<tr>
<td>Giving to central funds is hard for us. It requires a huge political push and it’s not sure how sustainable it is because it requires sustained lobbying.</td>
<td>Focus on getting new donor money because anything from us will be at the expense of what we currently give to countries. I would need to demonstrate what a vertical fund could do better.</td>
</tr>
<tr>
<td>The investments should be just catalytic to attract donors</td>
<td></td>
</tr>
</tbody>
</table>

---

19 See World Bank, 2006, Repositioning Nutrition as Central to Development: A Strategy for Large-Scale Action; World Bank, Washington DC, 246p
Key Messages from the Stakeholders

If Things Continue as They are We Will Not Reach the Agreed Goals

Most stakeholders agree that the goals for micronutrients agreed to at the UNGASS for Children in 2002 and the broader nutrition and poverty alleviation targets in the UN Millennium Development Goals will not be reached if “business as usual” continues. The target of sustainable elimination of iodine deficiency disorders by 2005 is already past and is likely not to have been achieved; and other targets for 2010 for vitamin A deficiency and iron deficiency anemia are only four years away. Some additional effort is needed and probably a new approach with some international leadership.

There is Support for a Micronutrient Strategy

There is broad support for the idea of a micronutrient strategy along the lines of the one being explored by GAIN on behalf of the leading agencies involved in micronutrient interventions. It is strongest among intergovernmental organizations, university researchers, some of the international NGOs and the major multinational food companies. These are likely to be the most active players.

The main reasons for support of the strategy are that people think micronutrients are important and are neglected and misunderstood at all levels—in intergovernmental organizations and international forums, within national priorities, and within communities. They see current support for micronutrient interventions as very fragile, dependent on a very few donors and governments. They hope that coordination and information exchange between international agencies both at headquarters and between their country offices might be improved if a new strategy were agreed upon.

But the Support Is Conditional

Although only 5% of stakeholders expressed themselves clearly as opposed to the idea of a new strategy, there are some warning signs in what we heard both from those who are more ‘neutral’ and some of those who support a strategy. Those who are opposed gave two main reasons: they are against any special pleading for micronutrients compared to the wider problem of malnutrition; and they have concerns that the strategy would be another donor-driven ‘cookie-cutter’ vertical program.

A larger number of stakeholders referred to the prior existence of organizational policies, strategies and programs, including their own, which must be taken into account by any strategy for micronutrients. In other words, there is already a strategic landscape out there which any new micronutrient strategy must successfully navigate. While it is reasonable that any strategy should build upon what is there already, there is a question about how much room there is for
fresh thinking. If we had to capture the essence of what we heard from many international stakeholders it was more: “The micronutrient strategy should help us to do better what we do now” rather than “It should help us to do our work better and differently”.

Key Features of the Strategy that Will Attract Wide Support

Reach for MDG/UNGASS Goals

If there is one aspect of the strategy on which there is consensus it is that the goals must be tied to the mast of the MDGs and the specific micronutrient goals agreed at the UNGASS on Children in 2002. International and national stakeholders told us that it had taken years to focus government attention on these goals, especially the MDGs and that the strategy must capitalize on that political investment. Among the challenges that the strategy will have to tackle will be:

1. To integrate within its own goals the UNGASS 2002 targets already agreed upon for iodine, vitamin A and iron;
2. To show how micronutrient interventions could support national efforts to meet the MDG targets, especially those relating to reduction of poverty and hunger and child mortality.

Focus on five main vitamin and mineral deficiencies

Stakeholders generally agreed that there is enough of a consensus to move forward on a strategy that covers vitamin A, iron, iodine, folic acid and zinc although there are some doubts about including the last two, including among some national stakeholders who are still struggling to put policies and programs in place for vitamin A, iodine and iron. National stakeholders also asked that the goalposts not be moved mid-course—in other words, there should be clear norms and guidelines from WHO to guide national policies.

Include supplementation, food fortification and other food-based approaches under one strategic umbrella

This is seen as the only logical framework for the strategy as they are all three necessary and complementary approaches. That being said, many stakeholders especially those from industry, see food fortification as the centerpiece of the strategy and one which will increase in reach and importance in the next ten years. Despite some comments about supplementation being phased out no one expects it to happen within the ten year time frame of the strategy, and for some groups such as infants and pregnant mothers, who need special doses of vitamins and minerals compared to the general population, supplementation will continue to be the best way to provide them.

Attention to other food-based approaches in the strategy will require engagement with constituencies that have not been closely involved with micronutrient programs before and may even be opposed to any division between supplementation, fortification and other food-based approaches. Organizations promoting dietary improvement, breastfeeding, school and home
gardens and food security programs will bring divergent views and competing priorities that will be difficult to balance with those of the more narrowly focused micronutrient stakeholders but the consensus of stakeholders is that they should all be at the table.

Have measurability, sustainability, flexibility and integration as design criteria

Throughout the interviews we heard these words frequently. Stakeholders—both international and national—are looking for a strategy that can measure results and therefore provide them with the means to be accountable, to document progress and to see success. They are also looking for sustainable solutions and we suspect that sustainability is the most important test for stakeholders who are jaded by silver bullet initiatives that leave behind the same situational contexts more or less unchanged once the money ends. Flexibility in how a strategy is interpreted or a program is applied, particularly at national and sub-national levels, is another common message and one at which many vertical programs fail the test.

While stakeholders support the idea of a strategy to promote micronutrient nutrition they also want to see the key messages and actions integrated into other programs such as child health, food security and water and sanitation. How to balance this twin-track approach will be critical to the successful implementation of the strategy.

Develop sub-strategies for reaching key target groups

The strategy must chart special routes to reach certain target groups early in the ten year plan. These include the poorest of the poor (those beyond any market-based strategy); pregnant mothers; infants under two years and children under five years—or it will fail to gain the support of many key stakeholders.

There is a Broad Interest in Joining an Alliance

There is a broad interest in participating in an alliance that would support a micronutrient strategy but about three quarters of the stakeholders want to know more about the strategy before they can commit their organizations or themselves. They represent the large middle ground between the almost 20% who are most enthusiastic about an alliance and the 7% of those who see themselves as unlikely to join. The key deciding factors for the middle ground will be the content and direction of the strategy and how well it is aligned with their own organizational policies and will add value to what they already do.

But There are Difficult Choices and Trade-offs

Not only does support for an alliance depend on the details of the strategy but stakeholders want to know how the alliance will be organized and governed. And here there are clearly some trade-offs and hard choices to be made. Some, but not all of the difficult decisions are rooted in the idea of a three-sided coalition between government, industry (the for-profit sector) and civil society at the core of the alliance. Just about everyone agrees it is essential but many have qualms.
Managing these relationships successfully is the key to an effective alliance because there are strong feelings, a lack of understanding and some mistrust between the three sides—particularly on the part of some civil society organizations towards the food industry. Even where motives are not at question, there is a lot of mutual learning needed to find common cause and to be able to express it in a common language.

**How do you take the time to build trust in the alliance and not become a talk shop?**

Stakeholders emphasized again and again that time was needed to build trust and good understanding between unfamiliar partners and that everyone needed to ‘own’ the strategy but they also said that the alliance had to move fast from talking to doing. One way is to focus agreement on the basics and try to move to some agreed joint action as soon as possible instead of trying to agree on everything first.

Another is to agree on a triage of the issues—what the parties already agree on; what they profoundly disagree on and those areas where agreement is within reach through negotiation. Identifying the first set shows how much the alliance has in common; identifying the second set and “parking” them for later discussion allows them to be negotiated after some more trust has been built and not block progress meanwhile; and focusing attention on issues that have some chance of resolution moves the process ahead.

**How do you encourage broad participation and run an effective coalition?**

The broad scope of the strategy means that there will be a large number of stakeholder organizations at both international and national levels. Yet each organization brings its own set of priorities and constraints (both geographic and program related). Sometimes these can be matched seamlessly to produce a coherent overarching plan. More often they lead to choices that try to please everyone to keep them onboard but reduce any chance of the joint strategy actually being strategic.

It is not only the challenge of a high number of alliance partners but also how to organize them into coalitions that are more relevant to their specific interests and mandates without creating ghettos or silos within the alliance. This is more of a challenge than it may appear. Industry stakeholders don’t want to spend time in UN style generic discourses. Neither do they want to be segregated into sub-coalitions composed only of industry stakeholders. And we heard many times that the nutrition “community” was among the most fractious ever experienced by insiders and outsiders alike.

**How do you have a governance structure that is democratic and accountable?**

Everyone agrees that there must be clear and agreed rules about representation, decision-making, codes of conduct and how conflicts are to be resolved—and that these are agreed at the outset and not left until problems arise. We also heard that there needs to be some alliance architecture—having everyone around a single table for such a large group of stakeholders is a recipe for alliance breakdown or stagnation or both (see meetings below). For those who are not sitting
around the table, there must be access to effective two-way communication systems so that everyone feels part of the alliance and that it is transparent.

Meetings, meetings, meetings

It may seem strange to highlight meetings but they are a major challenge to running a successful alliance. They are the experiential part of the alliance and colour the way stakeholders view the whole enterprise. Industry stakeholders express a lot of dissatisfaction with the way multi-stakeholder meetings are run and say when they go home they wonder why they were asked to the meeting in the first place. National stakeholders do not have time to go to different stakeholder meetings for each micronutrient coalition in their own countries and donors tell us that they cannot ‘service’ any more vertical health programs by participating in their meetings. Paying attention to how to make every meeting effective in terms of outcomes; efficient in terms of each person invited to the table; and satisfying in terms of stakeholder experience will go a long way to help implement an effective strategy.

Action at the National Level is Critical, but Don’t Forget Sub-national and Regional Levels

Many national stakeholders emphasized that the strategy would need to assist countries to deliver micronutrients through sub-national structures since states/provinces, municipalities and even villages have been delegated responsibilities for nutrition and other development programs in a process of government decentralization that has swept through much of the developing world. This further complicates how the strategy and the international partners in the alliance will engage with national and sub-national partners to deliver better micronutrient nutrition to the individuals and communities who need it.

We also heard that some vertical health programs ignore the regional level and that the micronutrient strategy should not be one of them. National stakeholders feel that they can learn from the experience of neighbouring countries and there are clear advantages in addressing some issues such as harmonization of standards and trade regulations on a regional scale. Concerns are also expressed about the ‘orphan’ countries that get left off everyone’s priority lists for interventions because they are small or lack an enabling environment. A regional approach can help to bring these countries in from the cold by participating in regional training and advocacy. The regional offices of organizations like WHO and UNICEF are focal points for regional technical support and can support regional coordination for the strategy.

Stakeholders Have Strong Views About Funding

For the most part, stakeholders did not discuss the financial aspects of developing and implementing a strategy and coordinating an alliance. Nearly 65% of those who did comment on funding said that they were opposed to the idea of a global fund or major centralized funding just for
micronutrient nutrition. Only 10% supported the idea and these were within the intergovernmental organizations. Most stakeholders recognize the need for central funds for coordination, advocacy and agreed strategic actions but they do not think that funds for national implementation programs should flow through the alliance or its secretariat.

We heard that most donors are unable to track the amount of funds being provided to support nutrition programs and that the general situation for mapping financial flows is likely to become worse rather than better over the next ten years until recipient national governments strengthen their own budget tracking systems. While the strategy might lay out directions for future investments, the clear message—especially from donors, university researchers and industry—was that the alliance itself should not be in the business of disbursing grants to countries.

Their central argument is that the strategy should focus on raising the profile of micronutrients within national budgets, within intergovernmental organizations and donor agencies so that these existing financial transfers and budgets allocate more resources to micronutrient nutrition (and to nutrition generally).

In this way the strategy will have transformed and mainstreamed funding for nutrition that can be sustained during the course of the ten year plan and beyond.
In this final section we use the results of the stakeholder survey as a springboard for raising some additional questions about the strategy and the alliance.

Forecasting Changes Over the Next Ten Years

The major players in industry seem to be those who are thinking most clearly about the changes that are likely to take place over the ten year time frame of the strategy. They see major shifts in the percentage of populations who will be entering the market in terms of purchasing at least their condiments like soy sauce, bouillon cubes, table salt and ‘special occasion’ beverages and snacks for their children. They anticipate home fortification and single unit packaging to bring micronutrient-rich products to many more poor families than they do today. They see a retail sector which in a decade has come from nowhere to supplying 50% of fruits and vegetables in fast urbanizing developing countries. In short, industry expects the population in many developing countries who are within reach of a market-based approach to micronutrient nutrition to increase dramatically in ten years and this bolsters their confidence that there is a business case to be made for providing quality fortified food to the poor.

No one expects that a market strategy will reach all the poorest of the rural poor in ten years or that it can solve the need for high and targeted doses of micronutrients to groups like pregnant mothers or their infants. But thinking about market changes does underscore the need for strategic planners to include some forecasting exercises in their planning process. How do we expect health systems to change after ten years’ more experience of government decentralization? How will national budget planning processes change? What new technologies for small scale fortification or for bio-fortification will be developed? Thinking through some plausible and desired scenarios may be a useful strategic exercise—especially at national and regional levels—so that the strategy is designed for the likely future rather than the known past.

Taking a Systems Approach to the Strategy

The clear consensus of the stakeholders is that the strategy should include all three approaches to micronutrient nutrition—supplementation, food fortification and other food-based approaches. However, there are tremendous challenges in having such a broad strategy being implemented by a large alliance of stakeholders especially given that the time frame for action is only ten years and the clock has already started ticking.

We would like to suggest a systems approach to designing the strategy and the alliance architecture that will support it. It will be more workable to build the strategy as sub-systems which are components of a larger integrated system. The inputs and outputs of each sub-system must fit with one another and make their requisite contribution to the “work” and goals of the higher order overall system but to some extent they can be “managed” by different constellations of stakeholders. Thus the alliance architecture would match the logic and needs of each sub-system
and stakeholders would be closer to the action that is most relevant to their own organizations. What would be different from the past is that the inputs and outputs of the sub-systems would be defined within the context and constraints of the strategic system as a whole.

How might one divide up the overall strategy into sub-components? One way is go back to the “traditional” sub-systems of supplementation-fortification-other food-based approaches with a new emphasis on developing the linkages between them.

A new component strategy for food fortification

For example the strategy for a ‘sustainable strategy for food fortification’ could include not only ‘traditional’ food fortification but be broadened to include innovations in community-based and home fortification. These may take the strategy down some less familiar paths such as how to help community cooperatives to organize themselves to obtain finance and organizational know-how to share appropriate technology to fortify their grain. It may seek new partners with micro-finance expertise like the Grameen Bank to help women entrepreneurs to distribute fortified condiments or “Sprinkles” style products for home fortification. It might reach out to women’s groups much more than seems to have been the case so far. In any case it would need to work with major food companies to provide the technical assistance needed by small and medium companies to fortify food and by the governments that need to monitor them. All these ideas are already being explored by stakeholders and the interest is there to do more within the framework of the alliance.

One advantage of presenting the strategy in terms of its main components is that each component would be more ‘legible’ to people inside and outside the alliance—its strategic rationale and where it begins and ends could be more readily understood than a broader micronutrient strategy might be. There is a real danger that the ‘supplementation-fortification-food-based approach strategy’ will get bogged down in internecine disputes about the relative emphasis given to the different approaches and also become involved in long running micro-macronutrient arguments. Component strategies built around supplementation, food fortification and food-based approaches are already recognised as only part of the overall strategy needed and could be presented in those terms.

Identifying a few high burden countries to test innovations at national level

Another way to structure the overall strategy is to see how all three sub-systems (supplementation-food fortification-other food-based approaches) can be integrated at national level by focusing on a few countries where the conditions are appropriate for testing new ideas and approaches to dealing with some of the major blockages to progress. These blockages could include the challenges of government decentralization and assisting lower levels of government to implement micronutrient programs; market innovations in reaching the poor with fortified food; and mainstreaming micronutrient nutrition into general budget support. Different agencies might take the lead in coordinating external agency support to national governments in each selected country.
Critical Path Analysis

A ten year strategy cannot do everything. It needs to focus attention on the key routes to success; where the major blockages are; where there are some fast gains to be made; and where the entry points are to making deeper systemic changes for the long haul. It must provide roadmaps to both the long and the short routes to better (micronutrient) nutrition for all.20

One of the charges laid against vertical programs is that they can distort existing public goods systems like national health systems to their own purposes rather than strengthening their capacities more generally—the charge against the ‘silver bullet’ approach. It is one of the major dilemmas in development—how to build fragile systems to be stronger and more sustainable for the long term while at the same time delivering results faster in the short term knowing that you can save lives today. We heard passionately from both sides of the issue and it is clear that the strategy needs to do both.

Many of the critical paths to remove blockages and entry points to strengthen systems for micronutrient nutrition are known. The challenge is to obtain agreement on which ones are first order priority in order to refocus efforts and resources on them. For example, from what we heard there is an agenda for priority research that seems close to having the support of many experts (see section 9.1). It includes some basic research but is concentrated on operational research like developing rapid assessment surveillance tools for measuring vitamin and mineral deficiencies in the field that can be used to undertake needed prevalence surveys. The need for better ‘food intake’ studies is widely supported by university researchers, government nutritionists and the food industry.

Economic research, especially better cost-benefit analysis, is recognised as one of the necessary starting points on a critical path (industry might call it a value chain) that leads to the development of evidence-based advocacy about the costs of micronutrient interventions compared to the high returns. Since the Copenhagen Consensus in 2004 ranked the provision of micronutrients as a top investment for development, the World Bank and others have developed the case further. However, more work is needed to understand what the total costs are to governments, to industry and to individuals and how the benefits are allocated compared to the costs. It is also clear that the benefits of micronutrients are confounded by other variables such as disease status and environmental health problems including diarrhoea and worms that can be improved by water and sanitation. Thus the cost-benefit analysis has to take a broader systems view to build effective advocacy with decision-makers faced with competing priorities.

To continue with the critical path analysis—a stronger evidence base on the costs and benefits of micronutrient nutrition needs to be combined with better information on prevalence of deficiencies and what sustainable solutions are available to combat them. This will enable the right messages to be inserted where the critical decisions are made. We heard that these decisions are made in national budget discussions led by central ministries for finance or planning. They are made in the negotiations between governments and bilateral aid donors about central budget support or

---

20 See World Bank, 2006, Repositioning Nutrition as Central to Development for a longer discussion.
sector programs (SWAps). They made are in the governing bodies and executive offices of influential bodies like WHO, UNICEF, FAO and the World Bank; in the governing assemblies of NGOs and civil society organizations; and in the boardrooms and shareholder meetings of food companies.

Thus one critical path can bifurcate and lead to several destinations that the strategy needs to reach if it is to mainstream micronutrient nutrition into development.

**Alliance Architecture**

One of the biggest challenges is how to structure the alliance so that it is inclusive and participatory and at the same time efficient and effective. The possibility of high transaction costs to reach agreement and undertake any action is a major deterrent to some stakeholders. One solution is to build the alliance around a series of smaller coalitions that are focused on particular components or sub-systems of the strategy and/or are geographically defined. These coalitions would be task-oriented and task-limited. The coalition might exist only for as long as needed and the membership would be defined by the needs of the task. The idea is an extension of the ‘product teams’ used in industry to develop solutions to specific problems and is an idea suggested by several industry stakeholders.

It is also the approach successfully employed by the recent UN Millennium Ecosystem Assessment in which over 1,360 experts and institutions were organized into interdisciplinary ‘assessment teams’ tasked over a five year period (2001-05) to solve different scientific problems posed at a range of geographic scales. The Millennium Assessment alliance had several other innovative features that might have some application to the ‘Micronutrient Alliance’. It was coordinated through a decentralized secretariat housed in ten organizations located in different parts of the world. It had a ‘policing arm’ otherwise known as the sixty-five member Review Board which checked that the assessment teams had done what they said they had done—specifically in their interactions with another 1500 experts and governments outside the alliance. And it discovered that the multi-stakeholder process is more a process of unlearning old ways of thinking as participants divided up a problem and tried to recombine it in new ways.

Another model that has been used successfully in situations where there is tension between stakeholder groups who need to reach agreement is to have a two storey design in which the ‘governing body’ is composed of organizational heads and the major players who can commit their organizations to the strategy. These people meet infrequently and briefly. They select their member of the technical team—a person who has their trust and ear—and who is authorized to spend time on the nuts and bolts of the alliance’s work. The CEOs are briefed by their technical team members and can waste no time in coming to decisions. Where you do not have this depth of support within organizations the alliance can become ineffective in keeping its members on the same strategic track.

We are not suggesting one approach over another but would urge that the architects of the alliance carefully review some of the design options and their relative merits to the case in hand.
Branding the Strategy

Whatever is decided about the scope of the strategy and the architecture of the alliance, it will need to have a separate identity—in other words, its own ‘brand’. We heard a lot of confusion about how a new strategy might relate to existing initiatives like those for vitamin A, iodine, folic acid, zinc and flour fortification.

Industry stakeholders suggested that the strategy will not only need its own brand but must also be marketed and actively promoted. It should have its own logo and perhaps even a certification system audited by independent agencies that would be paid by fees from industries wanting to use the logo to indicate that they are part of the ‘micronutrient alliance’. Part of the decision about branding the strategy will be what name to give it—and we heard many opinions so the discussion is likely to be lively.

If this seems far from what others imagine the strategy to be, it is at least worthy of discussion among the stakeholders. The process of thinking through what kind of strategy we are talking about is going to be an important—and revealing—early step in building the strategy. GAIN describes it as “a common strategy and business plan to enable each partner to scale up its activities and mobilize the resources necessary to achieve our common goal of eliminating vitamin and mineral deficiencies by 2015.”

From our interviews, it is clear that potential partners are unclear about how far the strategy is going to be positioned upstream with a focus on some of the critical paths we have outlined above or will lie farther downstream towards implementation and scaling up of micronutrient interventions. Whether it is upstream or downstream will define where the strategic partnerships are and have implications for what the amount and sources of funding needed.

Launching the Strategy

A word we heard fairly often was “buzz”. There is a felt need to create excitement and new interest about the strategy to raise the profile of micronutrient nutrition. There is also an impatience being expressed by stakeholders eager to see the new WHO Guidelines for Food Fortification.

National stakeholders told us that one of the benefits of international meetings is that they can encourage countries to take stock of where they are, especially if they are expected to provide a country report as part of their entry ticket. Declarations resulting from high level meetings can raise the profile of the issue with governments and donors. Launching the strategy at a high level meeting around the WHO Guidelines would seem to serve several purposes. The timing of the launch should provide for a strategic planning period and a trust-building exercise to solidify the alliance so that immediately after the launch there are several actions underway.

21 Ten Year Strategy Project, GAIN website entry dated 24 January 2006; www.gainhealth.org
22 One possible milestone in the process could be the meeting of the Micronutrient Forum planned for 2007 in Turkey.
Endnote

The ideas in this last section are meant to stimulate further discussion. They extend the arguments that we heard from the 155 stakeholders who shared their experiences and ideas with us and are certainly inspired by them but they go beyond the evidence-base of the rest of the report.

While our stakeholder survey did not explicitly address the question of who might take the lead in developing a new strategy, the issue of leadership came up spontaneously in our discussions. Stakeholders were appreciative of GAIN’s initiative in thinking about a comprehensive strategy and in undertaking the stakeholder survey. Some stakeholders assumed that GAIN would be playing a leadership role in the future development of the strategy and that the alliance would be built around the GAIN alliance. Our understanding is that the question is open.

What we do see is that there is a need for leadership to galvanize the different parties to work together and to create the financial and organizational space to do so. Without that leadership coming from somewhere, most stakeholders would agree with us that this survey will remain an interesting exercise rather than a platform for future discussion and action on a common strategy.
## Annex 1:
### List Of Contributors

<table>
<thead>
<tr>
<th>Organization</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Agriculture Organization</td>
<td>Biblap Nandi</td>
<td>Senior Food and Nutrition Officer FAO Regional Office, Bangkok</td>
</tr>
<tr>
<td></td>
<td>Kasirid Tontisirin</td>
<td>Director, Food and Nutrition Division, Rome</td>
</tr>
<tr>
<td>International Atomic Energy Agency</td>
<td>Lena Davidsson</td>
<td>Section Head, Nutritional and Health Related Environmental Studies Section, Division of Human Health, Vienna</td>
</tr>
<tr>
<td>New Partnership for Africa’s Development (NEPAD)</td>
<td>Boitshepo Gyose</td>
<td>Food and Nutrition Security Advisor, Midrand, South Africa</td>
</tr>
<tr>
<td>Pan-American Health Organization</td>
<td>Chessa Lutter</td>
<td>Regional Advisor, Food and Nutrition, Child and Adolescent Health, Washington DC</td>
</tr>
<tr>
<td>UN/ Global Compact</td>
<td>Melissa Powell</td>
<td>Project Manager, New York</td>
</tr>
<tr>
<td>UN/ Standing Committee on Nutrition</td>
<td>Roger Shrimpton</td>
<td>Secretary, Geneva</td>
</tr>
<tr>
<td>UNICEF</td>
<td>Victor Aguayo</td>
<td>Nutrition Advisor, West and Central Africa Regional Office, Dakar</td>
</tr>
<tr>
<td></td>
<td>Nita Dalmiya</td>
<td>Advisor, Micronutrient Supplementation, Nutrition and Child Survival, New York</td>
</tr>
<tr>
<td></td>
<td>Ian Darnton-Hill</td>
<td>Senior Advisor, Child Survival and Nutrition, New York</td>
</tr>
<tr>
<td></td>
<td>Rainer Gross</td>
<td>Chief, Child Survival and Nutrition, New York</td>
</tr>
<tr>
<td></td>
<td>Edwin Judd</td>
<td>Director, Program Division, New York</td>
</tr>
<tr>
<td></td>
<td>Werner Schultzink</td>
<td>Chief, Child Development and Nutrition, India Country Office, New Delhi</td>
</tr>
<tr>
<td>West African Health Organization</td>
<td>Ismael Thiam</td>
<td>Professional Officer, Nutrition and Child Survival, Bobo-Dioulasso, Burkina Faso</td>
</tr>
<tr>
<td>World Food Programme</td>
<td>Tina van del Briel</td>
<td>Senior Programme Advisor (Food Technology and Nutrition) Strategy, Policy and Programme Support Division, Rome</td>
</tr>
<tr>
<td>World Health Organization</td>
<td>Denise Coitinho</td>
<td>Director, Nutrition for Health and Development, Geneva</td>
</tr>
<tr>
<td></td>
<td>Bruno de Benoist</td>
<td>Coordinator, Micronutrients Unit, Nutrition for Health and Development, Geneva</td>
</tr>
<tr>
<td>Country</td>
<td>National Stakeholders</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Leonor Maria Pacheco Santos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ana Beatriz Vasconcellos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coordinator, Monitoring and Evaluation, Ministry of Social Development and Hunger Control, Brazilia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coordinator, National Food and Nutrition Policy, Ministry of Health, Brazilia</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>Chen Chunming</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ILSI Focal Point, Chinese Center for Disease Control and Prevention, Beijing</td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td>Irma Nunez</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nutrition Division, Ministry of Health, San Salvador</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>Rosanna Agble</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consultant, Former Head of Nutrition, Ministry of Health, Accra</td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td>Ivan Mendoza</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coordinator, Food Security and Nutrition, Ministry of Health, Ciudad Guatemala</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Ginnela V. Brahram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deputy Director, National Institute of Nutrition, Hyderabad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>K. Madhavan Nair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assistant Director, National Institute of Nutrition, Hyderabad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sangeeta Saxena</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assistant Commissioner (Child Health), Ministry of Health and Child Welfare, New Delhi</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>Soerkrirman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chair, National Fortification Coalition, Djakarta</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>Sonia Khan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director, Nutrition Division, Ministry of Health, Maputo</td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>Steve Hodgins</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director, Nepal Family Health Programme, Kathmandan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ram Shrestha</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director, Nepal Technical Assistance Group (NTAG), Kathmandu</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Adenike Adeyemi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director, Department of Community Development and Population Activities, Ministry of Health, Abuja</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dora Akunyili</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director General, National Agency for Food and Drugs Administration and Control, Abuja</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Davis Omotola</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secretary, National Commission on Food and Nutrition, National Planning Commission, Abuja</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>Florentino Solon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>President, Nutrition Center of the Philippines, Manila</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>Ali Dhansay</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director, Nutrition Intervention Research Unit, Medical Research Council, Cape Town</td>
<td></td>
</tr>
</tbody>
</table>
Turkey

Seniz Ilgaz
Nutrition, General Directorate of Child Health and Family Planning
Ministry of Health, Ankara

Zambia

Freddie Mubanga
Executive Director, National Food and Nutrition Commission, Lusaka

Lloyd Handongwe
Director, Nutrition Intervention and Information Programme for people with HIV/AIDS Lusaka

NON GOVERNMENTAL ORGANIZATIONS AND PROJECTS

A2Z Project

Omar Dary
Food Fortification Specialist, Washington DC

Phil Harvey
Technical Director, Washington DC

Tina Sanghvi
Country Programs Director, Washington DC

Africare

William Noble
Director, Food for Development Program, Washington DC

CARE Canada

Michelle Munro
Director, HIV/AIDS and Health Programme, Ottawa

CARE USA

Joan Jennings
Team Leader, Child Health, Health Unit, Atlanta

Consumer Voice India

Bejon Misra
Chief Executive Officer, New Delhi

Food and Nutrition Technical Assistance Project (FANTA)

Bruce Cogill
Project Director, Washington DC

Global Alliance for Improved Nutrition (GAIN)

Barbara Macdonald
Senior Manager, Performance Measurement, Geneva

Harvest Plus

Howarth Bouis
Director, Washington DC

International Business Leaders Forum

Robert Davies
Chief Executive Officer, London

Helen Keller International

Shawn Baker
Vice-President and Africa Region Director, Dakar

International Food Policy Research Institute

Marie Ruel
Director, Food Consumption and Nutrition, Washington DC

International Center for Research on Women

Kathleen Kurz
Director, Reproductive Health and Nutrition, Washington DC

Micronutrient Initiative

Luc Laviolette
Director, Asia Region New Delhi

Venkatesh Mannar
President, Ottawa

Dominic Schofield
Manager, Business Development Ottawa

PATH

Christopher Elias
President, Seattle

Ted Greiner
Senior Nutritionist, Washington DC
<table>
<thead>
<tr>
<th>SUSTAIN</th>
<th>Elizabeth Turner</th>
<th>Director, Washington DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Vision Canada</td>
<td>Barbara Main</td>
<td>Programme Manager, Micronutrients and Health Programme, Mississauga, ON</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>Geoffrey Smith</th>
<th>Business Director, Asia Pacific, Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akzo Nobel</td>
<td>Juan Torrez Muriel</td>
<td>Manager, La Paz</td>
</tr>
<tr>
<td>Association of Industrial Millers—Bolivia</td>
<td>Martin Jager</td>
<td>Director, Strategic Marketing, Human Nutrition, Limburgerhof, Germany</td>
</tr>
<tr>
<td>BASF</td>
<td>Takeshi Ohtsu</td>
<td>Strategic Marketing, Human Nutrition, Limburgerhof, Germany</td>
</tr>
<tr>
<td>Cargill</td>
<td>Claus Sondergaard</td>
<td>Global Applications Manager, Limburgerhof, Germany</td>
</tr>
<tr>
<td>Budenheim CFB</td>
<td>Rainer Schnee</td>
<td>Vice President, Business Food Unit, Budenheim, Germany</td>
</tr>
<tr>
<td>Buhler Inc.</td>
<td>Andrew Hollister</td>
<td>Product Manager, Extrusion Systems, Minneapolis, USA</td>
</tr>
<tr>
<td>Cargill</td>
<td>Scott Montgomery</td>
<td>Vice President, Corporate Procurement Leader—North America, Minneapolis, USA</td>
</tr>
<tr>
<td>Chamber of Milling, South Africa</td>
<td>Jannie de Villiers</td>
<td>Executive Director, Johannesburg</td>
</tr>
<tr>
<td>Coca Cola</td>
<td>Huaying Zhang</td>
<td>Director, Health and Wellness, Asia, Hong Kong</td>
</tr>
<tr>
<td>Fortitech</td>
<td>Erhan Gender</td>
<td>Head, Strategic Business and Product Development, Istanbul</td>
</tr>
<tr>
<td>DSM Nutritional Products</td>
<td>Hector Cori</td>
<td>Scientist and Technical Director, Nutrition Improvement Program, Santiago, Chile</td>
</tr>
<tr>
<td></td>
<td>Bruno Kistner</td>
<td>Program Director, Nutrition Improvement Program, Birsfelden, Switzerland</td>
</tr>
<tr>
<td>Groupe Danone</td>
<td>Bernard Giraud</td>
<td>Director, Sustainable Development and Social Responsibility, Paris</td>
</tr>
<tr>
<td>Heinz</td>
<td>Kerr Dow</td>
<td>Vice President, Global Innovation and Quality and Chief Technical Officer, Pittsburg, USA</td>
</tr>
<tr>
<td>HighChem Industrials Africa Ltd</td>
<td>Ian McCloy</td>
<td>Operations Director, Nairobi</td>
</tr>
<tr>
<td>Hosokawa Micron</td>
<td>Walter Smeltink</td>
<td>Sales Manager (Asia and Africa), Doetinchem, The Netherlands</td>
</tr>
<tr>
<td>International Association of Operative Millers</td>
<td>Gary Anderson</td>
<td>Executive Vice President, Leawood, Kansas, USA</td>
</tr>
<tr>
<td>Irani Brothers, Ghana</td>
<td>Tom Byrne</td>
<td>Chief Miller, Accra</td>
</tr>
<tr>
<td>LHD African Development, South Africa</td>
<td>Larry Umunna</td>
<td>Senior Partner, Johannesburg</td>
</tr>
<tr>
<td>Company</td>
<td>Name</td>
<td>Position</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Lobatse Estates, Botswana</td>
<td>Philip Fischer</td>
<td>Chief Executive Officer, Gaberone, Botswana</td>
</tr>
<tr>
<td>National Foods, Zimbabwe</td>
<td>Jonathan Baker</td>
<td>Director, Household Manufacturing, Harare</td>
</tr>
<tr>
<td>Nestle Nigeria</td>
<td>Klaus Wachsmuth</td>
<td>Managing Director, Lagos</td>
</tr>
<tr>
<td>Nestle S.A.</td>
<td>Gayle Crozier-Willi</td>
<td>Food Issues Management, Public Affairs, Vevey, Switzerland</td>
</tr>
<tr>
<td>Pick’N Pay Holdings Ltd, South Africa</td>
<td>Gareth Ackerman</td>
<td>Chairman, Claremont, Cape Town</td>
</tr>
<tr>
<td>Proctor and Gamble</td>
<td>Ethel Cormier</td>
<td>Director, Research, Cincinnati, USA</td>
</tr>
<tr>
<td></td>
<td>Haile Mehanbho</td>
<td>Research Fellow, Cincinnati, USA</td>
</tr>
<tr>
<td>Promasidor, Kenya</td>
<td>Kevin Boekenstein</td>
<td>Managing Director, Nairobi</td>
</tr>
<tr>
<td>Rudolph Lohmann GmbH KG</td>
<td>Christoph Krone</td>
<td>Head, Business Development and Sales, Emmerthal, Germany</td>
</tr>
<tr>
<td>Salt Institute, USA</td>
<td>Richard Hanneman</td>
<td>President, Alexandria, USA</td>
</tr>
<tr>
<td>Seaboard Corporation</td>
<td>Ralph L. Moss</td>
<td>Vice President, Governmental Affairs, Washington DC</td>
</tr>
<tr>
<td>Société nationale de commercialisation des oléagineux du Sénégal (Sonacos), Sénégal</td>
<td>Mbaye Diagne</td>
<td>Deputy CEO, Dakar</td>
</tr>
<tr>
<td>Tetra Pak</td>
<td>Ulla Holm</td>
<td>Global Director, Food for Development Office, Stockholm</td>
</tr>
<tr>
<td>Tetra Pak, South Africa</td>
<td>Bjorn Wille</td>
<td>Food for Development Africa Program, Director, Pinetown, South Africa</td>
</tr>
<tr>
<td>The Solae Company, South Africa</td>
<td>Kobus de Klerk</td>
<td>Director, Sub-Saharan Africa Region, Johannesburg</td>
</tr>
<tr>
<td>Unilever Food and Health Research Institute</td>
<td>Marti van Lier</td>
<td>External Relations Manager—Health and Nutrition, Vlaardingen, The Netherlands</td>
</tr>
<tr>
<td></td>
<td>Paulus Verschuren</td>
<td>Director, External Relations, Vlaardingen, The Netherlands</td>
</tr>
<tr>
<td>Visao Sustentavel, Brazil</td>
<td>Jose Paschowitch</td>
<td>Executive Director, Sao Paulo</td>
</tr>
<tr>
<td>Vita Foods, Zimbabwe</td>
<td>Paul Fernandes</td>
<td>Owner, Harare</td>
</tr>
</tbody>
</table>
## Universities, CDC and Private Consultants

<table>
<thead>
<tr>
<th>Institution</th>
<th>Name</th>
<th>Role and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston College</td>
<td>Cutberto Garza</td>
<td>Coordinator, UNU Food and Nutrition Programme and Academic Vice President, Boston College, USA</td>
</tr>
<tr>
<td>Cornell University</td>
<td>Michael Latham</td>
<td>Professor Emeritus, Nutritional Sciences, Ithaca, NY</td>
</tr>
<tr>
<td>Emory University</td>
<td>Karen Bell</td>
<td>Senior Faculty Associate, Rollins School of Public Health, Atlanta</td>
</tr>
<tr>
<td></td>
<td>Glen Maberly</td>
<td>Professor, Rollins School of Public Health, Atlanta</td>
</tr>
<tr>
<td></td>
<td>Godfrey Oakley</td>
<td>Professor, Folic Acid Advisory Center, Rollins School of Public Health, Atlanta</td>
</tr>
<tr>
<td>Harvard University</td>
<td>Tamara Bekefi</td>
<td>Manager, Business and International Development Research, Center for Business and Government, John F. Kennedy School of Government, Cambridge</td>
</tr>
<tr>
<td></td>
<td>Jane Nelson</td>
<td>Senior Fellow and Director, Corporate Social Responsibility Initiative, John F. Kennedy School of Government, Cambridge</td>
</tr>
<tr>
<td>Johns Hopkins University</td>
<td>Alfred Sommer</td>
<td>Dean, Bloomberg School of Public Health, Baltimore</td>
</tr>
<tr>
<td></td>
<td>Keith West</td>
<td>Professor, International Health, Center for Human Nutrition, Bloomberg School of Public Health, Baltimore</td>
</tr>
<tr>
<td></td>
<td>Richard Hurrell</td>
<td>Professor of Human Nutrition, Institute of Food Science and Nutrition, Swiss Federal Institute of Technology, Zurich</td>
</tr>
<tr>
<td>Tufts University</td>
<td>Jim Levinson</td>
<td>Director, International Food and Nutrition Center, Medford, Mass.</td>
</tr>
<tr>
<td></td>
<td>Patrick Webb</td>
<td>Dean for Academic Affairs, Friedman School of Nutrition Science and Policy, Medford, Mass.</td>
</tr>
<tr>
<td>University of California, Davis</td>
<td>Lindsay Allen</td>
<td>Director and Professor, USDA ARS Western Human Nutrition Research Center, Davis, CA</td>
</tr>
<tr>
<td></td>
<td>Kenneth Brown</td>
<td>Professor, Department of Nutrition; Director, Program in International Nutrition, Davis, CA</td>
</tr>
<tr>
<td>University of Toronto</td>
<td>Stanley Ztloklin</td>
<td>Director, Sprinkles Global Health Initiative (SGHI), Professor, Paediatrics, Hospital for Sick Children, Toronto</td>
</tr>
<tr>
<td>University of Washington</td>
<td>Jonathan Gorstein</td>
<td>Director, International Health Program PCMI, School of Public Health and Community Medicine, Seattle, WA</td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention (CDC)</td>
<td>Ibrahim Parvanta</td>
<td>Director, IMMPACT Program, Division of Nutrition and Physical Activity, Atlanta, GA</td>
</tr>
<tr>
<td>Private Consultants</td>
<td>Milla McLachlan</td>
<td>Washington DC</td>
</tr>
<tr>
<td></td>
<td>Peter Ranum</td>
<td>Tuscon, AR</td>
</tr>
</tbody>
</table>
# NETWORKS AND ASSOCIATIONS

<table>
<thead>
<tr>
<th>Network/Group</th>
<th>Coordinator/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flour Fortification Initiative</td>
<td>Glen Maberly Coordinator, See under universities above</td>
</tr>
<tr>
<td></td>
<td>Peter Hindle Senior Advisor to FFI, UK</td>
</tr>
<tr>
<td>Health Metrics Network</td>
<td>Carla AbouZahr Interim Executive Secretary Geneva</td>
</tr>
<tr>
<td>International Council for Control of Iodine Deficiency Disorders (ICCIDD)</td>
<td>David Haxton Executive Director, Greensboro, NC</td>
</tr>
<tr>
<td>International Nutritional Anemia Consultative Group (INACG)</td>
<td>Lena Davidsson Chair, See under IAEA above</td>
</tr>
<tr>
<td>International Union of Nutritional Sciences (IUNS)</td>
<td>Ricardo Uauy President Santiago</td>
</tr>
<tr>
<td>International Vitamin A Consultative Group (IVACG)</td>
<td>Alfred Sommer Chair See under universities above</td>
</tr>
<tr>
<td>International Zinc Nutrition Consultative Group (IZiNGC)</td>
<td>Kenneth H. Brown Chair See under universities above</td>
</tr>
<tr>
<td>Micronutrient Forum</td>
<td>Alfred Sommer Chair See under universities above</td>
</tr>
<tr>
<td>Network for Sustained Elimination of Iodine Deficiency</td>
<td>Juliawati Untoro Secretary, Ottawa</td>
</tr>
</tbody>
</table>

# FINANCIAL INSTITUTIONS

<table>
<thead>
<tr>
<th>Institution</th>
<th>Principal/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Development Bank</td>
<td>Patience Kuruneri Principal Health Sector Specialist, Tunis, Tunisia</td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>Rie Hiroka Senior Social Sectors Specialist, Manila, Philippines</td>
</tr>
<tr>
<td></td>
<td>Rustam Muzafarov Japanese Fund for Poverty Reduction Projects 9005/9052, Regional Coordinator</td>
</tr>
<tr>
<td>Development Bank of South Africa</td>
<td>Admassu Tadesse Head, Corporate Strategy, Midrand</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>Alfredo Solari Senior Health Advisor, Social Development Division, Washington, DC</td>
</tr>
<tr>
<td>United Nations International Fund for Agricultural Development</td>
<td>Sean Kennedy Human Health and Nutrition, Technical Advisory Division, Rome</td>
</tr>
<tr>
<td></td>
<td>Amanda Pingree Private Sector and Foundations Coordinator, Rome</td>
</tr>
<tr>
<td>World Bank</td>
<td>Harold Alderman Lead Human Development Economist Washington DC</td>
</tr>
<tr>
<td></td>
<td>Kei Kawabata Health, Nutrition and Population Sector Manager, Human Development Network Washington DC</td>
</tr>
<tr>
<td></td>
<td>Meera Shekar Senior Nutrition Specialist, Human Development Network Washington DC</td>
</tr>
<tr>
<td>Organization</td>
<td>Name</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Bill and Melinda Gates Foundation</td>
<td>David Fleming</td>
</tr>
<tr>
<td></td>
<td>Katharine Kreis</td>
</tr>
<tr>
<td></td>
<td>Sally Stansfield</td>
</tr>
<tr>
<td>Rockefeller Foundation</td>
<td>Akin Adesina</td>
</tr>
<tr>
<td></td>
<td>Derek Yach</td>
</tr>
<tr>
<td>Canadian International Development Agency</td>
<td>Ernest Loensohn</td>
</tr>
<tr>
<td></td>
<td>Kenneth Porter</td>
</tr>
<tr>
<td>Denmark Ministry of Foreign Affairs</td>
<td>Thea Christiansen</td>
</tr>
<tr>
<td></td>
<td>Jorn Heldrup</td>
</tr>
<tr>
<td></td>
<td>Lise Kaalund-Jorgensen</td>
</tr>
<tr>
<td>Germany</td>
<td>Marlis Luidecke</td>
</tr>
<tr>
<td>Japan International Cooperation Agency</td>
<td>Yojiro Ishii</td>
</tr>
<tr>
<td></td>
<td>Seiji Kojima</td>
</tr>
<tr>
<td>Japan Ministry of Foreign Affairs</td>
<td>Kazuo Kodama</td>
</tr>
<tr>
<td>Netherlands Ministry of Foreign Affairs</td>
<td>Rob Visser</td>
</tr>
<tr>
<td>Swedish International Development Agency</td>
<td>Anders Molin</td>
</tr>
<tr>
<td>United Kingdom Department for International Development</td>
<td>Stewart Tyson</td>
</tr>
<tr>
<td>United States Agency for International Development</td>
<td>Barbara Addy</td>
</tr>
<tr>
<td>Name</td>
<td>Title and Organization</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Frances Davidson</td>
<td>Global Health Bureau, Office of Health, Infectious Diseases and Nutrition, Washington DC</td>
</tr>
<tr>
<td>Dan Runde</td>
<td>Director, Global Health Alliances, Washington DC</td>
</tr>
<tr>
<td>Emily Wainright</td>
<td>Micronutrient Advisor, Nutrition Division, Bureau for Global Health, Office of Health, Infectious Diseases and Nutrition, Washington DC</td>
</tr>
<tr>
<td>Michael Zeilinger</td>
<td>Chief, Nutrition Division, Bureau for Global Health, Office of Health, Infectious Diseases and Nutrition, Washington DC</td>
</tr>
</tbody>
</table>
## Annex 2
### Interview Questions

<table>
<thead>
<tr>
<th>SECTION</th>
<th>QUESTION</th>
<th>QUESTION NO. BY INTERVIEW GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>What is your own role and experience in the micronutrient sector [food fortification/ supplementation/ food-based approaches]?</td>
<td>All—1</td>
</tr>
<tr>
<td></td>
<td>Is there a National Plan or government policies in place to combat vitamin and mineral deficiencies?</td>
<td>G-2</td>
</tr>
<tr>
<td></td>
<td>What are the main government programmes in your country to combat vitamin and mineral deficiencies; including:</td>
<td>G-3</td>
</tr>
<tr>
<td></td>
<td>• supplementation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• food fortification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• food-based approaches (e.g. improving peoples’ diets; home and school gardens; food support programmes for high risk groups etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What is the role of business/industry in any of these programmes?</td>
<td>G-4</td>
</tr>
<tr>
<td></td>
<td>How do you reach the poorest of the poor through these programmes?</td>
<td>G-5</td>
</tr>
<tr>
<td></td>
<td>What foods are being fortified in your country and are these under mandatory or voluntary legislation?</td>
<td>G-6</td>
</tr>
<tr>
<td></td>
<td>Does your organization track its support to either micronutrient or nutrition programs separately? If so, what is the approximate scale of your support?</td>
<td>D-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F-2</td>
</tr>
<tr>
<td></td>
<td>What are the main external and internal obstacles that your Company/Association faces in seeking to enter developing country markets that will need to be factored into any Global Strategy?</td>
<td>PS-2</td>
</tr>
<tr>
<td></td>
<td>What are the main obstacles to achieving the elimination of vitamin and mineral deficiencies in your country by 2015?</td>
<td>G-7</td>
</tr>
<tr>
<td>Global Strategy</td>
<td>Do you believe that a new global strategy is needed for the micronutrient sector? If so, what should be the goal to be reached by 2015?</td>
<td>R-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PS-3</td>
</tr>
<tr>
<td></td>
<td>Do you believe that a new global strategy is needed for the micronutrient sector? From an investment [donor] perspective, what do you see as its potential ‘value-added’?</td>
<td>NGO-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IO-4</td>
</tr>
<tr>
<td></td>
<td>What comments do you have on the proposed scope of the Global Strategy?</td>
<td>R-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NGO-3</td>
</tr>
<tr>
<td></td>
<td>What do you see as the main challenges to implementing a successful Global Strategy? Are there any immediate problems that need to be solved first?</td>
<td>R-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NGO-4</td>
</tr>
</tbody>
</table>

---

D = Donor; F = Financial Institution; IO = International Organization; NGO = Nongovernmental Organization; PS = Private Sector Companies/Associations; R = Research Organizations; G = National Government

---
<table>
<thead>
<tr>
<th>SECTION</th>
<th>QUESTION</th>
<th>QUESTION NO. BY INTERVIEW GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Strategy</td>
<td>How do you see the proposed Global Strategy linking to your own agency programs or other existing multi-agency strategies for micronutrients?</td>
<td>IO-5</td>
</tr>
<tr>
<td></td>
<td>How do you see the proposed Global Strategy linking to your own organizational strategy for micronutrients?</td>
<td>NGO-5</td>
</tr>
<tr>
<td></td>
<td>How could the proposed Global Micronutrient Strategy best support your national efforts to reduce vitamin and mineral deficiencies?</td>
<td>G-8</td>
</tr>
<tr>
<td></td>
<td>What kinds of contributions could your organization make to implement a Global Strategy on Micronutrient Malnutrition?</td>
<td>NGO-7 IO-6</td>
</tr>
<tr>
<td></td>
<td>What kind of contributions (e.g. innovations, new products, services, technical support) could your Company/Association make to the implementation of a new Global Strategy?</td>
<td>PS-5</td>
</tr>
<tr>
<td></td>
<td>Do you think that there is a business case to be made for providing micronutrients to the poor? Can the double bottom line of corporate social responsibility and for-profit activities be achieved?</td>
<td>PS-6</td>
</tr>
<tr>
<td></td>
<td>If it were up to you, where would you invest any additional resources that the Global Strategy managed to raise?</td>
<td>D-5 NGO-7 R-5</td>
</tr>
<tr>
<td></td>
<td>If it were up to you, where would you invest any additional resources that the Global Strategy managed to raise? What are the key research areas and innovations for early investment?</td>
<td>D-7 F-6</td>
</tr>
<tr>
<td></td>
<td>How would any proposal on micronutrient malnutrition have to be framed or structured to best link it into your own programming framework?</td>
<td>D-6 NGO-8 D-8 F-7 PS-7 IO-8</td>
</tr>
<tr>
<td>Global Alliance</td>
<td>What advice do you have for making alliances involving both public and private sectors work successfully?</td>
<td>R-6 NGO-8 D-8 F-7 PS-7 IO-8</td>
</tr>
<tr>
<td></td>
<td>What would be your expectations for the role of the private sector in implementing the Strategy?</td>
<td>R-7 NGO-9 IO-9</td>
</tr>
<tr>
<td></td>
<td>Will be obtained through five other questions for the private sector</td>
<td>PS6,8,9,10</td>
</tr>
<tr>
<td></td>
<td>What incentives or conditions would your organization need to join in a Global Alliance that would oversee the Global Strategy for micronutrient malnutrition? What role would you expect to play?</td>
<td>PS-8 NGO-10 IO-10</td>
</tr>
<tr>
<td>SECTION</td>
<td>QUESTION</td>
<td>QUESTION NO. BY INTERVIEW GROUP</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Global Alliance</td>
<td>Would your organization consider joining a donor partnership to support a Global Strategy?</td>
<td>D-9 F-8</td>
</tr>
<tr>
<td></td>
<td>Would your organization be interested in participating in a possible donor meeting in 2006 to be hosted by the Gates Foundation? If so, who should be invited?</td>
<td>D-10 F-9</td>
</tr>
<tr>
<td>Country Implementation</td>
<td>What suggestions do you have about how to achieve more harmonization between agencies and shared ownership at country level?</td>
<td>R-9 NGO-11 IO-11</td>
</tr>
<tr>
<td></td>
<td>What is your advice on how to make coordination work most effectively at national and sub-national levels within your country?</td>
<td>G-9</td>
</tr>
<tr>
<td></td>
<td>What criteria should guide the selection of priority countries for action within the Global Strategy?</td>
<td>R-10 D-6 NGO-12 IO-12</td>
</tr>
<tr>
<td></td>
<td>If your institution were to invest in it, what criteria should guide the selection of priority countries for action within the Global Strategy?</td>
<td>F-5</td>
</tr>
<tr>
<td></td>
<td>In which developing countries is your Company/Association/Organization positioned to play an active role in the Global Strategy?</td>
<td>PS-9</td>
</tr>
<tr>
<td></td>
<td>What particular market segments are you targeting in those countries? Do you have a specific approach to reach the groups most ‘at risk’ from micronutrient malnutrition?</td>
<td>PS-10</td>
</tr>
<tr>
<td></td>
<td>What has been your experience of global health initiatives? What have been some of the positive and negative impacts?</td>
<td>G-10</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Is there anything else that you would like to tell us? Can you suggest anyone else whom we should interview? Are there any key documents that you would recommend to us?</td>
<td>All</td>
</tr>
</tbody>
</table>