



United Nations
System

Standing
Committee on
Nutrition

SCN NEWS

No 37 early-2009 ISSN 1564 - 3743

Landscape Analysis

**on countries' readiness to
accelerate action in nutrition**

In this issue:

Feature papers on the
Landscape Analysis

Special feature:
Impact of High Food Prices
on Nutrition

Programme News

Speaker's Corner

Publications

Bulletin Board



SCN NEWS provides information on issues of importance and sharing of experiences in the field of international nutrition. All manuscripts submitted for consideration are peer-reviewed, although publication is not guaranteed. Overall editorial control is retained by the SCN Secretariat. Every effort is made to ascertain the validity of the information contained in SCN publications. Contributing authors are responsible for the accuracy of references. Manuscript guidelines are available at www.unscn.org. Items published by the SCN Secretariat do not imply endorsement of views given, nor necessarily the official positions taken by the SCN and its member agencies. The status of quotes and other material is generally indicated in the text and/or sources.

All links to websites and online information in this publication were accessed in June and July 2008, unless otherwise indicated.

SCN NEWS is issued twice a year by the United Nations System SCN. Your contributions to future issues are most welcome; please send these to scn@who.int

Readers are encouraged to review, abstract, reproduce or translate this document in part or in whole—but please attribute to the SCN.

If you wish to receive additional copies of **SCN NEWS**, to be added to or removed from our Emailing list, or would like to suggest other names to be added to our distribution list, please - send an email to scn@who.int - write to us at

SCN c/o WHO, 20 Avenue Appia,
CH 1211 Geneva 27, Switzerland
- send a fax to +41-22-798 88 91
- or submit a publication request form at www.unscn.org

This issue of **SCN NEWS** was edited by SCN News Editor Kaia Engesveen, with assistance from Lea von Moos (Swiss Federal Institute of Technology and intern at the SCN)

SCN NEWS
is printed by the
Lavenham Press
United Kingdom

ISSN 1564-3743

CONTENTS:

CHAIR'S ROUND-UP	<u>1</u>
FEATURES: LANDSCAPE ANALYSIS ON COUNTRIES' READINESS TO ACCELERATE ACTION IN NUTRITION	<u>3</u>
• Chizuru Nishida et al—Landscape Analysis on countries' readiness to accelerate action in nutrition	<u>4</u>
• Kaia Engesveen et al—Assessing countries' commitment to accelerate nutrition action demonstrated in PRSPs, UNDAFs and through nutrition governance	<u>10</u>
• Mickey Chopra et al—Assessing countries' readiness: Methodology for in-depth country assessment	<u>17</u>
• Sylvestre Tapsoba—Towards Nutrition MDGs in Burkina Faso: Will capacity to act follow the commitment?	<u>23</u>
• Mary Brantuo et al—Landscape Analysis of readiness to accelerate the reduction of maternal and child undernutrition in Ghana	<u>31</u>
• Juan Rodolfo Aguilar et al—Landscape Analysis on countries' readiness to accelerate actions to reduce maternal and child chronic malnutrition: The Guatemala assessment	<u>38</u>
• Ambinintsoa Raveloharison and Simon Christoph Rakotonirina—Landscape Analysis on countries' readiness to accelerate action to reduce maternal and child undernutrition: the Madagascar assessment	<u>43</u>
• Chessa Lutter et al—Landscape Analysis on countries' readiness to accelerate action to reduce maternal and child undernutrition: The Peru assessment	<u>49</u>
• Lynn Moeng—Landscape Analysis on countries' readiness to accelerate action to reduce maternal and child undernutrition in South Africa: Nationwide country assessment	<u>55</u>
• Jonathan Siekmann et al—Landscape Analysis on Readiness to Accelerate Action in Nutrition: Development of Nutrition Landscape Tracking System (NLTS).....	<u>56</u>
SPECIAL FEATURE: IMPACT OF HIGH FOOD PRICES ON NUTRITION	
• SCN Side Event at the 34th Session of the Committee on World Food Security—Impact of High Food Prices on Nutrition.....	<u>59</u>
• Roger Shrimpton et al—The Impact of High Food Prices on Maternal and Child Nutrition.....	<u>60</u>
PROGRAMME NEWS	
• REACH—Joint letter from FAO, WHO, UNICEF and WFP Heads of Agencies.....	<u>69</u>
• Fortify West Africa: Millers commit to fight vitamin and mineral deficiencies.....	<u>69</u>
• WHO—Consultation on feeding of children 6-23 months of age.....	<u>70</u>
• WHO—Consultation on the Dietary Management of Moderate Malnutrition.....	<u>70</u>
• IFPRI—Parallel Session at Global Ministerial Forum on Research for Health.....	<u>71</u>
• SCN—"One-Stop-Shop" Food and Nutrition Resource Portal	<u>72</u>
• YPHN—Young Public Health Nutrition Network.....	<u>72</u>
SPEAKER'S CORNER	
• Carlos Monteiro—The spectacular fall of child undernutrition in Brazil	<u>73</u>
• Robert Black et al—Response to commentary to the Lancet Nutrition Series	<u>74</u>
OBITUARIES	
• Thomas Marchione	<u>75</u>
• Lucie Malaba	<u>76</u>
PUBLICATIONS	<u>77</u>
BULLETIN BOARD	<u>81</u>

Chair's Round-Up

Dear SCN News reader,

As SCN Chair since December 2008, it is my pleasure to get this chance to write to all of you - the 7,500 dedicated *SCN News* readers across the globe. The SCN provides a unique mechanism for linking nutrition, food, agriculture and health, with a structure that permits UN agencies and partners to work together to reinstall nutrition at the top of the international agenda. This is a huge task which depends on the support of everyone at all levels and in all regions and countries. I look forward to working with the SCN network in our common endeavour to build a world free from hunger and malnutrition.

I would like to take this opportunity to extend, on behalf of all of you, our thanks to the former SCN Chair Executive Director of UNICEF Ms Ann Veneman, for her able guidance, leadership and support throughout the period of her chairmanship and her dedication to the noble cause of eliminating malnutrition in all its forms from the face of the earth.

This issue of *SCN News* focuses on the Landscape Analysis on Readiness to Accelerate Nutrition Action with Chizuru Nishida of WHO as the Special Guest Editor. It describes the country assessments undertaken in five countries that are part of the 36 high-burden countries identified by the Lancet Nutrition Series. The Landscape Analysis country assessment is led by the countries and facilitated by the partner agencies of the SCN constituencies, including WHO, UNICEF, FAO, WFP, IFAD, Helen Keller International, GAIN, and the Medical Research Council of South Africa, supported by the Bill and Melinda Gates Foundation. The Landscape Analysis is an important follow-up to the Lancet Nutrition Series in order to understand how existing commitment and capacity at the country level can be utilized to scale-up the evidence-based nutrition interventions and to further strengthen weak areas. The outcome of the Landscape Analysis will help the development or the update of country action plans and will facilitate the mobilization of resources for implementation. We hope that the agencies participating in the SCN will look at the process of the Landscape Analysis to be inspired in their approach to programme development, and to draw on the specific results achieved in this first group of countries in setting their action priorities.

This is a critical time for nutrition. With an increasing number of hungry people in the world, it is timely to link nutrition concerns to food security measures thereby creating an opportunity for poverty eradication. It is paramount to address the double burden of malnutrition that is hitting developing countries including its intergenerational aspects. The global financial crisis and recent high volatility for food and fuel prices present new opportunities for increased attention to nutrition. The SCN should take a lead in bringing nutrition into the discussions on the financial crisis, especially how it impacts on nutrition among vulnerable people including poor people and female-headed households. This *SCN News* presents a background paper on the impact of the high food prices on maternal and child nutrition developed by the SCN Secretariat in consultation with the Steering Committee and FAO for an SCN Side Event at the 34th Session of the Committee on World Food Security (CFS) on 14 October 2008 at FAO, Rome.

Alexander Julius Müller, Assistant Director-General, Natural Resources Management and Environment Department of FAO, became the 10th SCN Chair on 19 December 2008, when the SCN Steering Committee welcomed and unanimously agreed to his appointment.

As Assistant Director-General, Natural Resources Management and Environment Department from April 2006 to date, Mr Müller has emphasized the role of the food and agriculture sector in fostering sustainable livelihoods for food security and good nutrition. In the period June 2006 through April 2007, he was simultaneously Officer-in-Charge of the Agriculture and Consumer Protection Department, where the Nutrition and Consumer Protection Division is housed.

Before joining FAO, Mr Müller has had an outstanding career in the German government. From 2001 through 2005 he was State Secretary of the German Federal Ministry of Consumer Protection, Food and Agriculture. In the period 1995-2001 he was Member of Parliament in Hessen, Chairman of the Caucus of the Green Party, and Member of the Committees of Environmental Affairs, of Finance and for New Media in Wiesbaden. From 1992 to 1995, he was State Secretary in the Hessian Ministry of Youth, Family and Health Affairs in Wiesbaden.

As the new Chair of the SCN, I am committed to raising the political profile of nutrition. The nutrition community has the tools, the knowledge and the energy to be part of the solution. The SCN should lead the coalition for change. The SCN's unique tripartite structure and its long existence as a global policy harmonization mechanism in nutrition, creates a special opportunity to ensure a coordinated response to the malnutrition problem through effectively linking agriculture and health for good nutrition and the UN agencies and its partners to work together to reinstall nutrition at the top of the international agenda. It is therefore crucial that the SCN links officially to the High Level Task Force on Global Food Security Crisis as well as to the new Global Partnership for Agriculture, Food Security and Nutrition to be established following the high level meeting on Food Security for All in Madrid 26-27 January. The SCN also raised these points at a High Level Nutrition Seminar on 11 February in London convened by Save the Children to discuss the food crisis, the soaring food prices and the international nutrition architecture.

As many of you may know, the SCN will not hold a full-fledged annual Session in 2009. However, a smaller SCN meeting in Brussels is being planned in September, hosted by The European Commission in cooperation with Save the Children, The Institute of Development Studies and Institut de Recherche pour le Développement. Moreover, a one day meeting with technical discussions on policy and programme will be held on 10 October in Bangkok and I hope that many of you will be able to join. The Secretariat will keep you informed on how to register for these meetings through the SCN Email Update.* This year also sees a number of other meeting opportunities, such as the International Congress on Nutrition in Bangkok and the Micronutrient Forum in Beijing. I am confident that the SCN network will use all of these opportunities to advocate for partner agencies to work together to advance the nutrition agenda.

The SCN Secretariat has seen a series of change in staffing since the last *SCN News*, with Roger Shrimpton retiring from his post as technical Secretary on 31 December 2008 and the NICS Coordinator since 2002 Claudine Prudhon being promoted to the Health and Nutrition Tracking System based in WHO on 1 November 2008. I would like to extend my appreciation to Claudine for the professionalism and the commitment she has shown in her work, and wish her well in her new position. Further, I would like to express on your behalf our thanks for the hard work, dedication and passion that Roger Shrimpton has brought to the role of technical Secretary of the SCN for the past four and a half years. As Secretary, Roger has worked with the many constituencies that make up the SCN and he has ensured that the voices of all these members were heard often amidst divergent and challenging trends. He has enabled the SCN to seek support where little existed and to pursue important opportunities to increase the visibility and output of the SCN. He also endeavoured in enlisting the UN Agencies to see nutrition more as a whole than a specific agency agenda. To his credit, he kept together the many who would see nutrition in very different ways. He has championed those members that make up Civil Society thus facilitating the SCN to engage new and exciting developments in nutrition. With this change have come many challenges. Roger has continued to stand up to these challenges. We will be seeking Roger's replacement in the coming months and will keep you informed of the process. I would also like to welcome Marzella Wüstefeld as the new NICS Coordinator starting on 1 May. In the period 1 January to 1 May, the SCN News Editor Kaia Engesveen has been the only technical staff in the Secretariat, which is why this issue of the *SCN News* is being published early 2009 instead of late 2008.

We also note with regret the passing away of a long-time champion for nutrition Tom Marchione, who was a great supporter of the SCN and through his enthusiasm influenced much of the support provided to it from USAID. This *SCN News* includes a memorial note for Tom that has been contributed by Ted Greiner. We also include a memorial note for Associate Professor Lucie Malaba of the University of Zimbabwe, whose unfortunate death will be a loss for Zimbabwe and public nutrition in Africa.

On 31 December 2009, the SCN moved web-server from the UN System to an independent server at www.unscn.org. While the website still looks the same, an upgrade is currently being undertaken by the Secretariat. The new SCN website will feature the *SCN "One-Stop-Shop" Food and Nutrition Resource Portal*, including a *Nutrition in Emergencies Repository* and host the Global Nutrition Cluster's Harmonized Training Package, which will contain resources and information from all agencies and partners participating in all constituencies of the SCN. We will keep you informed through the SCN Email Update* on the date of the launch of the new website and resource portal.

* Sign up for the SCN Email Update at scn@who.int

Alexander Müller

SCN Chair

Features

Landscape Analysis on countries' readiness to accelerate action in nutrition

This *SCN News* features papers that describe the methodology development, country assessments and products of an interagency initiative on the Landscape Analysis of Countries' Readiness to Accelerate Action in Nutrition, with Chizuru Nishida of WHO as the Special Guest Editor.

Nishida, Shrimpton and Darnton-Hill ([p.4](#)) provide an **overview of the project design and implementation process** since the first Partner Agency meeting in Geneva in November 2007, where experts and representatives of SCN Steering Committee member agencies agreed on the process forward, including the country assessments. They describe the development of indicators for countries' "readiness to accelerate action in nutrition", which comprises not only the nature and extent of nutrition problems and contextual factors, but above all "commitment" and "capacity" to act at scale.

Interagency Partners at the 2007 Geneva meeting discussed how such commitment and capacity could be assessed, through data and documentation publicly available at the global level and through rapid assessments in countries. Engesveen, Nishida, Prudhon and Shrimpton ([p.10](#)) describe three **methodologies for assessing commitment** to nutrition in countries, through looking at the nutrition components in the Poverty Reduction Strategy Paper and United Nations Development Assistance Framework documents and through indicators for nutrition governance. For the country level assessments, Chopra, Pelletier, Witten and Dieterich ([p.17](#)), lay out the **methodologies for in-depth country assessments**, describe the data collection tools and present a detailed analytical framework with indicators for assessing commitment and capacity in countries. Landscape Analysis Country Assessments have so far been carried out in five countries in 2008, with more countries following the process in 2009.

Tapsoba ([p.23](#)) reflects on willingness and ability to scale-up nutrition actions in **Burkina Faso**. He envisions the need for a road map to guide the action of all partners, concentrating on four elements: prevention, multisectoriality, national leadership and community involvement. Since the consensus meeting on 16 May 2008 where no less than 52 stakeholders participated, Burkina Faso has already started implementing recommendations from the Landscape Analysis.

Brantuo, Okwabi, Adu-Afuawuah, Agyepong, Attafuah, Brew, Gomez, Dawson and Ashong ([p.31](#)) report that whereas most of the findings and recommendations had been made previously in **Ghana**, the notable difference was that they were agreed by all key stakeholders at the consensus meeting. Ghana is currently initiating the process of developing a Nutrition Policy, where results of the Landscape Analysis will provide inputs to process.

Aguilar, Alvarez, Lutter and Fischer ([p.38](#)) describe the country assessment in **Guatemala**, which indeed was found to have the willingness, potential and assets to scale up in the fight against malnutrition. This will be accomplished by implementing the National Strategy for the Reduction of Chronic Malnutrition, with the support of the UN System, bilateral agencies, NGOs, and multilateral agencies.

Raveloharison and Rakotonirina ([p.43](#)) report that most of the Landscape Analysis recommendations already were part of the **Madagascar** National Action Plan for Nutrition. The agreement by the Bureau Permanent for nutrition under the Prime Minister's office was therefore seen as an endorsement of the Plan. A road map will be developed towards the vision of Madagascar without Malnutrition, where the Landscape Analysis results will be an important input.

Lutter, Casanovas, Pena and Diaz ([p.49](#)) describe the country assessment in **Peru**. Peru has seen a remarkable commitment by Government and its development partners to reduce stunting. The President has made stunting reduction as the key goal of the Government's social policies. The Landscape Analysis reconfirmed stakeholders nutrition activities, provided an opportunity for self-reflection, and identified areas where current actions could be strengthened.

Moeng ([p.55](#)) describes the process and lessons learned to date in **South Africa**, which has chosen to scale-up the Landscape Analysis nation-wide in all provinces in the country. The assessment, currently ongoing, has proved to be a unique opportunity to develop the nutrition capacity in all provinces in a way that has never happened before.

In order to ensure continued monitoring of the sort of information gathered through the Landscape Analysis, WHO Department of Nutrition for Health and Development has developed the **Nutrition Landscape Tracking System** (NLTS). Siekmann, Moller and Shannon ([p.56](#)) describe how the NLTS gathers a wide range of nutrition and nutrition-related indicators from various databases and organizations in one convenient location. These data are available to users in a customized, downloadable format as well as in pre-formatted Country Profile that present a standardized collection of the most-recent key nutrition, health, and development indicators.

Landscape Analysis on countries' readiness to accelerate action in nutrition

Chizuru Nishida (WHO), Roger Shrimpton¹ (Institute of Child Health, London), Ian Darnton-Hill² (Tufts University)

Introduction

All children have the same potential, and the right, to grow and develop according to their full potential. But a third of all children (or approximately 178 million) under 5 years of age in developing countries continue to suffer from stunting, or low height for age, with all the short-term and long-term negative consequences that this implies. The unacceptably high rates of undernutrition could be rapidly eliminated if adequate and universal maternal and child nutrition could be assured.

Current global rates of progress, while positive on average, are insufficient to meet the first Millennium Development Goal (MDG1), in particular the hunger and undernutrition target, and the rates of progress need to be more than doubled in order to achieve the MDG (UN 2008a, 2008b, UNECOSOC/AU 2008). It should also be noted that large variations occur within regions with some countries actually worsening, especially in Sub-Saharan Africa, and continuing high rates in South Asia. Furthermore, not achieving the undernutrition target will negatively impact all other MDGs as well (see Box 1).

The Landscape Analysis was conceived as part of WHO's efforts to strengthen its contribution, along with Governments and other partners, toward the achievement of the MDGs. The Lancet Nutrition Series (Maternal and Child Undernutrition Study Group 2008) was published in January 2008 and provided a unique advocacy opportunity to accelerate evidence-based action in nutrition and to initiate a broader harmonization of various actors. These include UN agencies, bilateral partners, NGOs and civil society, as well as the private sector, under the leadership of national governments. In order to maximize the impact of this opportunity and to carry forward the findings of the Lancet Series to create intersectoral action for improving nutrition, the Landscape Analysis aimed to serve as a "readiness analysis" to assess countries' readiness to accelerate action in nutrition, particularly in the 36 high-burden countries³ where 90% of the world's stunted children live (Figure 1). "Readiness analysis" is frequently used in the private sector for assessing where investing resources is likely to give the greatest return and for determining how best to invest in order to yield the maximum benefits. But an analysis of readiness to act has not been systematically developed across a broad spectrum of countries in the area of food and nutrition programmes before. The Landscape Analysis therefore intended to systematically assess such readiness in these countries, not only the readiness to act, but also the readiness to change. As such, it also explores attitudes and perceptions of stakeholders, old versus new skill sets required, and existing levels of risk and insecurity, institutional cohesiveness, incentives and effective communication.

Box 1: Nutrition's contributions to the attainment of the MDGs

Goal 1: Eradicate extreme poverty and hunger

Malnutrition erodes human capital, reduces resilience to shocks and reduces productivity (impaired physical and mental capacity).

Goal 2: Achieve universal primary education Malnutrition reduces mental capacity. Malnourished children are less likely to enrol in school, or more likely to enrol later. Current hunger and malnutrition reduces school performance.

Goal 3: Promote gender equality and empower women Better-nourished girls are more likely to stay in school and to have more control over future choices.

Goal 4: Reduce child mortality Malnutrition is directly or indirectly associated with more than 50% of all child mortality. Malnutrition is the main contributor to the burden of disease in the developing world.

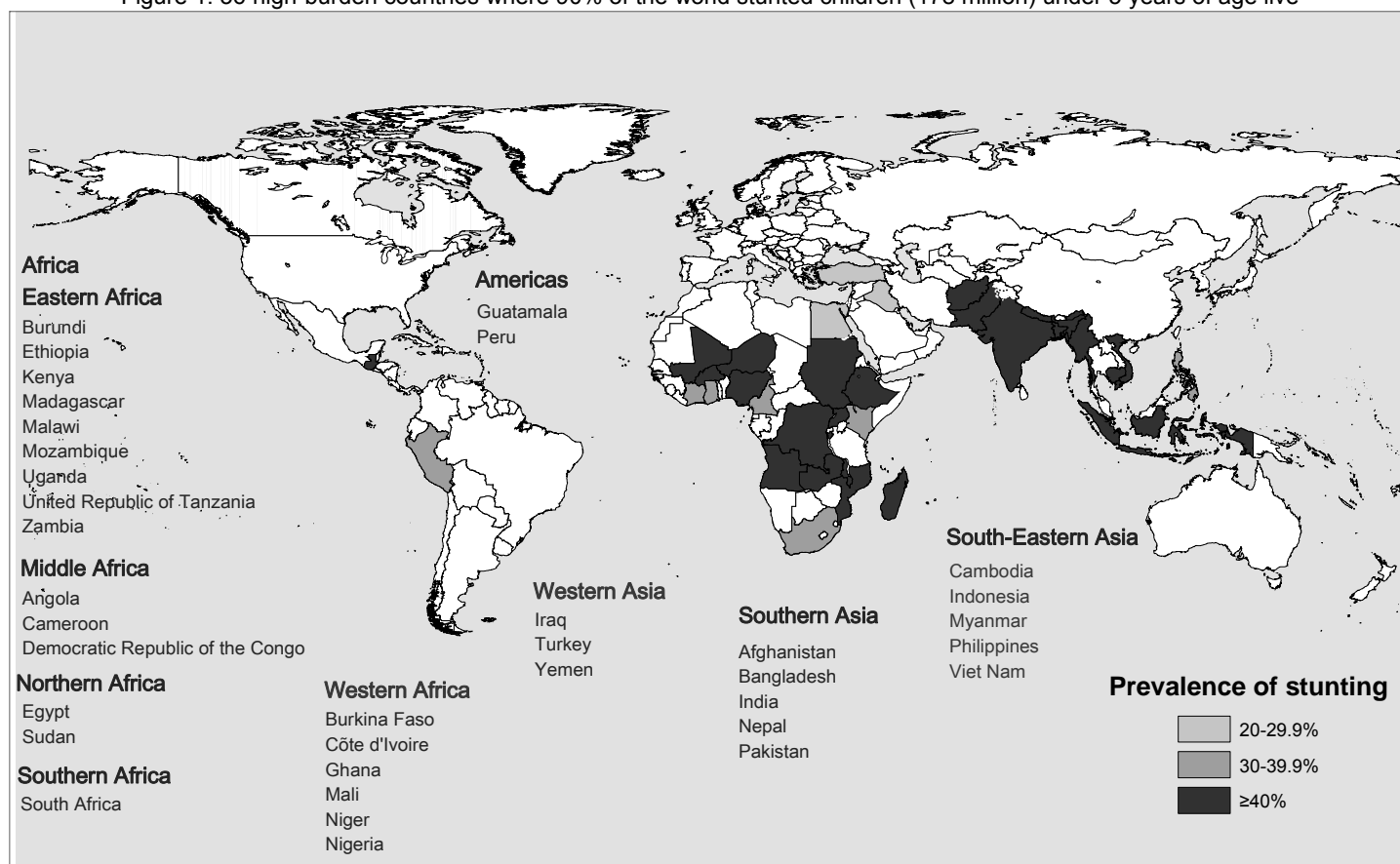
Goal 5: Improve maternal health Maternal health is compromised by an anti-female bias in allocations of food, health and care. Malnutrition is associated with most major risk factors for maternal mortality.

Goal 6: Combat HIV/AIDS, malaria, and other diseases Malnutrition hastens onset of AIDS among HIV-positive. Malnutrition weakens resistance to infections and reduces malarial survival rates.

Source: SCN (2004) 5th Report on the World Nutrition Situation: Nutrition for improved development outcomes

1. Former Secretary of the SCN; 2. Former Special Adviser to the UNICEF Executive Director on Ending Child Hunger & Undernutrition and Chair of the Landscape Analysis Partner Agencies; 3. The following are 36 high-burden countries with more than 20% stunting rates that were the focus of the Lancet Nutrition Series for investigating the effects of nutrition interventions (Bhutta et al 2008): Afghanistan, Angola, Bangladesh, Burkina Faso, Burundi, Cambodia, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, Guatemala, India, Indonesia, Iraq, Kenya, Madagascar, Malawi, Mali, Mozambique, Myanmar, Niger, Nigeria, Nepal, Pakistan, Peru, Philippines, South Africa, Sudan, United Republic of Tanzania, Uganda, Viet Nam, Yemen, Turkey, Zambia.

Figure 1: 36 high-burden countries where 90% of the world stunted children (178 million) under 5 years of age live



Despite the recognized and documented benefits of improving the nutritional status of populations, the level of commitment, as reflected in budget support and consolidated action, has been remarkably poor (Gillespie et al 2003, Sumner et al 2007). During the last 30-40 years, there have been a multitude of solemn government pledges, declarations and reaffirmations to eliminate hunger and to reduce all forms of malnutrition. But nutrition-related problems, especially in light of the recent food price crisis and the ongoing financial and economic crisis, are likely to become larger, not smaller. It was estimated that the number of food insecure people in the world rose to 963 million in 2008, compared to 923 million in 2007 (FAO 2008).

There have been a number of efforts and initiatives at international, regional and country levels to try to address this situation and to accelerate progress in improving the nutritional status of populations. However, these multiple initiatives and strategies remain inconsistent and uncoordinated, and are rarely linked or build upon previous efforts. The international nutrition system and stakeholders have been frequently characterized as disjointed and ineffective (Morris et al 2008). There is, therefore, consensus that stronger consolidated efforts for accelerating action are urgently needed.

Building on the experiences of the countries in formulating and implementing national intersectoral nutrition plans and policies developed as a follow-up to the 1992 International Conference on Nutrition (ICN), the Landscape Analysis process aims to assess existing gaps and constraints, and to identify opportunities to integrate and scale up new and existing effective intersectoral nutrition-related actions, particularly in the 36 high-burden countries mentioned above. In addition, following a more in-depth analysis through both country assessment and a desk review of existing data, the Landscape Analysis aims to work with Governments and national and international partners in the development of recommendations and an "action plan" to guide consolidated and harmonized action at the country level by all stakeholders. The process is also aimed at creating a synergy for international support and assistance by donors and other concerned agencies and partners through guidance as to not only "where best to invest", but also "how to invest" in order to accelerate action. The Landscape Analysis also establishes a baseline related to current status of nutrition and nutrition action through a nutrition tracking system, linking together existing nutrition databases within WHO, as well as linking to those in other partner agencies. It is believed that the findings of the Landscape Analysis will facilitate the identification of priority countries to accelerate

support to scale up consolidated action and contribute to the attainment of the MDGs, thereby contributing greatly to the implementation of on-going international efforts and initiatives. These include the recent World Bank-led initiative in developing A Global Action Plan for Scaling-Up Nutrition Investments, the UN Secretary-General's [High-Level Task Force on the Global Food Security Crisis](#), REACH: Ending Child Hunger and Undernutrition Initiative (REACH), the [Countdown to 2015 Initiative for Maternal, Newborn and Child Survival](#), International Health Partnership (IHP+) and the Mainstreaming Nutrition Initiative (MNI), to mention just a few.

Project design and implementation process

The methods used in the Landscape Analysis process evolved over the period of the project with inputs from the multiple actors and stakeholders involved. These inputs were provided in four major areas: 1) the overall methodology orienting the Landscape Analysis, 2) the undertaking of the Desk Review of the 36 high-burden countries, 3) the implementation of the in-depth Country Assessments in selected countries, and 4) the development of the Nutrition Landscape Tracking System (NLTS).

The nurturing of the various inputs from all partners and stakeholders to the process of guiding the Landscape Analysis, as well as the effort to keep the overall thrust consistent and pertinent, was largely carried out by a small interagency coordinating group chaired by the representative from UNICEF. This group provided oversight and discussed and reviewed the methodologies as they evolved. It was assisted by a Geneva-based "secretariat" which consisted of the WHO inter Departmental team (i.e. Nutrition, Child and Adolescent Health and Making Pregnancy Safer) and UN Standing Committee on Nutrition (SCN) Secretariat, that met weekly to review progress, discuss and exchange information, and assign tasks for the next steps. In addition, an interagency steering group of partner agencies was called on to periodically review and contribute to the continued development of the methodologies. This interagency collaboration started at the inception of the project with the Partner Agency Consultation¹ held in Geneva in November 2007, continued through email exchanges, and was further punctuated by other meetings in New York in December 2007 and at the 35th Session of SCN held in Hanoi in February 2008. Furthermore, the Landscape Analysis was a regular agenda item of monthly meetings of the SCN Steering Committee in order to ensure that this broad coalition of actors was kept abreast of developments and progress of the Landscape Analysis implementation.

Indicators of "readiness"

"Readiness" to act at scale for accelerated nutrition actions and how to measure it, was amply discussed at the Partner Agency Consultation in November 2007 (WHO 2007a). The understanding that emerged from these discussions was that there was no existing framework and that any possible framework would need to incorporate factors not usually considered in nutrition interventions such as changing behaviours. While the Consultation acknowledged the usefulness of the UNICEF Conceptual Framework (Figure 2) for orienting the categorization of indicators used to measure "readiness", it was agreed that the expression of readiness should reflect two main dimensions: 1) the immediate and underlying level factors affecting nutrition outcomes; and, 2) factors acting at the basic level of causality leading to "readiness to accelerate progress in undernutrition reduction". "Readiness" itself, in turn, would be a function of both "commitment" and "capacity". The Consultation also suggested a category of "meta-indicators" to describe general conditions and contextual factors that can influence how nutrition actions operate at the level of impact.

The Consultation, therefore, suggested that the indicators be reviewed under the following four broad categories:

1. Nature, extent and distribution of nutrition problems

This category includes nutrition problems (i.e. as manifested by nutritional outcomes), and determinants, with immediate level factors (i.e. dietary intake and disease interaction) and underlying level factors (i.e. food, health and care factors), as in the UNICEF Conceptual Framework. These indicators need to capture change over time (i.e. percentage of change in prevalence levels and trends), as well as issues of inequity (i.e.

1. The Partner Agency Consultation was participated by the representatives of concerned UN agencies, such as FAO, IFAD, UNHCR, UNICEF, UN-SCN, WFP and WHO, some bilateral agencies (i.e. Norway), NGOs (i.e. Helen Keller International), Bill & Melinda Gates Foundation, Medical Research Council of South Africa, and some international initiatives (i.e. Mainstreaming Nutrition Initiative, REACH: Ending Child Hunger and Undernutrition).

disaggregation by sex, socioeconomic status, local differences), disaggregated by geographical areas (using sub-national data, such as urban vs. rural), and possibly serve to identify so-called "hotspots", where possible (e.g. as WFP have done in their mapping exercises with countries).

2. Commitment

Commitment corresponds to countries' "**willingness to act**" at scale. This can be measured for nutrition actions in terms of concrete plans and demonstrated resource allocation, among governments as well as agencies and donors, in addition to indirect policies in other areas that might impact on nutrition such as women's education and investments in agricultural research and development. Nutrition budgets, however, are seldom explicit and this poses a challenge to understanding priority changes or tracking resource flows devoted to policies and programmes that could be expected to have an impact on the national nutrition situation.

Some examples of governmental commitment include: the existence of nutrition policies, itemized budget lines for nutrition, nutrition objectives in Poverty Reduction Strategy Papers (PRSPs), existing legislation, percentage of budget spent on health and nutrition, priority given to the nutrition sector relative to other sectors by national governments, reporting obligations to, for example, the [World Declaration and Plan of Action for Nutrition](#) adopted by the International Conference on Nutrition (ICN), the Convention on the Rights of the Child ([CRC](#)), and the International Covenant on Economic, Social and Cultural Rights ([CESCR](#)).

The paper by Engesveen, Nishida, Prudhon and Shrimpton ([p.10](#)) in this SCN News describes the development of a methodology for assessing commitment to accelerate nutrition action demonstrated in PRSP and United Nations Development Assistance Framework (UNDAF) documents and through nutrition governance.

3. Capacity

Capacity refers to countries' "**ability to act**" at scale. Some examples include resources at national level (i.e. general GDP per capita), coverage of nutrition and health programmes, the existence of sufficient health workers to ensure adequate outreach of nutrition actions during the window of growth faltering from conception to two years of age, the number of nutritionists or nutrition personnel in the Ministry of Health, their training and capacity, existence of nutrition institutions and coordination mechanisms, and training opportunities in nutrition.

4. Meta-indicators

Meta-indicators describe general conditions and contextual factors that will enable or constrain the commitment and capacity to carry out nutrition actions. Examples include governance, female education, women's status, crises (i.e. natural disasters, wars, conflicts, etc.), human development indicators/indexes, and expenditures on defence.

Implementation of the Landscape Analysis

The four broad categories of indicators described in the previous section provided the orientation for the further development of three parallel activities of the Landscape Analysis: 1) development of the Nutrition Landscape Tracking System (NLTS); 2) classification of countries according to "readiness to act" through the Desk Review; and, 3) implementation of in-depth Country Assessments. These three sets of activities were deliberately developed with different, but complementary aims and objects, recognizing that mobilizing action often requires a mixture of complementary "push" and "pull" mechanisms. The development of the NLTS, because it is more a "top-down" activity aimed at raising awareness of, and concern about, the Country Profile among country policy-makers and other stakeholders including donors, could be considered a more 'push' activity. Bringing various existing nutrition-related databases together inside WHO and also those of other partner agencies to develop NLTS should help nutrition action as a whole to be presented in a more comprehensive way. The paper by Siekmann, Moller and Shannon in this SCN News ([p.56](#)) describes in detail how the NLTS was developed, as well as the mechanism and functions.

The undertaking of the Desk Review has been aimed more at increasing international support and assistance and aims to help provide guidance on what international agencies and donors can do to help mobilize nutrition actions at scale, in particular for improving maternal and child undernutrition. The outcomes and findings of the Desk Review will be included in the overall report of the Landscape Analysis currently being prepared (WHO 2009).

The undertaking of the in-depth Country Assessments has been aimed at creating country level action, as well as providing a capacity-building opportunity for intersectoral and interagency country teams in the respective countries. Country Assessments were supported by international interagency teams of facilitators, both national and international. The development of the methods used in the Country Assessment was discussed at the technical interagency follow-up meeting hosted by UNICEF in New York in December 2007 (WHO 2007b). The meeting then agreed to develop country assessment tools based on the experiences of the project on the Prevention of Mother to Child Transmission (PMTCT) Scale-up and Pediatric Care Implementation in South Africa, led by Dr Mickey Chopra and his team from the Medical Research Council in South Africa, incorporating indicators from the Mainstreaming Nutrition Initiative (MNI) developed by Dr David Pelletier of Cornell University. Detailed discussion on the Landscape Analysis country assessment methods and tools is provided in the paper by Chopra, Pelletier, Witten and Dietrich in this same issue of the SCN News (p.17).

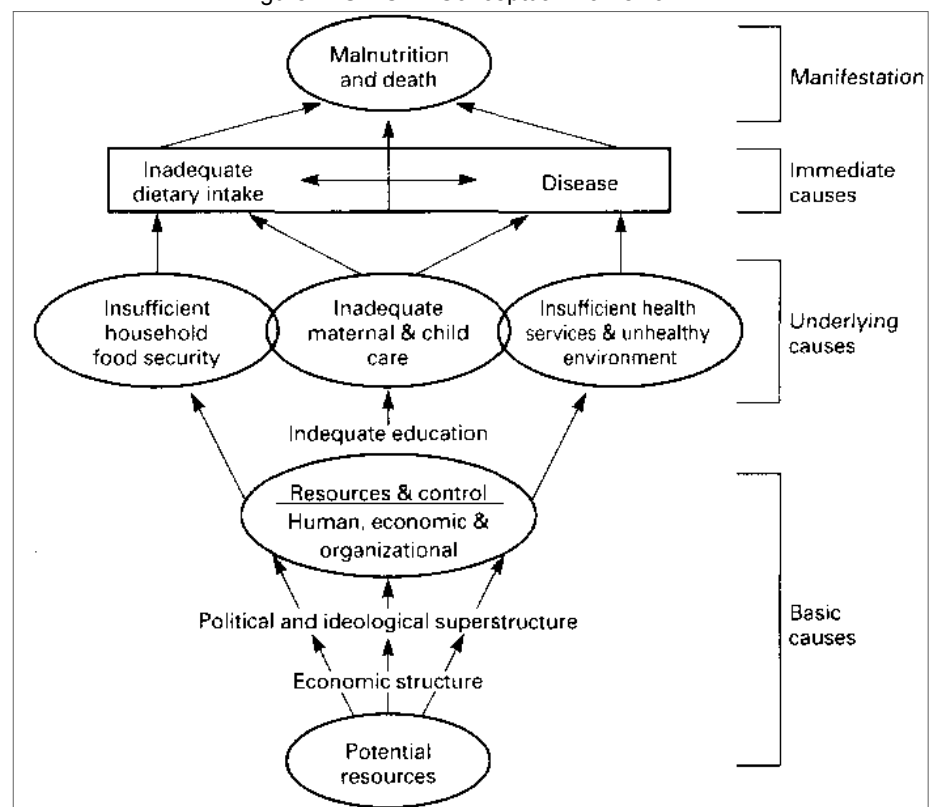
Landscape Analysis Country Assessment

The criteria for selecting countries for in-depth country assessments were agreed at the Partner Agency Consultation in November 2007 (WHO 2007a) which initially identified ten possible countries from among the 36 high-burden countries. These criteria included issues such as no security constraints (i.e. < 2 on the UN security phase scale), the countries' willingness, as well as the possibility/potential, for effecting change, as well as timeliness (i.e. existing strategic opportunities in countries), severity of the nutrition burden, existing trends and a geographical spread in the diversity of countries. A further discussion of the process and criteria for selecting possible countries was held at the technical interagency follow-up meeting in December 2007 (WHO 2007b), when it was agreed that the short list of countries to be approached would include Burkina Faso, Cameroon, Guatemala, Kenya, Madagascar, South Africa and Viet Nam.

After various consultations with possible countries and among partner agencies, the Landscape Analysis country assessment was finally undertaken in five countries (i.e. Burkina Faso, Ghana, Guatemala, Madagascar and Peru) in 2008. During the 61st World Health Assembly in May 2008, a high-level briefing meeting on the Landscape Analysis was organized at which the preliminary outcomes of the country assessments in Burkina Faso, Guatemala and Madagascar were presented and discussed with the participation of senior-level policy-makers from these countries (i.e. the Minister of Health from Burkina Faso, the Vice Minister of Health from Guatemala and the Minister of Health and the Ambassador from Madagascar), and representatives of other countries, both donor and target high-burden countries, as well as other partner agencies. This special issue of the SCN News on the Landscape Analysis on Countries' Readiness to Accelerate Action in Nutrition highlights the outcomes of the country assessments and presents the summary reports of the assessments in Burkina Faso (p.23), Ghana (p.31), Guatemala (p.38), Madagascar (p.43) and Peru (p.49).

In April 2009, Comoros undertook a country assessment and is currently in the process of preparing their country report. South Africa initiated

Figure 2: UNICEF Conceptual Framework



their country assessment in February 2009, nation-wide being implemented in all nine Provinces of the country. The South African authorities have also used this as the opportunity to build the capacities of both the national and provincial personnel in undertaking "readiness analysis" by providing training sessions for the various stages of the assessment and analysis. Moreover, they are planning to hold stakeholder meetings to review and discuss the outcomes of the assessment in each province before holding a national stakeholder meeting. They envisage this national process to lead to the development of a national nutrition strategy for South Africa. The South Africa Landscape Analysis process is summarized in this SCN News ([p.55](#)).

Preparations for a country assessment are currently underway in Timor-Leste with a facilitation by an interagency country team. Further requests and proposals for undertaking the Landscape Analysis country assessments in additional countries are being reviewed at present with concerned countries, among partner agencies as well as with interested donor countries. It is well documented that nutrition activities are under-resourced and poorly implemented in those countries with the greatest problem. Lack of coordination amongst national and international partners has similarly been well-described as a barrier to scaling-up nutrition actions. At the same time, the benefits of addressing high levels of malnutrition are clearly established, both in the short-term and in the longer term. National economic development can be greatly potentiated by reducing the burden of undernutrition in countries. It is anticipated that the Landscape Analysis Country Assessments will contribute in a tangible way to move forward and scale-up nutrition activities in those countries with the greatest burden.

Acknowledgement: *Special acknowledgement is made to the Bill & Melinda Gates Foundation for supporting the implementation of the Landscape Analysis on Countries' Readiness to Accelerate Action in Nutrition. Deep appreciations are expressed first of all to the Governments and the intersectoral/interagency country teams in respective countries who have shown the great interest in undertaking these country assessments, and also to the members of the Partner Agency Group (including UN agencies, bilateral agencies and NGOs, in particular Helen Keller International, and GAIN) as well as a number of collaborating experts who had supported and guided in various stages of the preparations and implementation of the Landscape Analysis.*

References

- Bhutta ZA, Ahmed T, Black RE, Cousens S, Dewey K, Giugliani E, Haider BA, Kirkwood B, Morris SS, Sachdev HPS and Shekar M (2008) What works? Interventions for maternal and child undernutrition and survival. *The Lancet* 371(9610):417-40. ([online](#))
- FAO (2008) *The State of food insecurity in the world 2008: High food prices and food security – threats and opportunities*. FAO, Rome. ([online](#))
- Gillespie S, McLachlan M, Shrimpton R (2003) *Combating malnutrition: Time to act*. The World Bank, Washington, D.C.
- Maternal and Child Undernutrition Study Group (2008) Maternal and child undernutrition. *The Lancet* 371(9608-12). ([online](#))
- Morris SS, Cogill B, Uauy R; Maternal and Child Undernutrition Study Group (2008) Effective international action against undernutrition: why has it proven so difficult and what can be done to accelerate progress? *Lancet* 371(9608):608-21. ([online](#))
- SCN (2004) *5th Report on the World Nutrition Situation: Nutrition for improved development outcomes*. UN Standing Committee on Nutrition, Geneva. ([online](#))
- Sumner A, Lindstrom J and Haddad L (2007) *Greater DFID and EC leadership on chronic malnutrition: Opportunities and constraints*. Institute of Development Studies, London.
- UN (2008a) *The Millennium Development Goals Report* ([online](#))
- UN (2008b) *A Future Within Reach 2008: Regional Partnerships for the Millennium Development Goals in Asia and the Pacific* ([online](#))
- UNECOSOC/AU (2008) *Assessing Progress in Africa towards the Millennium Development Goals Report 2008*, E/ECA/COE/27/10 and AU/CAMEF/EXP/10(III) ([online](#))
- WHO (2007a) *Report of the Partner Agency Consultation on the Landscape Analysis on Readiness to Act in Nutrition, 5 - 6 November 2007, Geneva, Switzerland*. ([online](#))
- WHO (2007b) Summary Notes of a technical follow-up meeting on the Landscape Analysis project, 19 December 2007, UNICEF, New York ([online](#))
- WHO (2009) *Landscape Analysis on Countries' Readiness to Accelerate Action in Nutrition*. (forthcoming)

Contact: nishidac@who.int

Assessing countries' commitment to accelerate nutrition action demonstrated in PRSPs, UNDAFs and through nutrition governance

Kaia Engesveen ([SCN](#)), Chizuru Nishida ([WHO](#)), Claudine Prudhon ([WHO](#)), Roger Shrimpton¹ ([Institute of Child Health](#), London)

Introduction

The global burden of maternal and child undernutrition remains unconscionably large, and is the single greatest constraint facing global development efforts. It is now well recognized that economic development alone does not automatically translate into an improved impact upon maternal and child undernutrition, and for that reason special efforts are required to accelerate their reduction. Remarkably little is being done to tackle this problem, especially in the countries most affected. Increased mobilization is therefore needed at all levels of society in order to act at scale with essential nutrition interventions (SCN 2008).

The Landscape Analysis looks at countries' readiness to accelerate nutrition actions, where *readiness* is considered to be a function of *commitment* and *capacity*. Commitment may be weak for a number of reasons, such as unawareness of effective interventions, poor investments, or multiple stakeholders with different interests (Table 1). Heaver (2005) suggests that assessment of commitment currently happens "unsystematically and with more focus on formal policy than the perspectives and behaviour of key stakeholders". The Landscape Analysis has proposed a set of indicators to assess commitment to nutrition. Many of these are available through WHO or partner agencies whereas some can be composed by assessing publicly available policy documents or factors (desk review). Others require rapid assessment at country level (country assessment, see Chopra et al, [p.17](#)). From the policy perspective, the participants at the partner agency consultation held in Geneva, 5-6 November 2007 (WHO 2007), agreed that commitment to accelerate nutrition actions is to a large extent reflected in concrete plans and demonstrated resource allocation to nutrition as well as to indirect policies in other areas that might impact on nutrition.

Maternal and child undernutrition are caused by multiple factors operating at different levels and require solutions involving many sectors. Therefore a range of actors, from community to national level, in government and among development partners, need to be committed to work together for successful scaling-up of nutrition action. The commitment of governments may be studied through looking at the existence of nutrition policies, budget lines for nutrition, relevant legislation, nutrition content of national development strategies such as the Poverty Reduction Strategy Paper (PRSP), percentage of budget spent on health, and the priority given to nutrition relative to other sectors by national governments. Governmental commitment can also be observed through reporting obligations to, for example the World Declaration and Plan of Action for Nutrition adopted by the 1992 International Conference on Nutrition (ICN) - the first ever global intergovernmental conference on nutrition, and relevant human rights conventions such as the Convention on the Rights of the Child (CRC) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). The commitment of donors and development partners in a country is reflected in their key strategies. The United Nations Development Assistance Framework (UNDAF) for example, will reflect the priorities of the UN Country Team (UNCT).

This paper describes the methodologies used for assessing and classifying commitment to nutrition among governments and UN agencies. It presents preliminary analysis on how different classifications of commitment are seen in relation to the progress of the country towards achieving for instance, MDG1 hunger and undernutrition target. The analysis focuses on the 36 high-burden countries where child stunting is greater than 20% and that make up 90% of the total global stunting burden, that were the focus of the Lancet Nutrition Series (Bhutta et al 2008). The strength and weakness of commitment to nutrition were assessed as demonstrated through publicly available documents, such as the PRSP and the UNDAF. We also developed a composite indicator on nutrition governance, drawing the information and data from the WHO Global Database on National Nutrition Policies and Programmes that tracks nutrition action in countries after the ICN, complemented by updated information collected from the countries with the support of UNICEF Regional and Country Offices. Finally, we have undertaken some preliminary analysis on the relationship between countries' commitment as measured through PRSPs, UNDAFs and Nutrition Governance, and progress towards achieving MDG1 hunger and undernutrition target.

1. Former Secretary of the SCN

Table 1: Ten reasons for weak commitment. (Heaver 2005)

- Malnutrition is usually invisible to malnourished families and communities
- Families and governments do not recognize the human and economic costs of malnutrition
- Governments may not know there are faster interventions for combating malnutrition than economic growth and poverty reduction or that nutrition programmes need not be prohibitively expensive
- There are multiple organizational stakeholders in nutrition
- There is not always a consensus about how to intervene against malnutrition
- Adequate nutrition is seldom treated as a human right
- The malnourished have little voice
- Some politicians and managers are not interested in whether nutrition programmes are implemented well
- Governments sometimes claim they are investing in improving nutrition when they are not
- Lack of commitment to nutrition leads to underinvestment in nutrition, which leads to weak impact, which reinforces lack of commitment.

Methodologies

Three different methodologies were used to assess and classify the commitment to nutrition demonstrated through PRSP and UNDAF documents, and through the nutrition governance in place in the 36 high-burden countries.

Poverty Reduction Strategy Paper (PRSP)

The PRSP approach was introduced in 1999 with a view to empower governments to set their own priorities and to encourage donors to provide predictable, harmonized assistance that is aligned with country priorities. A PRSP should articulate development priorities and specify the policies, programmes, and resources needed to meet the poverty reduction goals. It is prepared by the government through a participatory process involving civil society and development partners, including the World Bank and the International Monetary Fund (IMF) and should result in a comprehensive country-based strategy for poverty reduction (World Bank 2008, IMF 2008). The emphasis given to nutrition in a PRSP reflects to what extent the government considers it essential to improve nutrition for poverty reduction and national development.

We used a methodology developed by Shekar and Lee (2006) consisting of seven main predefined questions to examine the degree to which nutrition is being dealt with in the PRSP in terms of recognition of undernutrition as a development problem, use of nutrition information for poverty analysis, and support for appropriate nutrition policies, strategies, and programmes in the PRSP. The most recent PRSP documents available on the World Bank website were used.¹ The PRSPs were systematically searched for key words to identify the parts that concern nutrition, food security and health outcomes and interventions that would be relevant for applying the World Bank methodology. In order to classify the commitment to nutrition demonstrated in the PRSP, we developed a scoring system. Four questions concerning recognition of undernutrition as a development problem and the use of nutrition information for poverty analysis as well as the general focus on nutrition in a PRSP were suggested a total score of maximum 16 points. One extensive question relating to policies, strategies and programmes was proposed a total score of 20 points; and, two questions that relate to budget allocations and accountability in terms of monitoring and evaluation were suggested a total score of 22 points as this was thought to be the most crucial element pertaining to whether the PRSP would be implemented or not. Thus, the maximum possible score was 58. The PRSPs were then ranked according to their total score and classified according to which third of the total score that they belonged, i.e. 0-19.5 = weak; 20.0-39 = medium; > 39 = strong.

United Nations Development Assistance Framework (UNDAF)

The UNDAF and Common Country Assessment (CCA) were adopted as planning tools in response to the Secretary General's 1997 reform agenda for the United Nations (UNDG 2008). The UNDAF document is the strategic programme framework for the UN Country Team (UNCT). It focuses on three to five priorities where the UN agencies together can make the biggest difference, in addition to other agency-supported activities that respond to specific country demands but which fall outside the common results matrix. For each national priority selected for UNCT support, the UNDAF Result Matrix describes the UNDAF outcome(s), the contributing outcomes of agencies working alone or together, the outputs of agencies working alone or together, the role of partners, resource mobilization targets for each agency outcome, and coordination

1. PRSP documents are available from the [World Bank website](http://www.worldbank.org)

mechanisms and programme modalities (UNDG 2008). The nutrition component of the UNDAF reflects the collective priority which is given to nutrition by the UN Agencies in a country. In other words, it can serve as an indication of how much the UN system is committed to helping governments improve their food and nutrition situation. UNDAF documents follow a predefined format of a core narrative and a results matrix. The results matrix lists the high level expected results (so-called "UNDAF outcomes"), the outcomes to be reached by agencies working alone or together, and the agency outputs.

We used the results matrix of the UNDAF document for assessing commitment to nutrition because the matrix represents a synthesis of the strategy proposed in the document and is available in the same format in most of the country UNDAF documents. The most recent UNDAF documents on the UNDG website were used.¹ The specific outcomes and outputs related to nutrition were identified and counted. The outputs were compared to the set of evidence-based interventions to reduce maternal and child undernutrition recommended by the *Lancet Nutrition Series* (Bhutta et al 2008, Table 1, p.42). Because most of the UNDAF documents do not give detailed information on the expected outputs, the evidence-based nutrition interventions were broadly classified into three areas: micronutrients (supplementation and/or fortification), promotion of breastfeeding and/or improved complementary feeding, and treatment of severe malnutrition, and were thereafter counted. The sum of the number of outcomes, the number of outputs and the number of areas of evidence-based intervention areas addressed in the outputs was calculated. The maximum sum obtained was 15. Countries were ranked according to the sum and classified according to which third of the total score that they belonged, i.e., 0-4 = weak; 5-10 = medium; > 10 = strong.

Nutrition Governance

A composite indicator on nutrition governance was constructed using the components that were identified by countries as key elements for successfully developing and implementing national nutrition plans and policies (Nishida et al 2003). Countries discussed such success factors at a series of regional and sub-regional review meetings between 1993 and 2003. For instance, it was agreed by participating countries that having a national nutrition plan and policy provided a political base in which a country can initiate the implementation of action. In many countries, official governmental endorsement or adoption of national nutrition plan or policy facilitated its implementation. The role of the intersectoral coordinating committee in implementing national nutrition plans and policies was also identified as crucial although the nature (i.e. whether executive or advisory), members, organizational structure and location of the committee seemed to have varying effectiveness in different countries. Another important element identified by the countries was the need for regular surveys and other major nutrition data collections. Routinely collected food and nutrition data and a national nutrition information system that is updated periodically were considered important for both evaluating the effectiveness of a national nutrition plan and policy and for facilitating the identification of continued subsequent actions.

Taking the country experiences into consideration, the following components were identified in developing the scoring of Nutrition Governance:

- Existence of intersectoral mechanism to address nutrition
- Existence of national nutrition plan or strategy
- Adoption of national nutrition plan or strategy
- Whether national nutrition plan or strategy is part of national development plan
- Existence of national nutrition policy
- Existence of national dietary guidelines
- Allocation of budget for implementation of national nutrition plan, strategy or policy
- Implementation/existence of regular nutrition monitoring and surveillance
- Existence of budget-line for nutrition in health budget

The information and data for 36 countries were drawn from the WHO Global Database on National Nutrition Policies and Programmes that tracks nutrition action in countries after the ICN. The information for many of the countries, in particular those in Africa, were complemented by updated information collected from the countries with the support of UNICEF Regional and Country Offices in February/March 2009. Taking into consideration

1. UNDAFs are available from the [UNDG website](#), UNDG and UN System Staff College also provide an [Online Results Matrix Database](#)

the components listed above as well as the status of national nutrition plan, strategy and policy, the last component (existence of a budget-line for nutrition in health budget) was excluded from the analysis because it was a missing value in a third of the countries. For the other components used in the analysis, missing values were not attributed the value "zero", but instead with the mean value of all countries with data for that particular variable. More details on this methodology are described in the desk review section of the Landscape Analysis report (WHO 2009 forthcoming). In consequence a maximum possible score of 11 points was used to calculate the score for each country, and the strength of nutrition governance was considered weak for countries scoring from 0 to 6.9, medium for those scoring from 7 to 9.9, and strong for those scoring from 10 to 11.0.

Assessing countries' commitment to nutrition

Table 2 shows the results of assessing commitment in the 36 high-burden countries applying the methodologies described above. Of the 23 countries with a PRSP, only two were classified as strong with regard to nutrition, seven were medium, and fourteen were weak. Of the 33 countries with an UNDAF, four were classified as strong with regard to nutrition, 21 as medium, and eight as weak. For the Nutrition Governance score, ten countries were classified with a strong fourteen with medium and twelve with weak governance.

Examining the strength of Nutrition Governance in relation to the strength of nutrition in the PRSP and UNDAF documents, two countries (Nigeria and Viet Nam) had weak nutrition focus in both PRSP and UNDAF despite having a strong Nutrition Governance, suggesting a possible dysfunctional linkage between the work related to poverty reduction, national development and nutrition among concerned partners, including government and UN agencies, within these countries. In Pakistan on the other hand, while great efforts are being made by the UN Agencies to give priority to nutrition as indicated by the strong nutrition emphasis in the UNDAF document, the weak PRSP and Nutrition Governance score indicate that the government has yet to give sufficient prominence to nutrition as an essential component of poverty reduction and national development strategies. Bangladesh is the only country which has strong emphasis on nutrition in both the PRSP and the UNDAF and also has a strong Nutrition Governance. Peru, which has no PRSP, also scores high on both UNDAF and Nutrition Governance indicators.

Of the five countries that have undertaken the Landscape Analysis country assessment in 2008, two were identified as having strong Nutrition Governance (Burkina Faso and Peru), whereas two were medium (Guatemala and Madagascar) and one was weak (Ghana). More in-depth discussions of the strength and weakness of the commitments of the countries which have undertaken county assessment are available in each of the country papers in this issue of the SCN News.

Relationship between countries' commitment and progress towards achieving MDG 1

Based on UNICEF (2007) estimates, of the 36 countries, ten (28%) have an average annual rate of reduction (AARR) that is on track to achieve the MDG1 hunger and undernutrition target, while seventeen (47%) have insufficient progress and eight (22%) have no progress (Table 3)¹. Comparing the progress towards achieving MDG1 with the nutrition priority level of PRSPs or UNDAFs, and the strength of Nutrition Governance, there does not seem to be any consistent relationship. The only two countries with strong nutrition components in their PRSPs (Bangladesh and Malawi) are on track in reaching the MDG1 hunger and undernutrition target. It should be noted, however, that analysing the relationship between the nutrition priority level of PRSPs and the progress towards achieving MDG1 was complicated by the fact that more than a third of the countries did not have a PRSP which could be included in the analysis. For the four countries with strong nutrition components in their UNDAF, Bangladesh and Peru are on track whereas Pakistan has insufficient progress and unfortunately no information is available for Angola. Analyzing the relationship between the strength of Nutrition Governance and the progress towards achieving the MDG1 hunger and undernutrition target, each component of Nutrition Governance individually does not seem to have any significant relationship with the progress. Four out of ten countries that have strong Nutrition Governance are on track for MDG1, but then five countries (i.e. Egypt, India, Nigeria, Philippines and Uganda) have insufficient progress and Burkina Faso has

1. "On track" means having an Average Annual Reduction Rate (AARR) of child underweight greater than 2.6%, "Insufficient" rate is AARR 0.6 - 2.5% and "No progress": means AARR less than 0.5%

Table 2: Assessed commitment to nutrition in 36 high-burden countries as demonstrated through PRSP and UNDAF documents, and Nutrition Governance

Country	PSRSP ¹			UNDAF ²			Nutrition Governance ³	
	Period covered ⁴	Score	CLASSIFICATION	Period covered	Score	CLASSIFICATION	Score	CLASSIFICATION
Afghanistan	2008-2013	24.5	Medium	2006-2008	9	Medium	6.4	Weak
Angola				2005-2008	14	Strong	5.0	Weak
Bangladesh	Published in 2005	47.5	Strong	2006-2010	15	Strong	10.0	Strong
Burkina Faso	2004-2006	20.5	Medium	2006-2010	10	Medium	11.0	Strong
Burundi	Published in 2006	17	Weak	2005-2007	5	Medium	9.6	Medium
Cambodia	2006-2010	22	Medium	2006-2010	1	Weak	6.0	Weak
Cameroon	Published in 2003	17.5	Weak	2008-2012	6	Medium	9.0	Medium
Côte d'Ivoire				2009-2013	10	Medium	8.0	Medium
DRC	2006-2008	14.5	Weak	2007-2012	7	Medium	4.0	Weak
Egypt				2007-2011	2	Weak	10.0	Strong
Ethiopia	Published in 2002	20.5	Medium	2007-2011	10	Medium	7.7	Medium
Ghana	2006-2009	10.5	Weak	2006-2010	8	Medium	5.0	Weak
Guatemala				2005-2009	7	Medium	9.0	Medium
India				2008-2012	7	Medium	11.0	Strong
Indonesia				2006-2010	9	Medium	8.7	Medium
Iraq							6.2	Weak
Kenya	2003-2007	11	Weak	2004-2008	1	Weak	6.0	Weak
Madagascar	2007-2012	9.5	Weak	2008-2011	8	Medium	9.0	Medium
Malawi	2006-2011	43	Strong	2008-2011	9	Medium	11.0	Strong
Mali	2007-2011	14.5	Weak	2008-2012	9	Medium	6.0	Weak
Mozambique	2006-2009	26	Medium	2007-2009	10	Medium	5.0	Weak
Myanmar							9.7	Medium
Nepal	2002-2007	6.5	Weak	2008-2010	2	Weak	9.7	Medium
Niger	2008-2012	34.5	Medium	2009-2013	9	Medium	8.0	Medium
Nigeria	2003-2007	3.5	Weak	2002-2006	0	Weak	10.0	Strong
Pakistan	Published in 2003	18	Weak	2004-2008	13	Strong	6.0	Weak
Peru				2006-2010	11	Strong	10.0	Strong
Philippines				2005-2009	5	Medium	10.7	Strong
South Africa				2007-2010	5	Medium	9.0	Medium
Sudan							8.1	Medium
Turkey				2006-2010	0	Weak	8.0	Medium
Uganda	2004-2008	18.5	Weak	2006-2010	10	Medium	10.0	Strong
United Rep. of Tanzania	2005-2010	17.5	Weak	2007-2010	5	Medium	6.0	Weak
Viet Nam	2006-2010	13	Weak	2006-2010	0	Weak	10.9	Strong
Yemen	2003-2005	9	Weak	2007-2011	4	Weak	5.4	Weak
Zambia	2006-2010	36.5	Medium	2007-2010	8	Medium	9.0	Medium

1. Source: World Bank 2008 and see methodology section for score and classification; 3. Source: UNDG 2007 and see methodology section for score and classification; 4. Source: WHO Global Database Base on National Nutrition Policies and Programmes, Landscape Analysis Desk Review for Score and see methodology section for scores classification; 4. Year of publication when no period of coverage indicated in PRSP.

no progress at all despite having strong Nutrition Governance. Bangladesh is noteworthy for having strong PRSP, UNDAF and Nutrition Governance indicators as well as being on track for the MDG1. At the same time Yemen and Kenya are of concern because despite insufficient or lack of progress toward the MDG1 hunger and undernutrition target, their PRSP, UNDAF and Nutrition Governance are all weak.

Discussion and next step

The results of the assessments clearly show that commitment to nutrition as demonstrated through the PRSP and UNDAF documents was weak in relation to the high burden of undernutrition that these 36 countries face. This lack of commitment can have dire consequences for human and economic development in these countries. This does not necessarily imply that any government department or UN agency in the country is not working to improve nutrition. However, unless such efforts are anchored in key strategy documents like the PRSP and the UNDAF, they may not be sufficiently sustainable or scaled-up in order to adequately address the undernutrition problem in the country, and thereby accelerate the reduction of maternal and child undernutrition. The multisectoral nature of nutrition requires constant attention and action from a wide range of actors. Basing nutrition action in these overall development frameworks contributes to ensuring accountability of government and its development partners. In

countries where both the PRSP and the UNDAF placed little focus upon nutrition and progress towards achieving MDG1 is either insufficient or non-existent (i.e. Kenya, Nepal and Yemen), a strong advocacy strategy is much needed, along with other efforts to strengthen or build commitment for improving nutrition.¹

At the same time, it has to be admitted that the guidance being given on how countries should include nutrition related interventions when preparing these documents may not be optimal. There are no guidelines on how to ensure that the UNDAF adequately deals with nutrition issues, and nutrition is only mentioned in an annex to the general UNDAF guidelines which lists possible sources of indicators (UNDG 2007). The World Bank PRSP Sourcebook totals 1,260 pages covering all aspects of the PRSP and includes a chapter and technical annex covering health, nutrition and population (World Bank 2002a, 2002b). While comprehensive on strategies for improved health and nutrition outcomes among the poor, the chapter has been criticized for being too long, too conceptual and for providing excess sophistication especially on data,

and for being too short on practical assistance for those who develop the PRSP². Therefore its practical utility may be questioned. The World Bank (2000) has also produced rapid guidelines for integrating health, nutrition and population issues in an interim PRSP (i-PRSP). As has been pointed out by the Lancet Nutrition series, the normative guidance provided by the UN system is not always the most prioritized, succinct or available in an accessible language that facilitates translation into action (Morris et al 2008).

Aside from the limitations inherent to the indicators themselves, the lack of a clear relationship between the three proposed nutrition commitment indicators and the AARR of child underweight might be due to several factors. For example, PRSP and UNDAF documents concern future actions that may impact on nutrition, while the AARR reflects past trends. Also, although commitment to nutrition among governments and UN partners is a crucial component for the improvement of nutritional situations, other contextual factors and general conditions that can enable or constrain the commitment and capacity to implement nutrition action also play important roles. These include governance, economic growth, female education, women's status, and crises (i.e. natural disasters, wars and conflicts).

The present exercise clearly demonstrates the methodological challenges of assessing and classifying commitment to nutrition at country level. Assessing the nutrition components of a PRSP for example, is a time-consuming process as these documents are usually large (up to 200-400 pages) and do not follow a given format, unlike the UNDAF which ideally should not exceed fifteen pages, although they often do. The

Table 3: Relationship between countries' commitment and progress towards achieving the MDG1 hunger and undernutrition target

	Country progress in reaching MDG1 nutrition target*	PRSP**	UNDAF**	Nutrition Governance**
On track	Afghanistan	Medium	Medium	Weak
	Bangladesh	Strong	Strong	Strong
	Cambodia	Medium	Weak	Weak
	Ghana	Weak	Medium	Weak
	Guatemala		Medium	Medium
	Indonesia		Medium	Medium
	Malawi	Strong	Medium	Strong
	Peru		Strong	Strong
	Turkey		Weak	Medium
Viet Nam	Weak	Weak	Strong	
Insufficient progress	Côte d'Ivoire		Medium	Medium
	DRC	Weak	Medium	Weak
	Egypt		Weak	Strong
	Ethiopia	Medium	Medium	Medium
	India		Medium	Strong
	Iraq			Weak
	Kenya	Weak	Weak	Weak
	Mali	Weak	Medium	Weak
	Mozambique	Medium	Medium	Weak
	Myanmar			Medium
	Nepal	Weak	Weak	Medium
	Nigeria	Weak	Weak	Strong
	Pakistan	Weak	Strong	Weak
	Philippines		Medium	Strong
	Uganda	Weak	Medium	Strong
United Rep. of Tanzania	Weak	Medium	Weak	
Zambia	Medium	Medium	Medium	
No progress	Burkina Faso	Medium	Medium	Strong
	Burundi	Weak	Medium	Medium
	Cameroon	Weak	Medium	Medium
	Madagascar	Weak	Medium	Medium
	Niger	Medium	Medium	Medium
	South Africa		Medium	Medium
	Sudan			Medium
	Yemen	Weak	Weak	Weak

Sources: * UNICEF (2007); ** Table 2 and see methods section for classifications.

1. Heaver (2005) proposes various ways in which commitment can be strengthened or built.

2. According to undated presentation on the World Bank PRSP Sourcebook, Health, Nutrition and Population webpage ([online](#))

World Bank methodology for assessing PRSPs is considerably more comprehensive than the methodology developed by this Landscape Analysis for the UNDAF. Moreover, the scores as well as the classification were developed in a different way. For UNDAF, the highest possible score was set at the highest obtained score, whereas for the PRSP and the Nutrition Governance the highest score was set as the highest theoretically obtainable score. This may have led to an overrepresentation of higher UNDAF scores, compared to the other two indicators. Furthermore, analyzing policy documents often requires subjective interpretation by the assessor and therefore, the objectivity of the analysis may be questioned.

However, despite the methodological challenges that exist in undertaking this analysis, it is important to have an accepted methodology for systematically reviewing and assessing key development and policy framework documents, such as PRSPs and UNDAFs to assess whether they address necessary nutrition interventions, allocate resources for their implementations, and identify responsibilities and accountabilities for improving the nutritional well-being of the population. To this end, WHO is undertaking a more detailed and comprehensive global nutrition policy review in 2009. This will contribute to the further development of the concepts and analytical framework with regards to countries' commitment to nutrition as well as to the understanding of what should constitute Nutrition Governance.

Acknowledgements: *The authors thank Jeffrey Yu, Department of Nutrition for Health and Development (NHD), WHO, for updating the PRSP and UNDAF analysis in March 2009. Special acknowledgement is made to Dr Ian Darnton-Hill, Former Special Adviser to the UNICEF Executive Director on Ending Child Hunger & Undernutrition, Dr Felicite Tchibindat, Regional Nutrition Advisor, UNICEF West and Central Africa Regional Office, and Dr Saba Mebrahtu, Regional Nutrition Advisor, UNICEF Eastern and Southern Africa Regional Office, Dr Genevieve Begkoyian, Regional Advisor Child Survival and Development, UNICEF Regional Office for South Asia for contacting their respective Country Offices to help updating and verifying the information and data used for developing the scoring of the nutrition governance. The authors are very grateful to the colleagues in a number of government agencies and UNICEF Country Offices for their valuable contributions.*

References

- Bhutta ZA, Ahmed T, Black RE, Cousens S, Dewey K, Giugliani E, Haider BA, Kirkwood B, Morris SS, Sachdev HPS and Shekar M; Maternal and Child Undernutrition Study Group (2008) What works? Interventions for maternal and child undernutrition and survival. *Lancet* 371(9610):417-40. ([online](#))
- Heaver R (2005) *Strengthening Country Commitment to Human Development. Lessons from Nutrition.* ([online](#))
- IMF (2008) *Poverty Reduction Strategy Papers (PRSP).* A factsheet April 2008. ([online](#))
- Morris SS, Cogill B and Uauy R; Maternal and Child Undernutrition Study Group (2008) Effective international action against undernutrition: why has it proven so difficult and what can be done to accelerate progress? *Lancet* 371(9608):608-21. ([online](#))
- Nishida C, Mutru T and Imperial Laue R (2003) Strategies for effective and sustainable national nutrition plans and policies. In: Elmadfa I, Anklam E and Konig JS (eds). *Modern aspects of nutrition, present knowledge and future perspective.* Forum Nutr. Basel, Karger, vol.56, pp 264-266.
- SCN (2008) *Recommendations from the SCN 35th Session. Accelerating the reduction of maternal and child undernutrition.* ([online](#))
- Shekar M and Lee Y-K (2006) *Mainstreaming nutrition in poverty reduction strategy papers: What does it take? A review of the early experience.* Health, Nutrition and Population Discussion Paper ([online](#))
- UNDG (United Nations Development Group) (2007) *2007 CCA/UNDAF guidelines.* ([online](#))
- UNICEF (2007) *Progress for Children: A World Fit for Children Statistical Review (No. 6).* ([online](#))
- WHO (2007) Report of the Partner Agency Consultation on the Landscape Analysis on readiness to act in nutrition, Geneva, Switzerland, 5-6 November 2007 ([online](#))
- WHO (2009) *Landscape Analysis on Countries' Readiness to Accelerate Action in Nutrition.* (forthcoming)
- World Bank (2000) *Rapid Guidelines for integrating Health Nutrition and Population issues in Interim Poverty Reduction Strategy Papers of Low-Income countries.* Prepared by Soucat A and Yazbeck A with inputs from Knippenberg R, Chao S and Luculescu S. October 2000. ([online](#))
- World Bank (2002a) *A Sourcebook for Poverty Reduction Strategies.* Klugman J (ed). World Bank, October 2002. ([online](#))
- World Bank (2002b) *Health, Nutrition, and Population.* Written by Claeson M, Griffin CC, Johnston TA, McLachlan M, Soucat ALB, Wagstaff A and Yazbeck AS (2002), Chapter 18 in World Bank (2002a) *A Sourcebook for Poverty Reduction Strategies.* Klugman J (ed.). ([online](#))
- World Bank (2008) *Poverty Reduction Strategies.* ([online](#))

Contact: engesveenk@who.int

Assessing countries' readiness: Methodology for in-depth country assessment

Mickey Chopra (Medical Research Council (MRC), South Africa), David Pelletier (Cornell University), Chantell Witten (MRC), Megan Dieterich (Yale School of Medicine)

Background

The recent Lancet Series on Nutrition (Maternal and Child Undernutrition Study Group 2008) have clearly laid out a number of cost-effective nutrition interventions. However, the coverage of many of these vital interventions remains very low and the lack of scaled-up action is seriously impeding the progress of many countries towards achieving the Millennium Development Goals. A critical challenge is therefore to assist countries in better understanding barriers towards the scaling-up of nutrition interventions.

Bryce et al (2008) identified seven key challenges that need to be solved at a national level in order to make an impact. These are: 1. Putting nutrition on the national agenda, 2. Doing the right things, 3. Not doing the wrong things, 4. Doing things at scale, 5. Reaching those in need, 6. Creating data for nutrition decision-making, and 7. Building strategic and operational capacity.

The Landscape Analysis country assessments aim to review the current situation with regards to these and other challenges countries are facing and to identify possible actions that need to be prioritised in each country. Analysis of successes and failures of countries in implementing effective large scale nutrition programmes provides a number of important lessons and features that can be used to determine countries' readiness to scaling-up nutrition actions.

Scaling up of nutrition interventions often presents greater challenges because:

- It is complex and requires co-ordination across a number of departments and partners
- The science is rapidly changing and there is still insufficient data to answer some policy questions
- It is being superimposed on very fragile health systems suffering from chronic underfunding
- In most settings nutrition receives a low priority
- Some interventions rely upon a robust supply system

Effectiveness of intervention programmes depends upon both attaining sufficient coverage and upon the intensity of the intervention (Mason 2000). This has implications when thinking about what needs to be scaled up. Scaling up is usually associated with increasing the *geographical* coverage. But in order to ensure sufficient intensity of the intervention, other dimensions also need to be scaled up. These include the *functional, organizational, and political* aspects of the programme, all of which are pertinent to nutrition intervention programmes.

Functional scaling up refers to the additional number and type of activities that are to be performed while scaling up of the *organizational* capacity and strengths includes resource mobilization, external partnerships, integration with other programmes and capacity development. Furthermore, for increasing intensity and sustainability the process of scaling up will have to include a more explicit *political* component. At the community level this will require the strengthening of the interaction between formal health systems and local communities. At the national and international level it involves strengthening alliances between civil society and states to sustain pressure for resources and support.

This paper provides guidance on the country assessment process and main steps to be taken before, during and after the country assessment. An analytical framework describes some key areas to be explored during the country assessment in order to identify where the bottlenecks lie as well as the strengths or opportunities to build on and move forward for an accelerated action .

Methodology

Increasing the capacity of policy-makers and programme managers to guide the scaling up of nutrition interventions requires a detailed understanding of the constraints as well as the potentials and opportunities which can be built on within a particular context. The development of a methodology for assessing readiness to scale-up nutrition actions is highly inspired by the four key steps identified by the experience from the highly participatory human rights based approaches to programming (HRBAP). These four key steps are: Step 1: Causality analysis; Step 2: Role or Pattern analysis; Step 3: Capacity analysis; Step 4: Identification of candidate strategies and

Box 1: The five phases of the country assessment

actions (Jonsson 2000). The *causality analysis* aims to identify the immediate, underlying and basic causes of malnutrition in a specific situation. Through a *role or pattern analysis*, the right-holders, their rights or claims, the corresponding obligations and the associated duty-bearers are identified. The identification of claim-holders and duty-bearers may go from the mother and the peripheral health worker all the way to higher levels of society. For example, nutrition managers may not be able to perform their duties because of a lack of resources from national managers who have prioritized other programmes. Such challenges are revealed through a *capacity analysis* where duty bearers' capacity to perform their obligations and duties and the claim-holders capacity to exert their rights are being assessed. Traditionally capacity has been equated with training, but the rights-based approach has expanded the concept to encompass acceptance of responsibility to meet the duty; authority to do so; access to and control of economic, human and organisational resources necessary to meet the obligation; capability to communicate and capability for rational decision-making. Based on the three analyses described above, *candidate strategies and actions* are identified and prioritized with a view to strengthening the capacity of the duty-bearers to meet their duties to address nutrition problems and of the right-holders to claim their nutrition-related rights.

Process for undertaking the Landscape Analysis country assessment

The entire process is driven by a country assessment team formed by the lead national agency for nutrition. The members of the team include concerned national agencies and departments, international and bilateral agencies as well as NGOs working in nutrition in the country. There are five principal phases of the Landscape Analysis country assessment process: preparations by the national team (phase 1); field-based, qualitative rapid assessment and interviews at national level (phase 2); analysis of findings and recommendations (phase 3); consensus-building workshop (phase 4), preparation of final report and agreed recommendations (phase 5). Box 1 describes specific activities under each of the phases.

Analytical Framework

The concept of "*Readiness analysis*" applied in the Landscape Analysis is frequently used in the private sector, where companies undergo the exercise before making investment decisions in order to determine the readiness for change in terms of technical and strategic capacity, and what preparation is needed where and how. The Landscape Analysis looks at readiness as a function of "commitment" and "capacity" to scale-up nutrition actions, i.e. "ready" being understood as "willing and able". An analytical framework for assessing commitment and capacity during in-depth country assessments was developed, taking into account relevant systemic, organizational, individual, or other salient factors that may influence programme and project

Phase 1: Preparations before the assessment week begins

- Brief overview analysis of the nutrition situation
- Mapping of key stakeholders for nutrition in the country and of existing, on-going nutrition-related programmes, projects and activities, as well as an analysis of the nutrition situation
- Identify members of the Country Assessment Team
- Arrange field visits and interviews with stakeholders at national and sub-national levels, including preparing documentation and advocacy material to hand-out during interviews
- Review country assessment tools to be adapted to national situation
- Prepare stakeholders meetings: consensus meeting on the last day, briefing meetings before the assessment and other meetings as necessary

Phase 2: Field-based, qualitative rapid assessment by task force

- Interviews, focus group discussions, checks, etc at national level and during field visits at two to three field sites by sub-teams of the Country Assessment Team

Phase 3: Analysis of findings and recommendations

- Meeting of assessment team to discuss key findings on strengths and weaknesses of willingness and capacity to act at scale according to analytical framework
- Propose draft recommendations for presentation at consensus meeting

Phase 4: Consensus-building workshop

- Presentation of key findings
- Discussion of key recommendations for reinforcing strengths, correcting weaknesses and testing new strategies

Phase 5: Preparation of final report and agreed recommendations

- Prepare and disseminate final report
- Develop action plan to move forward the follow-up process

operation and the successful achievement of goals.

As the Landscape Analysis country assessments mainly focus on interventions delivered through the public health sector in the communities and health services, the proposed indicators for capacity concentrate on the health sector although the indicators for assessing capacity in services provided by other sectors could be developed in a similar fashion.

The commitment indicators are largely derived from the first condition concerning operational strategies and availability of financial resources. *Willingness to act* comprises political commitment at national and sub-national levels among decision-makers in nutrition and in other fields. Policies, regulations, programmes and protocols need to focus on priority areas and be efficiently implemented on the ground. Importantly, commitment to nutrition is reflected in the allocation and mobilisation of resources as well as in the existence of institutional arrangements that ensure broad engagement in nutrition and good management. Willingness to act at scale further require central level support to the districts and the active involvement of partners, public as well as private, at all levels. Many of these indicators could also be seen as indicators of capacity, but they are used here as indicators of willingness because they represent important, proximate and tangible expression of political will and policy intent.

The capacity indicators are crucial components of *ability to act*. Quality of the services and human resources is a major element of the final effectiveness of the intervention and is reflected in whether standard procedures are well designed and followed (Tanahashi 1978). It also concerns the management of follow-up, the quality of data captured and the integration of nutrition into other programmes. Human resource issues include availability of trained personnel, quality of training programmes and quality of follow up after training. Another dimension of ability to act concerns the availability of key resources and management systems. An uninterrupted flow of nutrition supplies such as Vitamin A, growth cards, zinc etc is crucial, in turn requiring functioning management systems. Linked to the management systems are information systems, through which relevant data are collected in an accurate and timely manner and communicated to decision-makers at local and central levels. The last condition for having the ability to act is access to and continued use of services, i.e. the demand side factors at the community level. Mothers and infants have to be able to get to the place where nutrition screening, promotion and treatment is offered. Once they have accessed the service, women need to return continually monitor the growth of their children. Then they need to go back for each of the important subsequent steps. Finally, they need to comply with their treatment. Specific strategies can be implemented to fulfil each of these critical activities.

To assess the readiness to scale-up nutrition actions it is necessary to measure achievements in each of the above areas proposed for assessing commitment and capacity. Tables 2 and 3 present the analytical framework with proposed indicators, grouped by themes, for willingness (commitment) and ability (capacity) to scale-up nutrition action.

Country assessment tools

The analytical framework was used to develop data collection tools which would in turn be used at the national, regional/district and health facility level. Seven generic data collection tools have been developed: National level key informant guide, Provincial level key informant guide, District level manager guide, Facility manager guide, Health worker questionnaire, Facility checklist and NGO key informant guide. At the national level the tool is used to collect information in order to gain knowledge of the political and policy context of nutrition within a particular country and the perceptions of nutrition problems and priorities among key stakeholders. The tools at the sub-national level focus more upon the ability to act, including human resource availability, management and capacity, nutrition supplies and equipment and resource mobilisation.

Conclusion

This paper described the country assessment tools and the analytical framework with indicators and outlined the process that guides the Landscape Analysis country assessment. These country assessment tools and analytical framework have been piloted in six countries (i.e. Burkina Faso, Ghana, Guatemala, Madagascar, Peru and South Africa) with some adaptations for each country situation. Given the increasing attention on

Table 2 Indicators for assessment of willingness to act (commitment)

Assessment of willingness to act		
Theme		Indicators
i	Political commitment at central level	<ul style="list-style-type: none"> Public statements by senior politicians in support for nutrition Existence of a Senior level forum for discussion and planning of nutrition activities Evidence that nutrition is part of PRSP, national development strategy etc Perceptions of stakeholders that nutrition is prioritised
ii	Focused policies (and regulation) at central level	<ul style="list-style-type: none"> Presence of specific nutrition policy Clear focus on a reasonable limited number of nutrition interventions Updated Infant and Young Child Feeding policy Integration of nutrition actions into HIV, IMCI and Maternal Health policies and protocols Integration into Agricultural, Education and Social Development policies Adequate legislation is enacted and enforced (e.g. Code) Consistent list of nutrition priorities stated by stakeholders
iii	Resource mobilisation at central level	<ul style="list-style-type: none"> Perception of stakeholders whether there are sufficient resources for nutrition policy implementation Proportion of total health budget going towards nutrition Proportion of total nutrition financial resources between govt and donors Trends in amount of resources going towards nutrition
iv	Involvement of other role-players at central level	<ul style="list-style-type: none"> Level of engagement with private food industry Presence of wider nutrition forum for discussion and advocacy Expressed concern/commitment of wider role players Systematic attempt to nurture and support nutrition champions
v	Organization and management at central level	<ul style="list-style-type: none"> Functioning nutrition working group Number of working group meetings in previous 6 months Number of decisions of working group implemented Presence of dedicated nutrition co-ordinator with resources Number of personnel dedicated to nutrition centrally Involvement of other governmental departments in working group
vi	Policies/ protocols in support of the nutrition programme at the national and sub-national level	<ul style="list-style-type: none"> Evidence that nutrition is part of regional/district development plans (including health, agriculture or other relevant sectors and large scale health programmes such as MCH or IMCI) Specific nutrition policy or plan Updated operational plans with budgets to support nutrition policies Production of updated protocols for key nutrition interventions and programmes (e.g. BFHI) Proportion of managers aware of nutrition policies Proportion of senior clinicians and nurses aware of nutrition protocols Capacity to monitor implementation of fortification regulations (salt etc) and other legislation (e.g. Code)
vii	Central level support to districts	<ul style="list-style-type: none"> Frequency of meetings between central and district co-ordinators Presence of a contact list of district coordinators Summaries of nutrition data made available to districts Frequency of supervisor reports Orientation and training at launch of programmes
viii	Organization and management at district level	<ul style="list-style-type: none"> Functioning MCH or nutrition working group Number of working group meetings in previous 6 months Number of decisions of working group implemented Presence of dedicated nutrition co-ordinator Budget available for district plans
ix	Involvement of partners at regional/ district level	<ul style="list-style-type: none"> Number of different role-players invited to working group meetings Proportion of nutrition funds going to other partners outside of the health sector Number of nutrition interventions implemented by NGOs Links between health facilities and community groups and local businesses
x	Presence and adherence to protocols at facility level	<ul style="list-style-type: none"> Proportion of health facilities with protocol available Proportion of staff with satisfactory knowledge of protocol(s) Proportion of clients treated according to protocol
xi	Budget provision at sub-national level	<ul style="list-style-type: none"> Proportion of total budget covered by govt. Proportion of total costs covered by budget Presence of financial plan for programme Proportion of funding for future budget already secured or identified

Table 2 Indicators for assessment of ability to act (capacity)

Assessment of willingness to act		
Human resources and quality		
Theme		Indicators
i	Distribution of staff with appropriate skills at all levels	<ul style="list-style-type: none"> • Appropriate number of skilled staff at each level of service delivery for scope of work provided • Availability of additional trained staff for expansion of services
ii	Capacity of staff at all levels	<ul style="list-style-type: none"> • National training materials recently updated • Availability of training materials in local languages • Availability of trainers including NGOs and other resources • Rational training plans at district level • Availability of post-training supervision • Health workers' knowledge about basic nutrition actions • Confidence of staff to address nutrition problems
iii	Quality of services in facilities	<ul style="list-style-type: none"> • Quality of counselling based on observations • Availability of support groups • Availability of support and mentoring for health workers • Community satisfaction with counselling services • Quality of captured data • Implementation of protocols for management of severe malnutrition
iv	Staff motivation at all levels	<ul style="list-style-type: none"> • Satisfaction of regional (provincial, district) managers with regards to management structures, monitoring, coverage and quality of service • Satisfaction of facility staff regarding training, support and service delivery • Turnover of staff at central management level
v	Follow-up and enhanced care plan	<ul style="list-style-type: none"> • Integration of follow-up protocols into other primary maternal child health services • Implementation of follow-up support • Uptake of follow-up at facilities
vi	Integration into other programmes	<ul style="list-style-type: none"> • Inclusion of primary health and other sectoral partners at primary care and community level • Coordination and integration of nutrition protocols with Safe Motherhood Initiative (SMI), IMCI, PMTCT and Child Survival programmes at primary health care and community level
Management systems and supplies		
Theme		Indicators
i	Management systems	<ul style="list-style-type: none"> • Appropriately trained nutrition co-ordinators in each district • Clear lines of responsibility for nutrition activities • Supervisory manuals updated • Sites covered
ii	Information systems	<ul style="list-style-type: none"> • Evidence that nutrition data is being used for decision making • Completeness and accuracy of collected routine data • Availability of quarterly updated reports at district level • Appropriate spaces for nutrition info on maternal and infant cards
iii	Supplies	<ul style="list-style-type: none"> • Presence of essential vitamins and minerals • Availability and functioning of weighing scales at health facilities • Availability of non-expired micronutrients at facilities • Rational system for ordering of supplies at facility and district level
Demand side factors		
Theme		Indicators
i	Client knowledge/ Satisfaction	<ul style="list-style-type: none"> • Clients' knowledge about basic nutrition interventions and services available • Satisfaction with services received • Knowledge of nutrition interventions in the life cycle
ii	IEC	<ul style="list-style-type: none"> • Production of updated IEC materials for basic nutrition interventions • Presence of materials at facility level • Evidence of wider nutrition promotion activities • Mobilisation of civil society groups/community based organisations around nutrition activities
iii	Community organisations	<ul style="list-style-type: none"> • Systematic outreach activities to community organizations • Support materials for community based nutrition activities • Direct funding available to community based organizations for nutrition activities • Focus of community interventions on prioritised nutrition interventions

the impacts of food price crisis, in close collaboration with the International Food Policy Research Institute (IFPRI), some questions for assessing the impact of such crises were formulated and added to the assessment tools, in particular for the national level. Based on the experiences from these pilots, the tools were refined and further developed. These country assessment tools together with the analytical framework will be made accessible via the Landscape Analysis website¹.

The expected outcomes of the assessment in each country were to develop (i) a detailed set of recommendations describing the strengths and weaknesses of countries commitment and capacity (i.e. "readiness") to accelerate and scale up action in nutrition and (ii) a draft report summarizing these findings on which the recommendations are based. After having discussed and reviewed the outcomes and recommendations of the Landscape Analysis country assessment at a consensus meeting of all the stakeholders, the country team will develop an action plan to map out their way forward. The country papers that follow present the processes and main findings that reflect some of the ways in which the standardised process outlined above was actually implemented in five countries (i.e. Burkina Faso, Ghana, Guatemala, Madagascar and Peru) with all the restrictions related to time and resources. South Africa has decided to scale up the country assessment to be implemented nationwide in all nine provinces, to be undertaken in March and April 2009.

This is a work in progress. Efforts will continue to be made to further develop approaches towards assessing country readiness to scale-up actions to reduce maternal and child undernutrition.

References

Bryce J, Coitinho D, Darnton-Hill I, Pelletier D, Pinstrop-Andersen P; Maternal and Child Undernutrition Study Group (2008) Maternal and child undernutrition: effective action at national level. *Lancet* 371(9611):510-26. ([online](#))

Jonsson U (2000) An Approach to Human Rights-Based Programming in UNICEF (Eastern and Southern Africa). *SCN News* 20, 6-9. ([online](#))

Mason JB (2000) *How Nutrition Improves, and What That Implies for Policy Decisions*. Paper prepared for World Bank-UNICEF Nutrition Assessment. ([online](#))

Maternal and Child Undernutrition Study Group (2008) Maternal and child undernutrition. *Lancet* 371(9608-12). Available from <http://www.thelancet.com/collections/series/undernutrition>

Nishida C, Shrimpton R and Darnton-Hill I (2009) Landscape Analysis on countries' readiness to accelerate action in nutrition. *SCN News* 37:4-9. ([online](#))

Tanahashi T (1978) Health Service Coverage and its Evaluation. *Bulletin of the WHO* 56(2):295-303. ([online](#))

Contact: Mickey.Chopra@mrc.ac.za

COURSE ANNOUNCEMENT:

Ninth International Graduate Course on Production and Use of Food Composition Data in Nutrition

11-24 October 2009, Hof van Wageningen, Wageningen, The Netherlands

Compilations of data on the nutritional composition of foods are essential tools for nutritionists, especially those concerned with monitoring adequacy of dietary intake, for linking diet to health and disease, for planning and prescription, education, food security, and for trade, export and legislation. A two-week training course on the production and use of food composition data in nutrition is offered by Graduate School VLAG and the Division of Human Nutrition in cooperation with United Nations University (UNU), Food and Agriculture Organisation of the United Nations (FAO), and the European Food Information Resource Network (EuroFIR) in Wageningen, The Netherlands.

The aim of FoodComp 2009 is to demonstrate how to produce, manage and use good quality food composition data in a standardized way so that the requirements of the multiple users of food composition data can be met. The course will be based on the philosophy that the preparation of food composition databases requires close understanding of the needs of the users by both compilers and producers of analytical data.

FoodComp 2009 is intended for those involved in food composition database programmes as analysts and/or compilers and will be of value to those teaching nutrition and nutritional aspects of food chemistry. Users of food composition databases who wish to have a better understanding of how databases are prepared and the constraints upon their use will also find the course useful.

E-mail: ous.duym@wur.nl Website: <http://www.vlaggraduateschool.nl/eduvlco.html>

Towards Nutrition MDGs in Burkina Faso: Will Capacity to Act Follow the Commitment?

Sylvestre Tapsoba (Nutrition Director, Ministry of Health, Burkina Faso)

Abstract: *The past few years have witnessed an increasing interest in nutrition interventions, which have emerged as a key matter to achieve MDGs. While political commitment is widely spread, more needs to be done to improve operational capacity. This article, resulting from the Landscape Analysis Country Assessment, provides an overall picture of Burkina Faso's nutrition situation and outlines the steps to be taken over the next few years to develop more effective nutrition programmes and improve nutritional status across the whole population. It addresses several topics from policy down to services delivery levels and community involvement.*

Key words: *Nutrition policy, Burkina Faso, nutritional status, operational capacity, political commitment*

Country Nutritional Profile: Where are we?

With a per capita gross domestic product of 440 (2006), Burkina Faso is one of the poorest countries in the world. Despite considerable progress made on social and economic fronts, as indicated by improvements in indicators such as life expectancy, infant mortality rate (IMR), maternal mortality rate (MMR), under five mortality and literacy rates, the nutritional status of the population, especially children and women, has lagged behind.

According to DHS 2003 results, 35% of children below five years in the country are underweight, 38% suffer from stunting, and 19% suffer from wasting. Data on the nutritional status of adults as determined by Body Mass Index (BMI) shows that 21% of women suffered from different grades of chronic-energy deficiency (CED) with BMI<18.5. Nearly 18% of all infants born in Burkina Faso are of low birth weight (<2500 g), reflecting intrauterine growth retardation, usually caused by maternal malnutrition (DHS 2003).

Growth monitoring and promotion is an important activity to meet mothers and provide nutrition counselling and source of data on child growth but recent monitoring missions showed that various factors negatively affect it. These include non-availability of growth charts at health centre level, lack of skills in recording measurements and lack of appropriate equipment or weighing scales in poor working condition.

Anaemia is one of the most widespread problems. Nine out of ten children aged 6-59 months suffer from anaemia: 19% have moderate anaemia, whereas 60% and 13% respectively, have severe and very severe anaemia (DHS 2003). The prevalence of anaemia among women is also very high: five out of ten women suffer from anaemia and the proportion increases to 63% among pregnant women. Moreover, recent evaluations show that the current strategy of combating anaemia of pregnancy through distribution of iron and folic acid to pregnant women has made only a limited impact .

The last data on total goitre rate (TGR) date from 1996, when a survey covering 15 out of 30 provinces indicated an average goitre prevalence rate of 46% (Burkina Faso 1996). Nevertheless, the broad variation among different geographical areas in the country does not allow us to conclude upon a nationwide decline of TGR. The most affected populations for Iodine Deficiency Disorders (IDD) are children from 6 months to 10 years of age and women aged 26 to 39 years. A survey conducted in 2004 by the MOH Department of Nutrition showed that the median urinary iodine excretion (UIE) level in school-age children was 62.4µg/L, indicating that IDD was still a public health problem (Burkina Faso 2004). In Burkina Faso, there is neither local salt production nor a salt industry. All salt is imported primarily from Ghana (55%) and Senegal (42%) and in small quantities (3%) from other countries. Although 84% of households have access to iodized salt, only 48% possessed salt with adequate levels of iodine (DHS 2003). To control IDD, the national programme includes making iodized salt available to the population, undertaking regular quality control at market level, and raising public awareness.

Data on the national prevalence of vitamin A deficiency (VAD) are not available. The national vitamin A control programme covers children 6-59 months and includes the provision of a high dose (appropriate for age) supplement through health centres, as well as the provision of Vitamin A supplementation during measles and polio immunisations. The current coverage in children 6-59 months delivered through comprehensive vaccination days is estimated at around 98%. On the contrary, the maternal postpartum vitamin A supplementation programme reveals several limits due to the low proportion of babies who are delivered in a health facility, as well as lack of adequate in-service training.

Appropriate breastfeeding and young infant and child feeding practices remain a major and most neglected issue. While the percentage of children breastfed is very high (98.4%), only 18.8% of infants <6 months are

exclusively breastfed (DHS 2003). More than 75% of children receive a pre-lacteal feed, only 33% of women start breastfeeding within one hour of birth, more than 37% of women do not breastfeed during the first day of birth and less than 20% of youngest children age 6-23 months living with their mother are fed the minimum number of foods groups or more (DHS 2003). The last Multiple Indicator Cluster Survey (MICS 2006) reports a situation which is even more alarming with an exclusive breastfeeding rate of 7% among infants of 0-5 months (which increases to only 8% in children of 0-3 months) and less than 20% of children being breastfed within the first hour of birth. According to DHS 2003, only 38% of children between 6 and 9 months receive complementary food, whereas MICS 2006 indicates 49%. Moreover, the complementary foods given are often inadequate and unsafe. Legislation and guidelines on the use and marketing of breast milk substitutes have been revised since 2005 but they have not yet been adopted.

The Landscape Analysis: An opportunity to make the point and plan the future

The Burkina Faso Assessment was carried out jointly by a national team from the Nutrition Directorate (DN¹ of the [Ministry of Health](#)) and an interagency team represented by the United Nations Children's Fund ([UNICEF](#)), the World Health Organization ([WHO](#)), the UN Standing Committee on Nutrition ([SCN](#)), and Helen Keller International ([HKI](#)). The assessment lasted five days. The first day was dedicated to official meetings with national level authorities and used to develop, revise, test and study the assessment tools (questionnaires and interview guidelines).

During the second and third days, the team split into four groups in order to cover different field locations. In addition to the central level in Ouagadougou, the assessment involved three health regions (North, East and Centre-West) (Figure 1), six health districts (Ouahigouya, Gourcy, Koudougou, Nanoro, Fada and Bogandé), three regional hospitals (CHR²), nine primary health care centers (CSPS³), four Public Referral Facilities for SAM (CREN⁴) and two NGOs. In total, fifteen open interviews were conducted, involving key partners from WHO, UNICEF, the World Food Programme ([WFP](#)), World Bank, Institut de Recherche pour le developpement ([IRD](#)), HKI and Groupe de Recherche et d'Echanges Technologiques ([GRET](#))-Nutrifaso, together with seven Ministries: [Agriculture, Hydraulics and Halieutic Resources](#)⁵, [Social Services and National Solidarity](#)⁶, [Secondary, Higher Education and Scientific Research](#)⁷, [Promotion of Women](#)⁸ and three different departments within Health⁹.

Research findings were analyzed, discussed and agreed upon by all team members on the fourth day of assessment. Recommendations were finally presented on the fifth day during a stakeholder meeting which saw the participation of fifty-two people, including members of the multisectoral National Council for Nutrition Coordination (CNCN¹⁰), representatives of donor agencies, NGOs, research institutes, universities and all interested Ministries.

Willingness and Capacity to Act: Are we ready for scaling-up?

Willingness to act

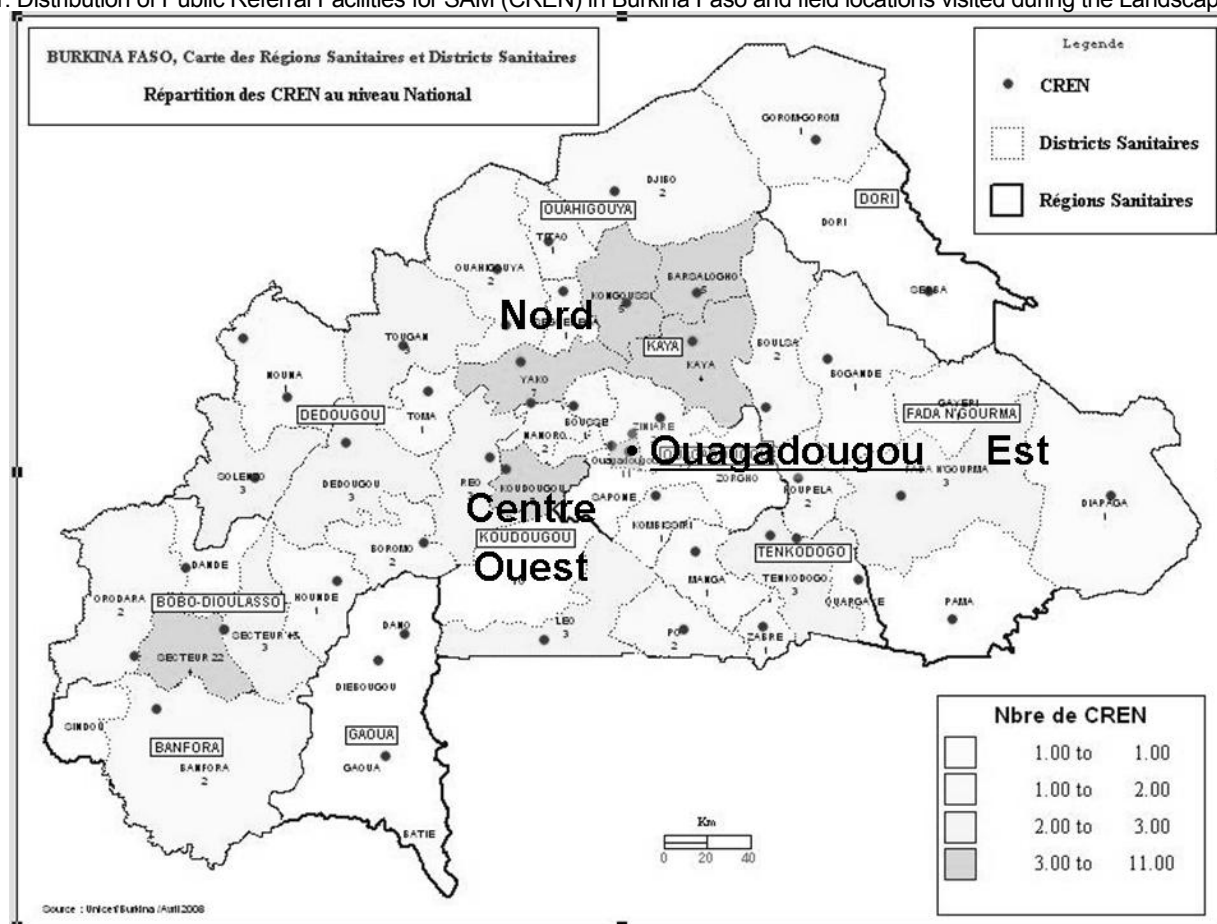
Research findings at all levels confirmed that the actual political commitment to fight malnutrition and scale up nutrition interventions is very strong. Proof of this willingness to act can be seen in several areas.

First of all, in order to give more importance to nutrition related issues, in 2002, the Ministry of Health turned the previous National Nutrition Centre (CNN¹¹) into the current Nutrition Directorate, which is under the auspices of the General Health Directorate (DGS¹²). Second, the recent creation of the CNCN has provided a broadly represented coordination mechanism and a good forum for discussion, advocacy and policy agreement, involving most of the nutrition policy makers, actors and stakeholders in the country. Third, nutrition is recognized as a key subject and considered as a major concern within the existing Interagency Emergency Working Group.

The National Nutrition Policy (Burkina Faso 2007a) provides a policy framework and directions for all nutrition programmes. The National Protocol for Management of Acute and Severe Malnutrition (Burkina Faso 2007b), finalized in March 2007, guides and harmonizes health workers' interventions to ensure appropriate care and

1. Direction de la Nutrition, Ministère de la Santé; 2. Centre Hospitalier Régional; 3. Centre de Santé et de Promotion Sociale; 4. Centre de Récupération et d'Education Nutritionnelle; 5. Ministère de l'Agriculture, de Hydraulique et des Ressources Halieutiques; 6. Ministère de l'Action Sociale et de la Solidarité Nationale; 7. Ministère de l'Enseignement Secondaire, Supérieur et de la Recherche Scientifique; 8. Ministère de la Promotion et de Femme; 9. Direction de la Santé de la Famille, Direction de la Nutrition, Direction des Etudes et de la Planification; 10. Conseil National de Concertation en Nutrition; 11. Centre National pour la Nutrition; 12. Direction Générale de la Santé

Figure 1: Distribution of Public Referral Facilities for SAM (CREN) in Burkina Faso and field locations visited during the Landscape Analysis



treatment to malnourished people, especially children. Currently, the Protocol is being rolled-out through a cascade of training of trainers and it seems to be well received at district and facility levels. The Minimum Nutrition Package is recognized as a high impact intervention and has been included in all district action plans. Finally, nutrition is integrated in the National Poverty Reduction Strategic Plan and in the United Nations Development Assistance Framework, hereby confirming political awareness towards the importance of nutrition as a cross-cutting area and priority.

With respect to financial resources and budget allocation, several actors have increased their financial support to nutrition programmes. For instance, the Nutrition Directorate has increased its human capacity by employing additional staff members. The UNICEF Country Office has also reinforced its nutrition team with a threefold increase in its nutrition budget over the past three years. The World Bank has just approved a grant worth of 10,000,000 USD to finance community based nutrition interventions. Furthermore, non governmental organizations (NGOs) and civil society organizations - by applying to different budget lines from a variety of multilateral and bilateral funding agencies ([WFP](#), European Community Humanitarian Aid ([ECHO](#)), Office of U.S. Foreign Disaster Assistance ([OFDA](#)), Japan International Cooperation Agency ([JICA](#)), etc.) - have mobilized resources committed to nutrition and invested them in the country.

At the district level, it was reported that support from the central level has been strengthened since 2007 in terms of improved communication, yearly monitoring, supervision visits, and organization of training of trainers for the management of severe acute malnutrition (SAM). Moreover, a range of coordination mechanisms are already in place at decentralized levels within the health sector and might be used to harmonize and strengthen nutrition interventions. These mechanisms include the Regional Technical Health Committee (CTRS¹), the District Leadership Team (ECD²) and the Primary Health Facility Management Committee (COGES³). Two out of thirteen health regions have also created specific Regional Nutrition Coordination Committees.

Finally, the country can benefit from several existing and potential nutrition partners, which might support and facilitate the scale-up of nutrition interventions.

1. Comité Technique Régional de Santé; 2. Equipe Cadre de District; 3. Comité de Gestion

Despite the considerable achievements, some major weaknesses still affect the current willingness to act.

The CNCN, which has been greeted with enthusiasm by all nutrition partners, needs to be integrated with small thematic commissions (or working groups), able to address specific problems and suggest timely concrete solutions. Moreover, its anchorage in the health sector might challenge the multisectoral approach, which would then need to be safeguarded through the introduction of some special measures. These could include the organization of periodical meetings, the creation of coordination panel or special information flow among different ministries and/or directorates. Finally, the CNCN does not involve the regional level, whose commitment is crucial to enforce CNCN's decisions and translate them into action.

Although the National Nutrition Policy and the National Protocol for Management of SAM are appreciated, they are not always available at district and facility levels. In addition, the Minimum Nutrition Package Booklet (Burkina Faso 2005b) and the Practical Guide for Appropriate IYCF (Burkina Faso 2005a) are often missing at these levels. There is no specific support in operational planning, and nutrition is not always adequately incorporated into the regional and district action plans. Even if the Minimum Nutrition Package is part of the recommended high impact interventions (HII), the budget allocated to it is usually underestimated and far below the proportion allocated to other interventions, with the IYCF aspect frequently ignored.

Financial resources directed at tackling the nutrition problem were perceived to be insufficient by all people interviewed. Moreover, the allocation of national funds to nutrition programmes does not reflect the political commitment. Financial resources at regional and district levels are also perceived to be insufficient, with little allocation of regular funds from the national level to sub-national action plans.

Finally, support from partners at the decentralized level is unevenly distributed and insufficient compared to actual needs.

Capacity to act

Nutrition services delivery has made significant progress over the last few years in terms of human resources, infrastructures, equipment, partners, coordination, monitoring and supervision. Nevertheless, a rapid scale-up is still elusive, with poor human resources and a lack of coordination at the community level being identified as the major cause preventing better performances.

Human resources capacity at the national level is definitely on the increase, with twenty-one nutritionists currently working for the public system. The majority of health facilities meet staffing requirements and measures have also been taken to counter staff turnover, which remains a major obstacle to an effective capacity building. There is a good basis for strengthening nutrition, including good interpersonal communication skills, acknowledgement that nutrition is important, recognition that responses must be community-based, motivation to solve nutrition problems and to increase nutrition know-how. However, the general perception is that human resources are insufficient, especially at the sub-national level, where there is a shortage of staff with formal training in nutrition and very few health workers able to strengthen capacity at the community level.

Services for management of moderate and severe acute malnutrition do not cover the whole country and are often characterized by sub-optimal quality standards. Referral facilities for SAM (CREN) are not functional in all districts yet. Counter-reference performances are usually inadequate. Moreover, the fact that caregivers can not be accommodated enhances the defaulter rate and affects the overall attendance. Prevention of Mother-to-Child Transmission (PMTCT) programmes do not adequately integrate nutrition issues and even if Integrated Management of Childhood Illness (IMCI) and community IMCI (c-IMCI) include nutrition, their coverage is insufficient. Lack of anthropometric minimum equipment (measuring boards and scales) and Behaviour Change Communication (BCC) material is recurrent at all sub-national levels. Health booklets and growth charts exist but they are not available everywhere. Appropriate stocks of essential drugs and therapeutic food depend to a large extent on the presence of partners in the area. There are many reasons for this, including inadequate stock management and inadequate forecasts which are largely based on official DHS data instead of reflecting the real situation.

Some pilot projects have been started in order to raise public awareness and contribute to nutrition behavioural change by disseminating nutrition messages throughout local radio and other media. Unfortunately, this is not intensive and not all communities can be reached by radio. Furthermore, messages

still need to be adapted to the different environments. In general terms, nutrition promotion activities are weak, particularly those promoting IYCF. There is a lack of BCC material and poor harmonization of messages among partners. A National Nutrition Communication Plan is being developed by the Nutrition Directorate and should help to improve the situation.

With respect to nutrition data, national level policy makers use a variety of sources such as DHS, Annual Health Statistics, MICS, etc. Even so, data management - especially day to day data collection at the facility level - needs to be greatly improved. The National Health Information System (SNIS¹) does not include several nutrition-relevant indicators, such as weight/height, and lacks important data on coverage and delivery of services and consumable supplies. Second, the quality of the information collected varies and data are not always collected on a representative basis. Third, many facilities lack nutrition registers, revised cards, and adequate training on data management. Fourth, data transfer suffers from frequent delays and monitoring reports are often incomplete despite the considerable amount of time spent on preparing them.

At the community level, existing resources are not well valorised and utilized. Supervisions and support received from health centres are very poor and the lack of any kind of compensation for community health workers penalizes sustainability, motivation and commitment.

Making It Happen: Nationally, regionally and locally

To move forward and scale up nutrition interventions in Burkina Faso, the Landscape Analysis Country Assessment showed that some of the major political commitments that exist have not been translated into action and several operational weaknesses still need to be addressed. Box 1 presents a set of concrete recommendations agreed by nutrition stakeholders at the consensus meeting on Friday 16 May.

At the national level, the CNCN has to be reinforced by the establishment of thematic groups designed to work on specific subjects and to suggest concrete solutions to a number of issues related to policy, planning, accountability and management. Moreover, to engage the regional level and make sure that CNCN's decisions will be implemented on the field, information flow from central to decentralized institutions has to be rapidly reinforced.

The Strategic Nutrition Plan, which is being finalized by the Nutrition Directorate, needs to be integrated with an action plan, a detailed budget, resource mapping and a clear definition of responsibilities for both implementation outputs and achievement of results. This would encourage policy makers to set priorities and link them to existing financial resources and future mobilization of funds.

The most significant constraint to a rapid scale up is indeed inadequacy of regular funds. The financing gap therefore needs to be filled through additional resources, a substantial portion of which may have to come from development partners. Nevertheless, to simply increase the availability of external funds is not enough. Improving predictability of aid flows and enhancing donor coordination (in terms of planning, practices, procedures, accountability, reporting and monitoring) are a prerequisite to ensuring more effectiveness. Furthermore, the central level has to enforce its political commitment by increasing the government budget allocation to nutrition. This would contribute to reduce dependence on external donors and decrease the concern for future sustainability if their priorities change. Tracking resource flows to nutrition through the national health accounts is also needed in order to hold governments accountable and to give cost-effectiveness evidence to results. Finally, the availability of new funds through new funding channels (such as the World Bank grant) is likely to compound the problem of low absorptive capacities. This must be seen as an opportunity to analyze existing country capacity limitations and to work on them.

To engage national leaders in policy dialogue about public health nutrition, PROFILES has been identified as a valuable advocacy tool, which can also be used to facilitate the design of new programmes and as a working model in training situations.

Partnerships are a fundamental feature of the effort to mobilize public, private and civil society actors. Complementary strengths among partners have been identified as a key feature of success. Nevertheless, to ensure that partners work well and address country priorities, and to avoid competition between government and NGOs for new resources, it is necessary to put into place strong coordination mechanisms and control

1. Système National d'Information Sanitaire

Box 1: Suggestions and recommendations arising from the assessment and agreed at the consensus meeting on 16 May

National level

Coordination

- Increasingly involve partners in development of documents
- Establish thematic working groups under the CNCN, starting with working groups on nutrition data, training, communication plan, strategic plan
- Establish decentralized CNCN structures at regional level

Resource mobilization

- Develop an Action Plan for coming years, with budget and document successful experiences
- Advocate for increased nutrition budget using PROFILES (an evidence-based nutrition advocacy tool already developed for Burkina Faso and widely used in Africa).
- Solicit more technical support from partners

Strengthening human resources capacity in nutrition

- Develop a training plan that covers:
 - In-service training of nutritionists
 - Strengthening of nutrition competencies among health workers, in other sectors, and among community leaders
 - Training on the continuum of care from prevention of malnutrition to management of acute malnutrition
- Consider training of health workers
- Promote nutrition among school aged children

Sub-national level

Commitment to act:

- Establish or strengthen coordination mechanisms at regional level to enhance involvement of partners and better coordinate activities
- Give more importance to nutrition in Regional and District Action Plans, including more and increasing allocated budget
- Ensure, without delay, that all relevant policy and protocol documents are available at sub-national levels
- Strengthen technical and financial support from partners to districts and regions in all country

Capacity to act - Human resources

- Accelerate recruitment of nutritionists at national and regional levels in order to have one nutritionist in each region
- Identify training needs for health workers (themes and numbers)
- Ensure in-service training at decentralized levels;
- Take into account staff mobility
- Increase frequency of trainings
- Enhance knowledge transfer by health workers who have received training
- Strengthen nutrition expertise in CRENS
- Include nutrition in curricula of initial training in health, agriculture, social services, education

Capacity to act - Nutrition promotion

- Implement at scale a National Nutrition Communication Plan that is being finalized
- Strengthen communication competencies among health workers
- Ensure IEC material is available throughout the health system
- Mobilize partners to support scaling-up the package of essential nutrition actions
- Develop community-based nutrition throughout the country

Capacity to act - Management and information systems

- Strengthen health infrastructure, including space for nutrition education, storage room
- As soon as possible, make CREN, the referral structure, operational in all regions
- Strengthen health structures in terms of financial and logistic resources for supervision at all levels
- Ensure adequate provision and storage of all supplies in health facilities and in the community
- Establish a motivation system for nutrition activities
- Review the list of nutrition indicators used by the Directorate of Studies and Planning in the SNIS
- Harmonize tools used by partners according to the national protocol
- Reproduce and disseminate as appropriate tools for data collection

systems. CNCN is a good starting point but it is not enough. Systematic mapping of partners is needed in terms of their benefit, problems, governance and management characteristics. It is also necessary to learn and share lessons on best practices and on other West African countries' experiences.

Also, national solutions to the production of complementary food should be encouraged by supporting operational research and pilot projects.

Each health region has to benefit from the employment of a nutritionist, who must be responsible for all nutrition activities as well as supervision of nutrition at the district level and integration of nutrition with social services and education institutions. Moreover, a regional coordination mechanism among partners needs to be established in order to ensure harmonization of interventions, information sharing and the representation of all stakeholders. In regional and district action plans nutrition needs to be strengthened especially with respect to HII and the promotion of appropriate IYCF practices.

At all services delivery levels, from health regions down to primary health units, human resources have been recognized as *the* bottleneck that impedes better performances. Problems associated with recruitment, training, updating, motivation, mobility, per diems, absenteeism, workload and migration of staff out of the public sector urgently need to be addressed. To start with, recommendations were formulated to develop a training plan which should cover both training of nutritionists and strengthening of nutrition competencies among all health workers. Training on the job and more frequent supervisions also emerged as two key strategies to build and reinforce capacity in the field.

Together with human resources, the nutrition information system remains one of the biggest operational limits and needs to be addressed by formulating new nutrition monitoring indicators and reinforcing nutrition surveillance during child monitoring activities and ANC services.

At the local level, the involvement of the community in all nutrition initiatives has been recognized as essential for success. Community based approaches have to be developed and implemented across the country. In addition, a study of motivation and possible incentives for community-based health workers (CBHWs) is strongly recommended together with a CBHWs census. Also, multisectoriality and a local ownership approach can only be achieved by matching nutrition initiatives promoted by the health sector with Local Development Plans (PDL), which represent the planning platform for development at the bottom level.

To make it happen, the new roadmap has to concentrate on four elements: prevention, multisectoriality, national leadership and community involvement. Although big pressure exists on the scaling up of nutrition programmes and progress on nutrition MDGs, all actors involved should be committed not just to *do* in order to show rapid results, but to *do well* and thereby build long lasting capacities at the national, regional and local levels.

Follow-up and next steps

The consensus meeting was held on 16 May 2008 to review and discuss the outcomes of the Landscape Analysis country assessment. Fifty-two stakeholders participated and agreed on several recommendations, which will be integrated into the National Nutrition Strategic Plan and into the Global Nutrition Communication Plan, both expected to be finalized in 2009.

As suggested by the Landscape Analysis, on 1 October 2008, the CNCN created the following four thematic groups to work on specific issues and provide technical solutions:

1. *Nutrition and Community Participation Group* to define and implement an effective strategy aimed at strengthening community involvement through local, national and international NGOs;
2. *Nutrition and Food Security Group* to work on strategies to prevent and manage food insecurity as well as to integrate the National Nutrition Policy with the National Food Security Plan;
3. *Nutrition and School Health Group* to follow up on nutrition activities at schools and to develop and improve teachers' skills and curricula on nutrition;
4. *Nutrition and Public Health Groups* to define procedures, rules and protocols as well as to build national capacities on nutrition and to develop a national strategy for nutrition promotion.

Moreover, as part of the follow-up to the Landscape Analysis, measures are being taken to strengthen nutrition at decentralized regional level. In support of these efforts, during the course of 2009 UNICEF will provide all thirteen Health Regions with a vehicle to be used to undertake specific nutrition supervision visits to health districts and health posts and to support health staff with appropriate training on the job and assistance on

nutrition related issues. In addition, in order to strengthen nutrition action at regional level, five regions (North-Center, North, East, Sahel and South-West) have created their own Regional Nutrition Council and four regions (Sahel, Cascades, East-Center and South-West) have designed a Regional Nutrition Action Plan.

In order to alleviate the impact of rising food and fuel prices, UNICEF and other development partners provided additional funds that are being spent in implementing some of the recommendations made through the Landscape Analysis. These include the signing of eight project agreements in 2009 between UNICEF and humanitarian NGOs intervening on community nutrition in order to support the national scaling up of the essential nutrition actions package as well as to encourage new community-based approaches around the country.

Finally, the Nutrition Directorate in collaboration with financial and technical partners is working to develop a nutrition surveillance system which will include both annual SMART surveys and day-to-day nutrition data collected by health facilities. This was also one of the areas recommended to be strengthened.

References

- Burkina Faso (1996) *Etude sur la goitre endémique au Burkina Faso*. Centre National pour la Nutrition, Ministère de la Santé.
- Burkina Faso (2001) *Plan National de Développement Sanitaire 2001-2010*. Ministère de la Santé. ([online](#))
- Burkina Faso (2003) *Enquête Démographique et de Santé 2003*. Institut Nationale de la Statistique et de la Démographie (INSD). ([online](#))
- Burkina Faso (2004) *Rapport sur la carence en iode dans le Burkina Faso*. Direction de la Nutrition, Ministère de la Santé.
- Burkina Faso (2005a) *Guide Pratique pour une Alimentation Optimal du Nourrisson et du Jeune Enfant*. Ministère de la Santé.
- Burkina Faso (2005b) *Paquet Minimum d'Activités de Nutrition*. Ministère de la Santé.
- Burkina Faso (2007a) *Politique National de Nutrition*. Ministère de la Santé.
- Burkina Faso (2007b) *Annuaire Statistique/Santé 2006*. Ministère de la Santé. ([online](#))
- Burkina Faso (2008) *Enquête par Grappes à Indicateurs Multiples (MICS) 2006*. Institut Nationale de la Statistique et de la Démographie (INSD), UNICEF, 2008. ([online](#))
- Geert Heikens T, Amadi B C, Manary M, Rollins N and Tomkins A (2008) Nutrition Interventions need improved operational capacity. *The Lancet* 371(9608):181-2.

Team members and contributors: Shawn K Baker (HKI), Ilaria Bianchi (Unicef Burkina Faso), Abel Dushimimana (WHO AFRO), Ghislaine Connombo (WHO Burkina Faso), Kaia Engesveen (SCN), Fatoumata Lankoande (Nutrition Directorate, MoH Burkina Faso), Anne-Sophie Le Dain (Unicef West and Central Africa), Biram Ndiaye (Unicef Burkina Faso), Hélène Ouedraogo (Nutrition Directorate, MoH Burkina Faso), Romeo Ouilli (Nutrition Directorate, MoH Burkina Faso), Prosper Sawadogo (Nutrition Directorate, MoH Burkina Faso), Ann Tarini-Hien (HKI Burkina Faso).

Contact: cnnbf@fasonet.bf

VACANCY ANNOUNCEMENT:

International Atomic Energy Agency (IAEA) Nutrition Scientist (P-3)

Main purpose: As a team member reporting to the Section Head, the Nutrition Scientist formulates and implements nutrition projects to combat malnutrition in all its forms in IAEA Member States.

Role: The Nutrition Scientist is a *specialist*, in particular in the use of nuclear techniques in nutrition within the Section, and a *contributor* to the IAEA's activities in human nutrition.

Functions: Assist in the conceptualization, design and implementation of CRPs. Provide technical assistance to nutrition projects supported by the IAEA technical cooperation programme. Develop guidelines and distance learning modules on nuclear techniques in nutrition. Organize technical meetings and consultants meetings to review current knowledge in nutrition. Prepare reports, proceedings and scientific publications.

Knowledge, Skills and Abilities: Excellent knowledge of nutrition, in particular at the international level; Good knowledge of relevant analytical techniques; Sound knowledge of biochemistry and physiology; Understanding of the specific needs and conditions of developing countries as regards nutrition.

Application Deadline: 30 June 2009

For more information see http://recruitment.iaea.org/vacancies/p/2009/2009_700.html

Landscape Analysis of Readiness to Accelerate the Reduction of Maternal and Child Undernutrition in Ghana

Mary N. A. Brantuo ([WHO](#) Ghana), Wilhelmina Okwabi (Family Health Division, [GHS](#)), Seth Adu-Afuawuah ([UNICEF](#) Ghana), Ernestina Agyepong ([UNICEF](#) Ghana), Nana Tamea Attafuaah (P.O. Box 252, Legon, Ghana), Gladys Brew (Family Health Division, [GHS](#)), Veronica Gomez (Family Health Division, [GHS](#)), Alice Dawson ([WIAD](#), MOFA) and Joseph Ashong ([Cornell University](#))

Nutrition situation and actions in Ghana

Ghana, like many other countries in Sub-Saharan Africa, experiences high rates of maternal and child undernutrition including moderate to severe micronutrient deficiencies. This poses a challenge to meeting the nutrition-related Millennium Development Goals (MDGs 1, 4 and 5), and place Ghana amongst the 36 countries with a high burden of malnutrition (Black et al 2008). In the Ghana Demographic and Health Survey of 2003, nearly a quarter (22%) of children less than five years in Ghana were underweight, about a third (30%) were stunted and nearly one in fourteen (7%) was wasted (GSS et al 2004). In the Multiple Indicator Cluster Survey of 2006, these rates had dropped to 17.8%, 22.4% and 5.4%, for underweight, stunting and wasting respectively (MOH et al 2008). This decrease is expected to be confirmed by future surveys. Anaemia¹ (commonly caused by inadequate dietary iron intake, malaria, and intestinal worm infestation) affects 76.1% of children, and 44.7% of women between 15 and 49 years of age (GSS et al, 2004). The Micronutrient Initiative estimates that in 2004, 60% of children under 6 years had sub-clinical vitamin A deficiency (Micronutrient Initiative 2004). Among women aged 15 – 49 years, 9.3% are underweight (BMI<18.5kg/m²) (GSS et al 2004).

These national rates conceal, however, wide disparities between southern and northern Ghana, as well as between rural and urban areas. Northern Ghana (Upper East, Upper West and Northern regions) has greater rates of undernutrition than the national averages: child underweight and stunting are each greater by about 12 percentage points (PP), and wasting by 3.3 PP (GSS et al, 2004). Compared to urban centres, greater percentages of children in rural areas are underweight (25.4% vs. 15.4%), stunted (34.5% vs. 20.5%) and wasted (7.4% vs. 6.6%) (GSS et al 2004). The same pattern of regional and urban versus rural differences holds true for undernutrition among women.

There are numerous strategy documents and programmes aimed at improving nutrition, such as “Imagine Ghana Free of Malnutrition” (GHS 2005), the Community-based Growth Promotion programme and others outlined in the Health Sector Programme of Work 2007-2011 (MOH 2007a). See Table 2 for a complete list and analysis. The current strategies and programmes are, of themselves, steps in the right direction, but their effectiveness, particularly on a national scale, may be hampered by several existing gaps which have resulted in the slow progress so far observed. Ghana undertook this landscape analysis to assess existing gaps and constraints in the area of child and maternal nutrition, and to identify opportunities to integrate and scale up nutrition-related actions. Results of the analysis are important for accelerating support towards achieving the nutrition related MDGs in Ghana. This paper describes the methodology of the landscape analysis, the key results and the recommendations made.

Country assessment: methodology

Assessment team

A national task force was created under the leadership of Ghana Health Service ([GHS](#)) with representatives from the Ministry of Food and Agriculture (MOFA) Women in Agricultural Development ([WIAD](#)), the United Nations Children's Fund ([UNICEF](#)), the World Health Organization ([WHO](#)) and academia. Members were selected based on their level of involvement in child and maternal nutrition issues and programmes in Ghana. The national task force was joined by a group of external partners from the headquarters and regional offices of WHO, UNICEF, the UN Standing Committee on Nutrition ([SCN](#)) and the Global Alliance for Improved Nutrition ([GAIN](#)), who formed the assessment team. During the weeks prior to the assessment, the national task force, led by two of the members who had participated in an international orientation workshop on the landscape analysis tools and methods held 7 March in Hanoi, met regularly to plan the process. They also developed questionnaires based on templates obtained from WHO that were modified to suit Ghana's setting.

1. Anaemia is defined in children and pregnant women as haemoglobin concentration Hb<11.0 g/dl, and in non-pregnant women as Hb<12 g/dl.

Assessment procedure and questionnaires

The assessment procedure involved a desk review of the nutrition situation in Ghana, and a collection of primary data in the field. The desk review was completed by the national task force prior to 14–18 July 2008, the exact period of the landscape analysis, and involved a review of nutrition reports from previous Demographic and Health Surveys (DHS) and the Multiple Indicator Cluster Survey (MICS), an examination of various government strategy documents in the area of child and maternal nutrition, and a mapping of existing interventions projects. The purpose of the desk review was to collect information that served as a background to the landscape analysis, and help guide the data collection in the field.

Data was collected in the capital Accra (for national level) and in six districts in three regions (Eastern, Volta and Northern). The selection of these regions took into account geographic distribution across northern and southern zones as well as the spectrum of nutrition activities in the regions.

During the assessment period, the team divided up into four groups, each consisting of both local and external team members, which then visited the designated areas for the purpose of conducting the interviews.

Interviews at the national level involved mainly senior staff (Directors and managers) at key government ministries and agencies, Departmental heads of academic and training institutions, and national programme officers of UN, donor and non-governmental organizations (NGOs). The information collected at this level involved the nutrition situation, policies and programmes, in-service training for key service providers, pre-service training at tertiary level, and nutrition education at basic school level. At the regional and district levels, interviewees included the Directors of Health Services, Regional and District Nutrition Officers, Disease Control Officers and senior staff of MOFA's WIAD. Information was also obtained from managers and administrators of hospitals, health centres, outreach centres, child welfare clinics, and where available, nutrition rehabilitation centres. The questionnaires at these levels explored available capacity and current activities in nutrition. A wide spectrum of people were interviewed, including seven MOH Directors, six national nutrition officers two regional health directors, three regional nutrition officers and six district nutrition officers, as well as representatives from three Ministries, seven NGOs, four Bilateral organizations, four UN Agencies, six educational and training institutions, and one food manufacturer. At district level, a range of facilities were visited, including seven antenatal clinics (ANC), six child welfare clinics (CWC), four outpatient departments (OPD), and one Nutrition Rehabilitation Centre.

Analysis of data

Data collected were summarized under two main sub-headings which reflect stakeholders' (a) "willingness to act" at scale to accelerate reduction of maternal and child undernutrition, and (b) "capacity to act" Together, the "willingness to act" and the "capacity to act" indicate the country's readiness to accelerate actions to reduce child and maternal undernutrition. For both variables, the *strengths* and *weaknesses* of the country are highlighted.

Findings of the Nutrition Landscape Analysis country assessment in Ghana

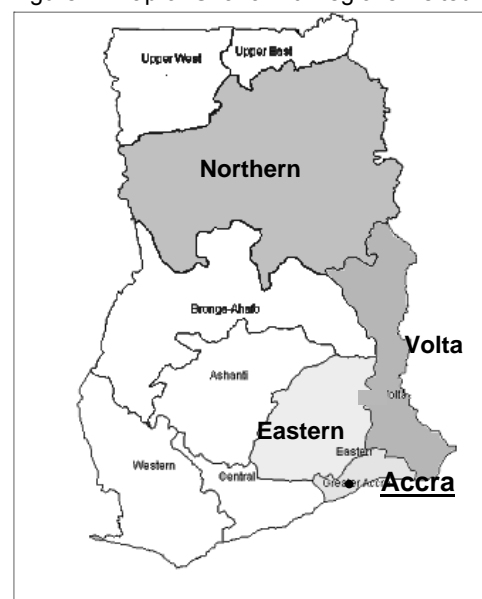
Assessment of commitment to scale-up nutrition actions

There has been considerable political commitment at the national political or ministerial level, towards nutrition in Ghana over the past years as evidenced by the number of nutrition initiatives championed by high level policy-makers, the existence of nutrition related policies, as well as the inclusion of nutrition in various government policy documents as

Table 1: Underweight, stunting and wasting among children 0 – 59 months , and underweight among women 15-49 years (GSS et al 2004, MOH et al 2008). (Reference population WHO/CDC/NCHS reference)

	DHS 2003	MICS 2006
<i>Children 0 – 59 mo age</i>		
Underweight (WAZ > -2)	22.1	17.8
Stunting (HAZ < - 2)	29.9	22.4
Wasting (WHZ < - 2)	7.1	5.4
<i>Women of child-bearing age (15-49 y)</i>		
BMI < 18	9.3	--

Figure 1: Map of Ghana with regions visited



shown in Table 2. There are a number of development partners funding various nutrition programmes. The main priorities, problems and causes identified by stakeholders during interviews, were fairly consistent. The highest priority was identified as infant and young child nutrition, followed by micronutrient deficiency and nutrition communication and education, respectively. Micronutrient deficiencies were again identified as the major nutrition problem followed by poor dietary habits. The consistency amongst the stakeholders on nutrition issues in the country presents an opportunity to prioritize the nutritional well-being of infants and young children and to focus upon other interventions identified as important.

Other strengths were noted in the organisation and management of nutrition programmes in the country. The Nutrition Unit has been elevated to department level, implying more autonomy and resources for implementation. There is an interagency nutrition partners' group coordinated by UNICEF and chaired by the GHS. Several taskforces and committees have been created for the purpose of guiding the implementation of various interventions such as Anaemia Control, the Baby Friendly Hospital Initiative, and the Food and Drugs Board Code monitoring taskforce to monitor adherence to the National Breastfeeding Promotion Regulations (national code on marketing of breastmilk substitutes) amongst others. There is also good collaboration between the Nutrition Unit of GHS and WIAD.

At the Regional and District Health Directorate level, nutrition is included in the Programme of Work for the year 2008. The areas included are Infant and Young Child Feeding activities, Essential Nutrition Actions¹, management of malnutrition, micronutrient deficiency control, Nutrition Health Education and regenerative health and nutrition. There are also existing budgets specifically for nutrition within the Global Fund to Fight AIDS, Tuberculosis and Malaria, WIAD and HIRD. Some UN agencies, development partners and NGOs such as Catholic Relief Services (CRS) support activities particularly in the northern sector of the country. There are also opportunities for coordination, effective organisation and management of programmes such as the Health Management and District Assembly meetings.

Beyond these strengths, a number of weaknesses were also noted which do hamper progress. Key amongst these is the lack of a national food and nutrition policy. Inter and intra coordination and collaboration within the government agencies were found to be inadequate. Diverging priorities of governmental organizations sometimes constitutes a problem for working efficiently together, for instance food security and production rather than nutrition quality being the primary focus of the Ministry of Food and Agriculture whereas the Ministry of Health focuses more on the health aspects of nutrition and less of those related to food. Limited private sector participation in addressing malnutrition constitutes another weakness.

Despite the existence of a decentralised reporting system, information systems at national and regional levels are not coordinated well. There are no nutrition indicators monitored by the Policy Planning, Monitoring and Evaluation Division (PPMED) to ascertain the progress being made in nutrition. For instance, information on the magnitude of some aspects of malnutrition, budget allocations, human resources and data on nutrition is not readily available. At the district and health facility level, there is no standardized form that health workers can use to collect all key indicators for nutrition and health. Rather, there are several existing forms used by the various programme areas or departments. Also, donor requirements and international initiatives directed towards special areas such as tuberculosis obligate the units and departments to collect data different from that they usually collect. This duplication of efforts in data collection, leads to poor quality data and creates an extra burden for health workers.

Assessment of capacity to scale-up nutrition actions

A challenge identified by the majority of stakeholders as one of the important barriers to scaling up nutrition interventions was inadequate human resources, in terms of distribution and appropriate skill mix, capacity and motivation of staff. This was considered when reviewing the capacity of the health system to act.

There are capable training institutions at the national level and efforts are being made to increase capacity in nutrition for mid-level health professionals such as diploma-level nutrition officers at national, regional and district levels. At present, a variety of human resources are mobilised at district and sub district levels for nutrition interventions. Community Health Nurses are placed in communities as part of outreach services. There is enthusiasm and knowledge among district level staff as well as involvement of capable community volunteers.

From interaction with the facility managers, it became clear that nutrition was integrated into other public

1. Actions included in ENA: Optimal breastfeeding; appropriate complementary feeding; feeding the sick child; women's nutrition; control of vitamin A deficiencies; control of anaemia, control of iodine deficiency disorders; and family planning.

health services done during community *durbars*¹, school health activities, adolescent health activities, Integrated Management of Childhood Illnesses (IMCI), home visits, and micronutrient supplementation amongst others. The concept of integration is very good since it helps improve nutrition education and increase partnership on current levels and quality of healthcare by maximising resources available and reducing duplication and wastage of resources for the benefit of the community. It can also serve as a medium for addressing nutrition related illnesses in a holistic approach that can significantly address complex health issues being faced by communities.

Training and other information materials on breastfeeding, complementary feeding, vitamin A supplementation for children, maternal anaemia, HIV, and infant and young child feeding counselling and support were available in health facilities visited, along with supplies such as Vitamin A capsules, Fe-Folic Acid and multivitamins.

Community mobilization programmes being implemented by the facilities included health promotion campaigns; community IMCI activities as well as meetings with opinion leaders. Asked in what ways the community could better support breast feeding practices, the responses gathered revealed a need for training programmes for Traditional Birth Attendants (TBAs) and community midwives and the strengthening of mother support groups to help new mothers to breastfeeding success. This indicates an opportunity for communities to be involved in nutrition service delivery. From the point of view of the facility managers, the community could better support maternal and child health activities by setting up or strengthening mother to mother and father to father support groups, organizing *durbars* to discuss maternal and child health issues, getting opinion leaders involved in maternal and child health activities, and focusing upon communal activities such as farming to grow iron rich foods.

There are structural challenges to recruiting and deploying graduate nutritionists at lower implementation levels such as the district and sub-district. Presently technical officers (trained in the Rural Health Training School in Nutrition and Disease Control) are deployed at the district and sub-district levels. For most of these officers however, implementing nutrition interventions are second priority to disease control interventions due to resource constraints.

There was limited knowledge and appreciation of nutrition solutions among medical personnel. Some health workers in direct contact with mothers and children were not fully up to date on nutrition protocols such as the management of acute malnutrition or nutrition in HIV. Nutrition is not strongly addressed in medical, nursing, agriculture and other paramedical training although nutrition is an important aspect of work in these fields. Moreover, training and research institutions are not closely linked to nutrition service delivery at all levels.

Some facilities' equipment and supplies (e.g. weighing scales, measuring boards) at the district and sub-district levels (Baby Friendly and Rehabilitation centres) were not up to standard and BFHI was inadequately implemented. Nutrition rehabilitation centres were present only in some areas, implying limited access to care for all severely malnourished children.

Recommendations

A number of recommendations were suggested by the assessment team based on their observations and analysis. These were modified based on inputs received from national stakeholders in a consensus meeting, and then further refined at the national level. The recommendations made addressed "policy and coordination", "Infrastructure, training and availability of supplies", and "programming in Infant and Young Child Feeding" (Box 1). In this article, they are discussed in relation to the seven challenges for scaling up effective nutrition actions at the national level suggested in the fourth paper of the Lancet Nutrition Series (Bryce et al 2008).

The first challenge is getting nutrition onto the list of priorities and keeping it there. In line with this, some advocacy measures were recommended such as the use of PROFILES; getting more people with higher degree in nutrition at national, regional and district levels; and, placing nutrition on the agenda of district health directors' meetings. In addition a National Policy on Nutrition was suggested to provide the legal and institutional framework for all stakeholders in nutrition.

The team also recommended integrating accountability for MDG1 in key health programmes, and MDGs 4 and 5 in

1. A "durbars" is an informal meeting where all members present have equal opportunity to contribute to the discussions. This forum is used to impart information and obtain views of community members.

Table 2: Overview of nutrition policies, strategies and major programmes in Ghana

Policies, strategies and programmes in Ghana	Nutrition thematic areas addressed										Policy components specified																										
	Undernutrition					Over-weight		Micronutrients				YCF				Food security				Health																	
	Underweight	Stunting	Wasting	Therap. feed.	Maternal	LBW	Preventive	Treatment	Vit A	Iron	Iodine	Fortification	Micronutrient Sup	Early initiation	Exclusive BF	Complementary food	Responsive feeding	Production	Supplementation	Cash transfer	School feeding	MCH	Vaccination	Deworming	Bednet	Wat San	Targets	Coverage	Timeframe	Budget	M&E	Action Plan					
Growth and Poverty Reduction Strategy (GPRS II) (2006-2009) ¹ (NDPC 2005)	x	x		x														x			x						x						x				
National health policy: Creating health through wealth (MOH 2007b)	x																																				
Food and Agriculture Sector Development Policy (FASDEP II) (MOFA 2007)	x	x																																x			
Imagine Ghana free of Malnutrition (GHS 2005)	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x				x	x						x							x			
Anaemia Strategy (GHS 2003a)									x			x																									
Vitamin A Policy (MOH 1998)									x			x																							x		
Child Health Policy (Final Draft, GHS/MOH 2008)	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x											x	x	x	x	x	x	x	x			
Infant and Young Child feeding Strategy for Ghana (GHS 2007a)	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x																					
National Reproductive Health Service Policy and Standards (GHS 2003b)					x				x			x																									
Reproductive Health Strategic Plan 2007 – 2011 (GHS 2007b)					x				x			x																								x	
Breastfeeding Promotion Regulations (MOH 2000) ²																																					
National Breastfeeding Policy (MOH 1995a)																																					
Regenerative Health Policy Paper (MOH 2007c)							x																														
High Impact Rapid Development Approach (HIRD) ³	x	x	x	x	x				x	x	x	x	x	x	x	x											x	x	x	x	x	x	x	x	x		
Food and Drug Law and amendments: Universal Salt Iodisation (MOH 1995b)									x	x	x	x	x	x	x	x																					
Food and Drug Law and amendments: Fortified flour and oil. ⁴ (MOH 2007d)									x	x	x	x	x	x	x	x																					
Integration of nutrition actions into HIV, IMCI, Maternal Health, HRD policies and protocols	x	x	x	x	x				x	x	x	x	x	x	x	x																					
Community-based Growth Promotion programme	x	x	x	x	x				x	x	x	x	x	x	x	x																					
Essential Nutrition Actions programme	x	x	x	x	x				x	x	x	x	x	x	x	x																					
National Plan of Action for Promotion of Breastfeeding, Ghana (MOH 1995c)					x																																x

1. Overall development framework for the country; 2. Legislative Instrument - local ratification of International code; 3. In Ministry of Health "5 Years Programme of Work"; 4. Awaiting Parliamentary approval

agriculture programmes. Including undernutrition as a key indicator in health programmes will ensure that attention is given to nutrition. In addition infant mortality and maternal mortality indicators when considered in the Agriculture sector will show the strong linkages between food and health in nutrition.

To ensure the country is “doing the right things” and “not doing the wrong things” the team recommended the strengthening of counselling and education. It was suggested that the school feeding programme should be used as an opportunity to improve nutrition education and nutrition among school aged children. Another recommendation was to disseminate evidence based, locally-appropriate guidelines for complementary feeding such as in the child health records at community level and to increase appropriate use of these guidelines. Nutrition education has been shown to be effective in reducing stunting.

Challenges four and five concern “acting at scale” and “reaching those in need”. This implies nutrition services available at all levels of the health delivery system and in all districts across the country. The recommendations made were to provide adequate resources for logistics needed to deliver basic health activities (e.g. weighing scales and Mid-Upper Arm Circumference (MUAC) strips at every facility), and to accelerate the scale-up of BFHI. Other recommendations at the community level were a scaling up of community-based activities to improve access to services, and reinforce and expand volunteerism.

Another recommendation made was to target all levels in a coordinated way in order to show the links between malnutrition, functional consequences, ready solutions and indicators to measure results. This recommendation summarizes to an extent the need for good data to support nutrition. Bryce et al (2008) described this challenge as “data-based decision-making for nutrition”. Other similar recommendations involved better gathering of impact data on dietary improvement interventions for complementary food, and measuring the impact of other nutritional interventions. These recommendations show the crucial role of evidence in addressing malnutrition.

The last challenge - building strategic and operational capacity - is reflected in several of the recommendations. These include strengthening the Nutrition Department of the GHS (strategic capacity) and strengthening the capacity of providers (operational capacity). Some suggestions as to how to address

Box 1: Recommendations

Advocacy and Coordination

- Target all levels in a coordinated way showing the links between malnutrition, functional consequences, ready solutions and indicators to measure results.
- Strengthen mechanisms (membership/level of representation) for making nutrition more visible with other stakeholders at all levels (National, Regional, District, Sub district, and across departments).
- Use opportunities of District Health Directors Conference to increase priority of nutrition (e.g. district budgetary allocation for nutrition) and District Assembly involvement .
- Strengthening of Nutrition Department at GHS in terms of funding and capacity for delivery
- Increase priority of nutrition scaling-up as activities to achieve MDGs by internal advocacy and analysis (e.g. PROFILES)
- Draft National Nutrition Policy
- Integrate accountability for MDG 1 in Health (HIRD) and MDG 4 & 5 in Agriculture. Include nutrition/food quality indicators in PPMED/MOFA plans at national level (some regions are doing this already).
- Ensure complementarities of nutrition investments and strengthen core nutrition delivery system.
- Use school feeding as an opportunity to improve nutrition education and nutrition among school aged children.
- Increase funding directed toward strengthening nutrition interventions

Infrastructure, training and availability of supplies

- Provide adequate resources for logistics needed to deliver basic health activities (e.g. weighing scales and MUAC strips at every facility).
- Accelerate scale-up of Baby Friendly facilities
- Curriculum of medical, nursing agric and other paramedical students should be significantly strengthened to include nutrition
- In-service/refresher training should be done frequently with a more integrated approach also targeting non-nutritionists
- Need to strengthen nutrition guidelines especially for curative care officers.
- Scale up community-based activities to improve access to services
- Increase number of nutrition technicians at district (and sub-district) level by increasing numbers trained regionally
- Reinforce and expand volunteerism at community level (e.g. recognition, monitoring)

Improve programming in IYCF

- Better gathering of impact data on dietary improvement (complementary food) interventions
- Building on evaluation of Accelerated Child Survival and Development approach (ACSD) to measure the impact of other nutritional interventions
- Disseminate evidence based, locally-appropriate guidelines for complementary feeding such as in the child health records at community level and increase appropriate use of these guidelines.

these included reinforcing the nutrition component of the curriculum of medical, nursing, agriculture and other para-medical students. It was also suggested that refresher training on nutrition be done frequently, especially for curative care officers. Another suggestion was to increase the number of nutrition technicians at district (and sub-district) level.

Conclusion and the next step

The Landscape Analysis provided the opportunity for the country to look very critically at its readiness to accelerate interventions to address maternal and child undernutrition. Although most of the findings and recommendations are not entirely new, a notable difference was that they were agreed by all key stakeholders collectively at a consensus meeting and this process reminded us about the persistence of the challenges and how they continue to undermine efforts to address key health and nutrition problems. Furthermore, disseminating these findings at the national level started the discussion which has set in motion the process for change. As the next step, the country is initiating the process of developing a Nutrition Policy to guide actions of all key players taking into consideration of the outcomes of the Landscape Analysis country assessment. More in-depth analysis of the data collected at all levels from the assessment is being undertaken to provide inputs to this Nutrition Policy development process in Ghana at present. Strengthening the strategic capacity of the Nutrition Department will be crucial for moving all these processes forward for effective follow-up.

References

- Bryce J, Coitinho D, Darnton-Hill I, Pelletier D, Pinstrop-Andersen P; Maternal and Child Undernutrition Study Group (2008) Maternal and child undernutrition: effective action at national level. *Lancet* 371(9611):510-26. ([online](#))
- Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, Mathers C, Rivera J; Maternal and Child Undernutrition Study Group (2008) Maternal and child undernutrition: global and regional exposures and health consequences. *Lancet* 371(9608):243-60. ([online](#))
- GHS (Ghana Health Service) (2003a) *Anaemia Strategy*
- GHS (Ghana Health Service) (2003b) *National Reproductive Health Service Policy and Standards*
- GHS (Ghana Health Service) (2005) *Imagine Ghana Free of Malnutrition*
- GHS (Ghana Health Service) (2007a) *Infant and Young Child feeding Strategy for Ghana*
- GHS (Ghana Health Service) (2007b) *Reproductive Health Strategic Plan 2007–2011*. Reproductive and Child Health Unit, Ghana Health Service.
- GHS/MOH (Ghana Health Service/Ministry of Health) (2008) *Final Draft Child Health Policy*
- GSS (Ghana Statistical Service), Noguchi Memorial Institute for Medical Research and ORC Macro (2004) *Ghana Demographic and Health Survey 2003 – Final Report* ([online](#))
- Micronutrient Initiative (2004) *Ghana: Vitamin and Mineral Deficiency Status and Actions* ([online](#))
- MOFA (Ministry of Food and Agriculture) (2007) *Food and Agriculture Sector Development Policy (FASDEP II)*
- MOH (Ministry of Health) (1995b) *Food and Drugs Law Amendments: Universal Salt Iodisation*
- MOH (1995a) *National Breastfeeding Policy*
- MOH (1995c) *National Plan of Action for Promotion of Breastfeeding, Ghana*. Ministry of Health, Breastfeeding Subcommittee.
- MOH (1998) *Vitamin A Policy*
- MOH (2000) *Breastfeeding Promotion Regulations 2000*. Legislative Instrument 1667.
- MOH (2007c) *Regenerative Health: Shifting the emphasis from cure to prevention*. Policy Briefing Paper 002, January 2007. ([online](#))
- MOH (2007b) *Creating Wealth Through Health* ([online](#))
- MOH (2007d) *Food and Drugs Law Amendments: Fortified flour and oil*. Awaiting Parliamentary approval.
- MOH (2007a) *The Health Sector Programme Of Work: 2007-2011*. ([online](#))
- MOH, Republic of Ghana and Ghana Statistical Service and MEASURE DHS/Macro International Inc. (2008) *Ghana: Multiple Indicator Cluster Survey 2006 - Final Report* ([online](#))
- NDPC (National Development Planning Commission) (2005) *Growth and Poverty Reduction Strategy (GPRS II) (2006-2009)* ([online](#))

Contact: brantuom@gh.afro.who.int

[back to contents](#) SCN NEWS # 37

Landscape Analysis on Countries' Readiness to Accelerate Actions to Reduce Maternal and Child Chronic Malnutrition: The Guatemala Assessment

Juan Rodolfo Aguilar (Secretary of Food and Nutrition Secretariat, [SESAN](#)), Edmundo Alvarez (Subsecretary of [SESAN](#)), Chessa Lutter (Pan American Health Organization [PAHO/WHO](#)), Maggie Fischer (Institute of Nutrition of Central America and Panama, [INCAP/PAHO](#))

Introduction

The Millennium Development Goals (MDGs) are at risk of not being achieved in many countries, including Guatemala, because of long standing inequities and lack of investment in combating the direct and underlying causes of malnutrition. Achievement is further aggravated by recent dramatic price increases in food, fuel and other basic commodities. These price increases have put poor and marginalized populations at even greater risk of undernutrition and its consequences.

Guatemala has the highest prevalence of stunting in the region of the Americas and among the highest in the world, reflecting long-standing economic and political inequalities and social exclusion. This exclusion affects a large segment of the population, particularly rural, indigenous peoples. Stunting significantly declined between 1987 and 1999, from 62.4%¹ to 54.5%, however since then, the reduction has not been significant (Lutter and Chaparro 2008). The most recent Demographic and Health Survey (DHS) of 2002 showed a prevalence of 54.4% (when reanalyzed according to the new WHO Child Growth Standards), whereby on average, one out of every two Guatemalan children under the age of five years was stunted. Stunting is greater among children of mothers who are indigenous versus ladino² (73% versus 41%). The prevalence of underweight was about twice as great among children of indigenous mothers compared to those of ladino mothers. In contrast, there was little difference in the prevalence of wasting or overweight between ethnic groups. As in other Latin American countries overweight is also increasing, and the prevalence (weight-for-length/height > 2 SD) since 1995 has been in the order of 6%.

The DHS of 2002 also showed that the prevalence of young child anaemia is very high, affecting 39% of children between 6 and 60 months of age³ and 65% among infants 6 to 11 months of age. Breastfeeding practices in Guatemala are among the best in the region, yet some key indicators have declined⁴. Although more than 95% of infants are breastfed within the first hour after birth, exclusive breastfeeding in infants < 6 months decreased from 46% in 1995 to 39% in 1998/99. During this same period, the median duration of breastfeeding remained constant at about 20 months.

In view of the situation outlined above, the Guatemalan Government has prioritized the reduction of chronic malnutrition. Recent important advances include a national Policy of Food and Nutrition Security approved in 2004, a Food and Nutrition Security Law passed in 2005, and under the present government a National Strategy for the Reduction of Chronic Malnutrition is in process of implementation.

Methodology

The assessment in Guatemala was carried out jointly by a team with both national and international members. The national team members included representatives of the Government and local representatives of WHO, the United Nations Children's Fund ([UNICEF](#)), the Food and Agricultural Organization ([FAO](#)), the World Food Programme ([WFP](#)), the United Nations Development Programme ([UNDP](#)) and the Institute of Nutrition of Central America and Panama ([INCAP](#)). The international interagency team members were represented by WHO and UNICEF. The mission took place 9-13 June 2008. The analysis involved the application of a series of assessment tools at the national, departmental and municipal levels. Visits to two different field locations were conducted and extensive interviews took place at the national level (Figure 1).

The assessment team met with the Director, Deputy Director and other members of the Secretariat of Food and Nutrition Security ([SESAN](#)⁵) to review the agenda and discuss the country assessment tools in the Guatemalan context. The agenda included meetings with relevant governmental, UN, bilateral, non govern-

1. All the prevalence data cited in this paper are estimated using the WHO Child Growth Standards; 2. Ladino is another word for Mestizo, which signifies people of mixed European and Amerindian ancestry in Latin America. The term is used to describe a socio-ethnic category prevalent in some parts of Central America especially in Guatemala; 3. Iron deficiency is difficult to measure directly in nationally-representative; therefore, anaemia is used as a proxy indicator; 4. DHS STATcomplier. Accessed March 11, 2009; 5. Secretario de Seguridad de Alimentación y Nutrición (SESAN) (Secretary for Food and Nutrition Security).

mental organizations (NGOs) and other key stakeholders. A briefing lunch and meeting was held with the Vice-President of Guatemala, the Chief of Staff to the President, the Director and Deputy Director of SESAN and the UNDP Resident Coordinator. The assessment team together with the Director and Deputy Director of SESAN met with a variety of stakeholders. These included, among others, the Vice Ministers of Health and Agriculture, the Director of the Program of Food and Nutrition Security ([PROSAN](#)¹) and the Director of Integrated System for Health Attention ([SIAS](#)²) of the Ministry of Health. The teams and SESAN also met with The First Lady and presented the Landscape Analysis at a meeting of the Council for Social Cohesion³, which she chairs. Meetings were held with the Joint United Nations Group on the Reduction of Chronic Malnutrition and cooperating bilateral and multilateral agencies, NGOs and lending institutions such as The World Bank.

The key stakeholder interviews and assessment were held in different areas outside of the capital at both the department and local levels. The field visits were to Tecpán and Chimaltenango in the west; and to Rabinal Baja Verapaz in the northeast. As a part of this field work, the groups visited several communities and health services and observed ongoing preventive and curative activities, including growth monitoring sessions. They also observed a meeting of a mothers' group, visited a pre-school establishment and met with departmental and local officials.

Observations and discussion

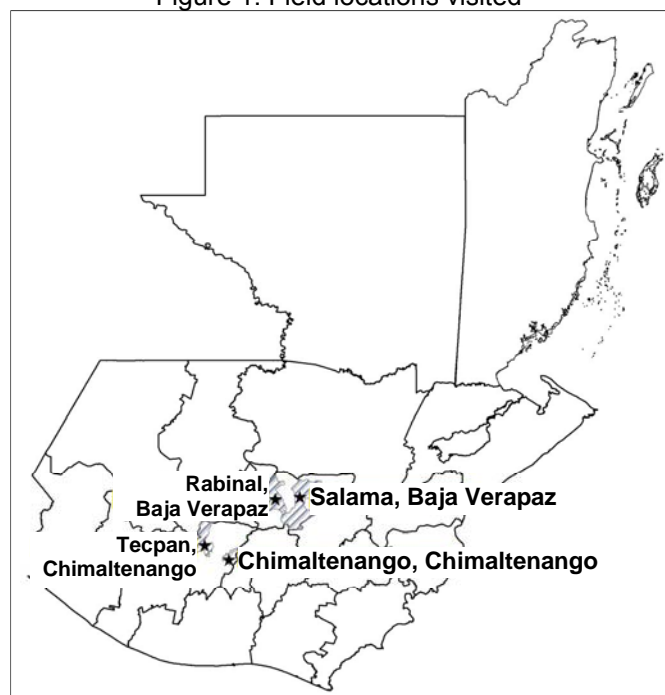
Willingness to scale-up nutrition actions

The Government of Guatemala is committed at the highest political level to reduce stunting. Reducing the high prevalence of stunting has been made a national priority and a series of legal, regulatory and policy actions have been taken such as the passage of a Law on Food and Nutrition Security⁴, implementation of a National Strategy for the Reduction of Chronic Malnutrition, and creation of the inter-sectoral SESAN. SESAN is a high-level task force charged with coordinating activities in food and nutrition and reports to the Vice-President. The members of SESAN include multiple ministries, the private sector and civil society, and it operates at the national and departmental levels. While SESAN was established by the previous Government, the new Government installed in 2008 is also very much committed to support the work of SESAN. There has also been a high commitment to join forces in addressing food and nutrition problems through signing of a joint programme of work between the Government and the Joint United Nations Group on the Reduction of Chronic Malnutrition in June 2008.

The establishment of the Council for Social Cohesion, headed by the First Lady, is another example of increased governmental commitment and investment in the social sector. The Council coordinates implementation of inter-sectoral actions at the departmental and municipal level, including conditional cash transfers to improve food and nutrition security as well as to improve utilization of health and education services; and development of an Action Plan to address the crisis caused by rising food prices. The Commission has taken an important step in targeting a total of 125 municipalities with the highest prevalence of stunting for intensive inter-sectoral action that address both immediate and underlying causes of poor nutrition.

Despite much awareness of the problem of stunting at the national level, including its magnitude, causes, consequences and window of opportunity for prevention and strong political and governmental commitment to

Figure 1: Field locations visited



1. Programa de Seguridad Alimentaria y Nutricional (PROSAN); 2. Sistema Integrado en Atención en Salud (SIAS); 3. Consejo de Cohesión Social ([read more](#)); 4. Available from the PAHO [website](#)

address the stunting problem, this awareness was observed less at the local level. Furthermore, side by side with the stunting problem, there is an increasing problem of overweight in the population, including among young (and often stunted) children, but this was also less recognized.

There is an understanding that both short term evidence-based interventions to address the most proximal causes, and long term interventions to address underlying and basic causes of malnutrition are needed in order to ensure rapid and sustainable impact. It was recognized that other sectors beyond health and nutrition need to be involved, and that actions need to be coordinated at the national and local levels. This has led to relatively good coverage and sustainability of national health and nutrition intervention programmes in Guatemala which had contributed to a significant reduction in infant mortality and maternal mortality rate

Notwithstanding the considerable strengths outlined above, several weaknesses with respect to the Government's ability to act were identified. Many of these weaknesses were also identified by the host government. They include funding limitations and few identified line items dedicated to nutrition; human resource limitations at the departmental and municipal level; and the need for an operational plan to strengthen partnerships with the private sector, media and religious groups, NGOs, and civil society,. In addition, the team noted that relatively little attention is being paid to the problem of overweight in the population, including school-aged children, many of whom are also stunted.

Ability to scale-up nutrition actions

The team observed a number of strengths with respect to the Government's ability to act in terms of human resources, management structure and supplies. Where human resources are concerned, it was noted that highly qualified and committed professionals exist at the national level and SESAN technicians and Ministry of Health nutritionists are present at the departmental level. Numerous health professionals, community health workers, and traditional birth attendants are engaged at the municipal and community levels. Regarding management structure, it was noted that there is a structure in place to coordinate all external aid, Secretary for Planning and Programming ([SEGEPLAN](#)¹); an infrastructure for health services at the municipal and community levels; priority municipalities identified for targeting of additional resources and concentrated inter-sectoral actions; and a Joint United Nations Program to support the government's efforts to reduce chronic malnutrition. A mechanism to create demand for nutrition programmes through conditional cash transfers was also in place. With respect to inputs (supplies), it was noted that comprehensive norms and guidelines have been developed to guide health and nutrition actions; and that fortified foods and micronutrients supplements for young children and pregnant women are available.

Nonetheless, the team also noted some weaknesses that could reduce the potential effectiveness of the Government's ability to act. Most important was the absence of a comprehensive plan for monitoring and evaluating the many investments being made. These included little apparent involvement of the target population in the development of interventions and long-term planning; limited human resources and capacity at the departmental and municipal level; and, in the municipalities where health services are provided through the model of "coverage extension", the need to strengthen coordination between curative health and preventive nutrition activities so that they are mutually reinforcing.

With respect to management systems, it was noted that there is a need to strengthen municipal development councils and local nutrition leadership and governance. Better coordination is required between service providers in the health posts and the providers, both paid and volunteer, in coverage extension, as well as improved coordination with and among the NGOs. Local monitoring and evaluation systems should be developed in order to be sure that all the government sectors and other actors work effectively and in a coordinated fashion.

Some weaknesses involving inputs (supplies) were also observed. It appears that there are insufficient resources for nutrition affecting coverage and quality of services, and a lack of advocacy materials at the municipal and community level to raise awareness of stunting as a problem. Educational materials targeted to poor mothers in appropriate languages and growth assessment equipment, particularly length boards, are also lacking.

1. Secretaría de Planificación y Programación

Recommendations to accelerate actions to reduce stunting

The major bottleneck to achieving accelerated action to reduce stunting in Guatemala, as other high-burden countries, involves the challenge of translating political commitment into concrete operational plans, including financing mechanisms, at the local level as well as strengthening inter-sectoral coordination at the national level. For this to occur, a number of important prerequisites need to be in place. First, there must be awareness at the local level that stunting is a major problem that can be solved using short- and long-term interventions. Such recognition and ownership of the problem and potential for solutions is necessary for local commitment and action. Second, it is crucial to ensure capacity at the local level for implementing quality programmes and interventions. Capacity at this level is often weak, and especially so in the most marginalized communities where the highest prevalence of stunting exists. Nonetheless, it is needed to build local nutrition governance and to translate political commitment into action at the national level with local results. A strategy for improving technical capacity to deliver programs, to sustain motivation for high quality implementation and for appropriate supervision is necessary. Third, resources (financial, human and equipment) must be allocated to the areas most affected by chronic malnutrition. This kind of resource allocation is presently is being considered with funds from the Cash Transfer Program. Fourth, there needs to be a demand from the target population to access the programmes and

Box 1 Recommendations to accelerate actions to reduce stunting in Guatemala

1. Develop and implement a strategy to mobilize resources.
 - Design a “marketing plan” for resource mobilization such as a profile on young child nutrition in Guatemala and a presentation to use with donors.
 - Map current and potential donors, municipalities where active, funding levels.
 - Organize a donor’s roundtable and continue to facilitate meetings with donors.
 - Technical cooperation for proposal preparation (e.g. the Spanish Millennium Development Fund, European Union, etc.).
2. Develop a social participation strategy to raise awareness and ownership of stunting as a major problem at the municipal and community level.
 - Create and train departmental level anthropometric teams for periodic (annual or biannual) height monitoring of young children in priority communities. The purpose of this training is to build awareness of stunting in the community using locally generated data.
 - Develop advocacy tools based on height monitoring of children tailored to the audience (health providers, politicians, religious leaders, parents).
 - Identify key behaviours to be changed through formative research and design and implement a comprehensive communications strategy in target municipalities.
3. Update mapping of all nutrition programmes and resource allocation (government, NGO, World Bank, UN, bilateral agencies, etc).
4. Improve coordination with NGOs.
 - Design a reporting instrument to harmonize reports to SESAN on target communities, specific actions, prevalence of stunting, and budgets.
 - Organize yearly NGO meetings with SESAN to share lessons learned and plans of action.
5. Develop a plan to strengthen both human capacity at the municipal and community level and decentralized implementation of the national strategy.
 - Create and implement a training course on planning and budgeting.
 - Contract community organizers to support development and implementation of local plans and budgets.
 - Disseminate norms and guidelines to local health workers and volunteers.
 - Strengthen the capacity of departmental nutritionists by implementing the new Baby Friendly Hospital Initiative course; integrated child feeding course; and growth assessment course.
6. Develop and implement a comprehensive monitoring and evaluation plan.
7. Ensure the integration of effective interventions to reduce maternal and child undernutrition identified in the Lancet Series on Maternal and Child Undernutrition in primary health care services.

interventions offered and to change their behaviours in favour of the nutrition of their children. Fifth, a strong and adequately financed monitoring and evaluation plan must be in place to measure inputs, progress and impact. Such a plan should include provisions for baseline data, continuous monitoring of programmes and interventions to assess the extent to which they are being implemented as planned, rapid feedback mechanisms so that necessary adjustments can be made to enhance programme delivery, and measurement of costs and impacts. The recommendations formulated by the Government and the interagency assessment team based on the observations from the Landscape Assessment in Guatemala and these prerequisites are listed in Box 1.

Limitations of the assessment

Given the brief duration of the mission and the multi-causal nature of the problem, the government’s inter-sectoral actions, the large number of organizations and donors present and the challenge involved in analysing and understanding this complex situation, the results of this mission reflect only a snapshot, resulting from the multiple meetings

and observations undertaken. Time limitations simply did not permit the international team to provide an in depth analysis nor comprehensive recommendations, including financing options, nor to adequately access the most severely affected populations, the largely indigenous peoples of the country living outside of large towns and cities. Such an analysis would be very valuable to the government, but would require a much larger human and financial commitment, including experts in health financing, data analysis, systems management, in addition to the technical expertise in health and nutrition possessed by the members of the team.

Although facilitated by an international interagency team, the decisions regarding the specific interventions that need to be undertaken and how these should be implemented clearly rest with the Government. The commitment, capacity, and actions to date of the Government, supported by the presence of, the UN Food and Nutrition Working Group, INCAP and many other bilateral institutions and NGOs, are essential to moving forward with this process.

Follow-up and next steps

The report of the country assessment of Guatemala was communicated to the Secretariat of Food and Nutrition Security (SESAN), which corresponds to the highest political level. During the first trimester of 2009, funds from WHO were transferred to follow-up the recommendations and conduct three workshops to strengthen capacities of the delegates of SESAN to influence and advocate the incorporation of actions and allocation of local resources to reduce chronic malnutrition / stunting among the Departmental and Municipal Food and Nutrition Security Councils. Additionally advocacy materials regarding the National Strategy for the Reduction of Malnutrition have been prepared and will be distributed.

Conclusion

Guatemala indeed has the willingness, potential and assets to scale up in the fight against malnutrition. This will be accomplished by implementing the National Strategy for the Reduction of Chronic Malnutrition, with the support of the UN System, bilateral agencies, NGOs, and multilateral agencies.

References

DHS (1995) *Guatemala Encuesta Nacional de Salud Materno Infantil, Guatemala 1995*. Macro International, Demographic and Health Surveys, Calverton, MD, 1996.

DHS (1998/99) *Guatemala Encuesta Nacional de Salud Materno Infantil, Guatemala 1998/99*. Macro International, Demographic and Health Surveys, Calverton, MD, 1999.

DHS (2002) *Guatemala Encuesta Nacional de Salud Materno Infantil 2002*. U.S. Centers for Disease Control and Prevention, Atlanta, GA, 2003.

Lutter CK and Chaparro CM (2008) *Undernutrition in Infants and Young Children in Latin America and the Caribbean: Achieving the Millennium Development Goals*. Washington DC: Pan American Health Organization, 2008.

Contact: lutterch@paho.org

COURSE ANNOUNCEMENT:

Nutrition in Emergencies

Nutrition in Emergencies is an intensive five day course designed to introduce participants to the latest knowledge and best practice in the sector. The aim of the course is to give participants an overview of nutrition in humanitarian emergencies, including the types of malnutrition, both direct and underlying causes of malnutrition, how malnutrition is measured, and common nutritional interventions.

An indicative course content covers the following: measuring malnutrition, food security, supplementary & therapeutic feeding programmes including CMAM, infant feeding in emergencies and anthropometric surveys. Trainers and facilitators are all experienced in the humanitarian sector and the course is run by the Centre for Public Health Nutrition, University of Westminster in collaboration – a member of the global nutrition cluster capacity development working group.

For application forms see www.wmin.ac.uk/sih/page-1104 or email: Mark Armstrong at cav-admissions@wmin.ac.uk

Landscape Analysis on Countries' Readiness to Accelerate Action to Reduce Maternal and Child Undernutrition: the Madagascar Assessment

Ambinintsoa Raveloharison (National Coordinator of the National Office for Nutrition, [ONN](#))

Simon Christoph Rakotonirina (Director of Mother and Child Department at [Ministry of Health and Family Planning](#))

Nutrition situation and actions in Madagascar

Madagascar has seen major improvements in health and nutrition indicators over the past decade. Between the two Demographic and Health Surveys in 1997 and 2003 (DHS 1997, 2003), the mortality rate for children under five decreased from 139 to 94 per 1,000 live births, the exclusive breastfeeding rate among children 0-6 months increased from 42% to 64%, and stunting among children under three years decreased from 48% to 45%. However, the stunting prevalence of 45% is still unacceptable, along with high malnutrition rates among women of reproductive age where 19% of women are underweight (BMI<18,5) and 6.5% are of low height (<145 cm). The main causes of this widespread maternal and child undernutrition are inadequate newborn and infant feeding, micronutrient deficiencies, inadequate hygiene and sanitation practices, food insecurity, low awareness, poverty and natural disasters.

A series of steps have been taken to address malnutrition, in terms of setting up a robust institutional framework and implementing actions to prevent malnutrition and to treat cases of severe malnutrition. Nutrition and food security are explicitly addressed in the Malagasy Poverty Reduction Strategy Paper, and the Madagascar Action Plan (Madagascar 2006).¹ The National Nutrition Policy adopted in 2004 outlines fourteen strategic axes ranging from infant feeding and micronutrients to emerging problems and policy development, as well as norms and communication (Madagascar 2004). It is multisectoral, spelling out roles and responsibilities of lead agencies and cooperating partners. Linked to the policy, the National Action Plan for Nutrition (PNAN) is being implemented (Madagascar 2005). The National Nutrition Office ([ONN](#)²) functions as the operational coordination mechanism and works closely with the Department of Nutrition in the Ministry of Health³ and other stakeholders in nutrition.

Major ongoing activities include food and nutrition surveillance, promotion of breastfeeding, community nutrition activities, prevention of micronutrient deficiencies, promotion of food security for vulnerable households, school nutrition programmes, treatment of severe malnutrition at health centre (CSB⁴) or community level as well as at clinic or hospital level, and nutrition support in emergency situations. The National Community Nutrition Project (PNNC⁵) is extensive and still expanding, with 3,470 sites covering 694,000 (24%) children under five in 2004 and 5,550 sites covering 1 million (34%) of children under five in 2007.

Aims of the Madagascar country assessment

Against this background the major nutrition actors in Madagascar ONN and the MOH Department of Nutrition along with the United Nations Children's Fund ([UNICEF](#)) and the World Health Organization ([WHO](#)), decided to undertake an in-depth country assessment for the Landscape Analysis. This exercise would constitute a mid-term review of the national nutrition plans and a review of sector cooperation, and was seen as an opportunity to merge together existing databases from different ministries.

The assessment aimed to review and outline the current nutrition situation in Madagascar, especially with regards to the set of proven nutrition actions identified by the Lancet Nutrition Series, and to identify activities that need to be prioritized in order to act at scale and accelerate the reduction of maternal and child undernutrition. The expected outcome at the end of this process was a strategic plan for accelerating the reduction of maternal and child undernutrition in Madagascar, that could and should be used as a basis for incorporating increased resources that must be invested if the MDGs are to be achieved in Madagascar.

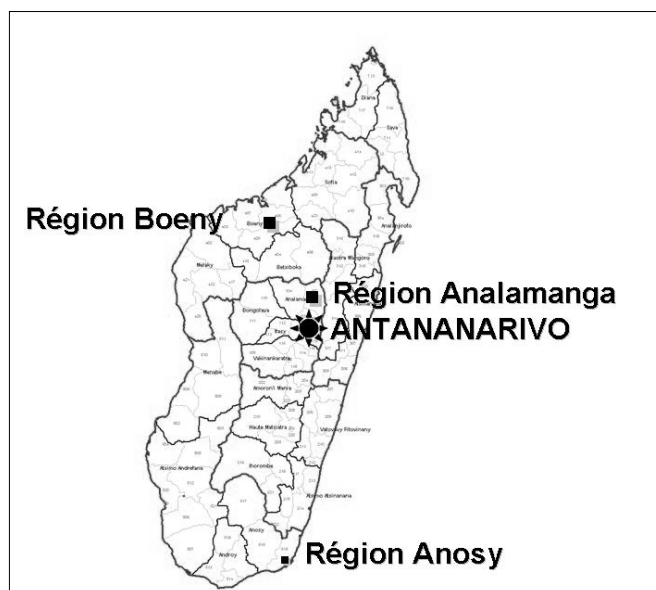
Country assessment methodology

The Madagascar assessment was carried out jointly by a national team which included representatives of the government at both national and regional levels, ONN, the MOH Department of Nutrition, SEECALINE⁶ and

1. See MAP Commitment 5, Challenge 7; 2. Office National de Nutrition; 3. Département de Nutrition, Ministère de la Santé; 4. Centre de Sante de Base; 5. Programme National de Nutrition Communautaire (PNNC); 6. SEECALINE (Surveillance Education des Ecoles et des Communaute en matière d'Alimentation et Nutrition Elargie) World Bank project implemented since 1997 in Madagascar.

CISCO¹, a national interagency team made up of UNICEF and WHO, and an international interagency team represented by Helen Keller International (HKI), UNICEF, SCN and WHO from 30 March to 7 April 2008. The assessment team met with the Bureau Permanent of the National Nutrition Council (CNN)² for a briefing session on the first day and used the opportunity to set up an interview with its members.³ Other stakeholders were interviewed at the national level in the capital Antananarivo, and included representatives from public sector, private sector companies and development partners.⁴ At the regional and district level, the assessment teams met with local government in the sectors of ONN, Ministry of Health, Education, Water and Sanitation, and Environment and Forestry. The teams visited hospitals, primary health care centres, schools, SEECALINE centres at three different field locations: Analamanga Region in the Central part of the country, Boeny Region in the North-West, and Anosy Region in the South (Figure 1).

Figure 1: Field visit locations in the Northern, the Centre and the South, and capital Antananarivo.



The assessment team reviewed the country assessment tools and the common analysis framework and adapted them to the Madagascar context. The findings and recommendations were presented on 7 April 2008 to the Permanent Bureau of the CNN as well as to the Prime Minister in a special audience.

Findings

Commitment to scale-up nutrition actions

Political commitment for nutrition in Madagascar is very strong. The CNN and its Permanent Bureau, with its broad representation, provides a good forum for discussion and advocacy for nutrition in development at the national level. The ONN, operating at both national and regional levels, is a very positive force, and the location of the ONN in the Prime Minister's Office contributes both a strong political commitment and dynamic leadership. A National Nutrition Policy and a Nutrition Plan of Action not only exist, but are well known by the main actors across sectors at the national level. Nutrition is also well anchored in the national MAP, and in at least some regions nutrition objectives are also reflected in Regional MAPs. There is also broad partner involvement in nutrition at the regional level, including Government, donors, bilateral partners, NGOs and the private sector. Furthermore, the successful World Bank financed project SEECALINE (Galasso and Umapathi 2007), which has a coverage of about a third of the population, will now be taken forward with Government funding as the PNNC under the ONN.

The strong political commitment to act is, however, diluted by a poor perception of what nutrition problems really are, as well as the interventions needed. This is especially so at the sub-national level. The commonly held view is that malnutrition can only be solved through increased food production, better education and poverty reduction, i.e. dealing with the more basic and underlying causes and not the immediate ones. "Undernutrition" is commonly seen as a humanitarian problem not a developmental one, i.e. it is associated

1. CISCO (Circomcription Scolaire); 2. Bureau Permanent de Conseil National de Nutrition (CNN); 3. Members interviewed included representatives from the Prime Minister's Office (Primature), and from Ministère de la « décentralisation et de l'aménagement du territoire » (decentralisation and Environment development), Ministère du finance et du budget (finance), Ministère de l'agriculture, de l'élevage et de la pêche (agriculture, husbandry and fisheries), Ministère de l'éducation nationale et de la recherche scientifique (education and research), and Ministère de la santé, du planning familial et de la protection sociale (health, family planning and social protection). The NGOs were: Association pour l'Education et la Récupération Nutritionnelle (ASERN), Fiombonan'ny Fiangonana Protestanta eto Madagasikara (Groupement des Églises Protestantes à Madagascar) Association Eglise Protestantes de Madagascar, FFPM, and Sampan'Asa Fampanandrosoana / Fiangonan' i Jesoa Kristy eto Madagasikara Département pour le Développement au sein de l'Eglise de Jesus Christ Madagascar, SAF/FJKM); 4. Including World Bank, CARE International, Catholic Relief Services, Food and Agricultural Organisation (FAO), Groupe de recherche et d'échanges technologiques (GRET), World Food Programme (WFP), Population Services International (PSI), and United States Agency for International Development (USAID).

with the images of "starving" children commonly seen in the South of Madagascar. There is little or no common understanding that small stature (which affects most of the population) is caused by undernutrition, not genetics. Furthermore, poor maternal nutrition is not seen as part of the problem of child malnutrition.

Most stakeholders seemed to think that insufficient financial resources are being directed at tackling the nutrition problem. The use of national funds in nutrition programmes is very limited. Furthermore, the donor base as well as their contributions to the national nutrition plan are small. Despite the existence of budget lines for nutrition at the district level, the programme budget for nutrition activities relies almost completely on donors and not on governmental funds. A lack of respect for national authority under ONN was also detected amongst donors. In addition, public-private partnerships are insufficiently developed.

At the regional level, although there is a regional MAP, little coordination exists among partners and nutrition is not well integrated into sectoral plans. Although there is a food security component in the agriculture plan, it is very much focused on increasing production and not on improving nutrition.

Capacity to scale-up nutrition actions

Madagascar has considerable strengths in terms of human resources to accelerate nutrition actions. Both ONN and MOH are working on nutrition at the local level, and although it is unclear who reports to whom, the cooperation seems to be smooth. The ONN has a Regional Technical Manager to oversee PNNC, and the existence of a large network of community health/nutrition agents greatly facilitates the outreach of nutrition education activities into the community. The training on Management of Severe Acute Malnutrition in the rehabilitation centres is ongoing in the MOH.

However, there is a poor capacity for advocacy for nutrition at the national level. Little or no capacity exists that would permit efforts to change the existing perceptions that undernutrition is largely determined by nature. Staff with a formal training in nutrition are in very short supply, especially at regional and district levels. In the health sector, nutrition activities tend to be everybody's business but nobody's responsibility. In sectors other than health nutrition activities are largely absent. The number of community nutrition agents is insufficient, and needs to be increased in order to expand coverage of PNNC.

Regarding management systems, the existing multisectoral coordination architecture at the national level is greatly appreciated. The outreach achieved for nutrition services during the Mother Child Health Week (SSME¹) held twice a year allows periodic high coverage of a limited number of essential nutrition actions. Growth monitoring data are collected at local level and sent to district/regional/national levels on a quarterly basis. DHS data exists and is widely used as the authoritative source of information on nutrition. Yet, nutrition activities are not integrated into sectors other than health. Furthermore, the roles and responsibilities of the various actors are sometimes not clearly defined, especially at the lower levels. The reporting lines for growth monitoring data from the local level are unclear and to some extent parallel.

In terms of supplies, all mothers observed had the booklet on child health with a growth chart, which is distributed through the PNNC and has appropriate space for nutrition information as well as key messages in the local language. Ready-to-use therapeutic food (RUTF) is readily available in certified rehabilitation centres, along with length measuring boards and child weighing scales. Access to iron-folic acid supplements is however, very poor, requiring the mother to purchase these herself from the central pharmacy. The availability of scales and length measuring boards in CSBs is inadequate and limited to 100 of the 2,000 CSBs that are certified as nutrition rehabilitation centres.

Recommendations arising from the assessment

Based on these observations, the assessment team formulated eight suggested recommendations, summarized in Box 1, to bring forward to the Bureau Permanent of the CNN:

1. *Expand coverage of existing community-based nutrition activities (PNNC):* While PNNC is targeted at the most severely affected third of the population, the undernutrition problem extends across the whole population (Van de Poel et al 2008), suggesting that greater coverage is required to increase impact. Indeed

as the impact of PNNC seems to be greater among mothers with a higher education (Galasso and Umapathi 2007), extending coverage to the less affected segments of the population would likely permit even greater impact for these behaviour change activities.

2. Strengthen maternal nutrition components (to address LBW and maternal anaemia): The Lancet Nutrition Series indicates that half of stunting originates during the intra-uterine period and half in the first two years of life (Victoria et al 2008). Maternal nutrition is a serious problem in Madagascar. 20% of women of reproductive age are underweight, and 50% of mothers are anaemic. Maternal nutrition is a serious problem in Madagascar with 20% underweight in women of reproductive age, low birth weight rates of 17% and 50% of mothers anaemic. Currently very little is done about maternal malnutrition and few perceive it as a problem. The provision of iron/folate tablets for tackling anaemia relies on mothers purchasing them at the central pharmacy. To counter this, micronutrient supplements (preferably multiple micronutrients) should be made universally available to all mothers during pregnancy, and delivery of the supplements should be through aggressive outreach delivered by community based nutrition facilitators of PNNC. In food insecure areas, with the highest rates of maternal undernutrition, food supplements for the mother during pregnancy will improve birth weights. How to provide such food supplements needs to be solved, probably in relation to suggestion 4 below. As a third of all women become pregnant before twenty years of age, and the total fertility rate is high at 5.1, every effort should be made to prevent teenage pregnancies and control fertility.

3. Nutrition capacity in the operational health system should be strengthened, with better orientation of resources and increased national budget contributions for nutrition: Perhaps the most vital element needed is professionals whom are adequately trained in public health nutrition. These resources need to be employed to expand the base of operations at the district level and below rather than to strengthen the central level. Employing staff will require improved national budget contributions, which should also then envisage support for nutrition programme activities, thus reducing dependence on donor funding. Such national funding would also allow far greater benefit to be achieved from donor funding. There is a higher degree training programme producing graduates in public health nutrition that could well be employed in the public system.

4. Integrate nutrition in non-health sectors, in particular agriculture where increased food production must reach mothers and young children in food insecure areas: Increasing food production and achieving food security is a presidential priority which should also have a nutritional component. Food production should not only be developed to assure food exports, but should also be oriented to the provision of a variety of foods (fresh fruit, vegetables, milk, eggs, poultry) for local consumption. Indeed, the relatively poor impact of community based nutrition activities upon less educated mothers could be a reflection of increased food insecurity in such families. How to tie the PNNC participation of mothers from food insecure households to a cash transfer or food supplementation using locally produced foods is something that should be explored.

5. Rationalize the collection and use of nutrition information for decision-making purposes at regional, district and commune level: The current situation allows for a multitude of information to be mechanically collected, processed, and passed upwards. Where such data goes and whether it is used for decision making is very unclear. The presence of suitable trained nutrition professionals at the sub-national level would increase the potential for using such information for local decision making. This suggestion is very much linked to suggestions 3, 4 and 6.

6. Strengthen nutrition coordination and leadership across sectors at lower levels and clarify the roles and responsibilities of different actors: While nutrition coordination at the national level is already strong and leadership is assured by the nature of the national nutrition architecture, this is yet to happen at the lower levels of the system. The absence of trained nutrition professionals tends to mean that in the health system at least, nutrition is everybody's business and nobody's responsibility. As development planning is decentralized, Regional MAPs should have strong nutrition components. These should draw on the priorities identified at the national level and be adapted to local circumstances. Such measures can help assure local level funding support for nutrition activities. For this to happen the roles of the different sectors need to be defined and responsibilities assigned.

7. *Strengthen consistency of nutrition communication messages from pregnancy through to two years of age linking to other activities such as WASH:* Communication for nutrition is currently very much "small issue" driven, focusing on, for example, breastfeeding and vitamin A capsules. Successful campaigns including radio and print material have been developed for these parts of nutrition. Some thought should be given to communicating a "bigger picture" for nutrition, with an overarching theme that covers all from stunting to starving. The idea would be to not only focus on changing particular behaviours, but to improve the public perception of the nutrition problem.

8. *Strengthen public-private partnerships for improved nutrition:* There are various areas where public-private partnerships (PPP) could be further strengthened and amplified. The iodization of salt is one ongoing area where PPP needs to be further strengthened if the coverage is to increase above the current 75%. Another area is the production of nutrient dense foods, be it for supply to the health system for the treatment of severely malnourished children, or through market channels for improving complementary feeding among infants in upper income brackets.

Follow-up and next steps

At the consensus meeting held on 7 April 2008, it was agreed that the Bureau Permanent of the National Nutrition Council would consider the suggested recommendations and the further dimension of what each of them might mean in terms of the National Action Plan for Nutrition. It was noted that most of these suggestions, with the exception of maternal nutrition improvements, were already included in the Plan, and as such the suggested recommendations were an endorsement of the Plan and a further incentive to try to get it fully implemented.

The multipartner country assessment in Madagascar was communicated to the highest political level. Representatives of the landscape analysis assessment team met with the Prime Minister on 7 April 2008 to brief him on the Landscape Analysis and how Madagascar came to take part in it, the Lancet Nutrition Series, and the roll-out of the assessment in the country with the participation of national stakeholders and international experts. The Prime Minister welcomed the initiative and expressed great interest in the problem of malnutrition in general and in the Landscape Analysis assessment in particular. The Prime Minister further reflected on how various underlying and basic causes of malnutrition played different roles in different parts of the country, emphasizing intra-household distribution of power and resources, women's role in society, and family planning. It was noted that Madagascar has the architecture and structure in place for implementing nutrition actions, especially at the national level. However the structure base where interaction with communities takes place need to be scaled up to ensure full coverage.

Representatives of the ONN and the MOH Nutrition Department presented the results of the Madagascar assessment at a ministerial level meeting at the World Health Assembly in Geneva on 19 May 2008. They emphasized the next steps planned, including:

- consolidating nutrition information for decision making; reinforcing coordination and leadership in all sectors and clarifying the roles and responsibilities of different actors;
- considering nutrition throughout the life-cycle and linking it with other child survival interventions;
- ensuring effective integration of nutrition with other sectors beyond health;
- reinforcing public-private partnership for better nutrition;
- extending the coverage of evidence based interventions already carried out such as the PNNC, the Community Management of Acute Malnutrition (CMAM¹²) and the Baby-Friendly Hospital Initiative in order to reach all children throughout the country;
- reinforcing efforts to reduce micronutrient deficiencies; giving greater priority to actions directed towards severe acute malnutrition; and,
- reinforcing nutrition in the operational health system.

The Government of Madagascar has committed to contributing about 10 million USD per year to these activities, amounting to 36.8 million USD for the period 2008-2011, while partners have pledged a total of 9.3 million USD. This leaves a funding gap of 82.7 million USD, given the estimated 134.4 million USD total budget needs.

12. Prise en charge de la malnutrition Aigue au niveau Santé de Base et Communautaire

Later, UNICEF also contributed additional financial resources to mitigate the effects of the food price crisis. These funds were linked to the recommendations arising from the Landscape assessment and were mainly used to reinforce the early warning system through rationalization of data collection in the PNNC sites, thereby contributing to meeting recommendations 2 and 5 to expand the coverage of the PNNC; to introduce the multi-micronutrients supplementation in pregnant and lactating women in the most affected areas as part of recommendation 2; and, to provide blanket distribution of Ready Use Food (Plumpy-doZ). The PNNC sites will have a key role in ensuring coverage and adherence to the intake. These actions will be supported by a communication campaign as stipulated in recommendation 7.

Conclusion

Madagascar indeed has the potential and assets to go to scale in the fight against malnutrition. This will be done by developing and integrating a road map towards the vision of «Madagascar without Malnutrition». The recommendations formulated in the Landscape Analysis country assessment will be an important input in this process.

References

DHS (1997) *DHS-III Direction de la Démographie et des Statistique Sociales (DDSS)/Institut National de la Statistique (INSTAT)*. Available from www.measuredhs.com

DHS (2003/2004) Institut National de la Statistique Ministère de l'Economie, des Finances et du Budget Antananarivo, Madagascar and ORC Macro Calverton, Maryland, USA. Available from www.measuredhs.com

Galasso E and Umapathi N (2007) *Improving nutritional status through behaviour change: Lessons from Madagascar*. Policy Research Working Paper #4424, Impact Evaluation Series # 19. Washington: The World Bank.

Madagascar (2004) *Politique Nationale de Nutrition République de Madagascar*. Antananarivo, 23

Madagascar (2005) *Plan National d'Action Pour la Nutrition 2005-09*. May 2005.

Madagascar (2006) *Madagascar Action Plan 2007-2012 (MAP)*. Available from www.madagascar-presidency.gov.mg

Van de Poel E, Hosseinpoor RA, Speybroeck, N, Van Ourti T and Vega J (2008) Socioeconomic inequality in malnutrition in developing countries. *Bulletin of the World Health Organization* 86:282–91.

Victora CG, Adair L, Fall C, Hallal PC, Martorell R, Richter L, Sachdev HS; Maternal and Child Undernutrition Study Group (2008) Maternal and child undernutrition: consequences for adult health and human capital. *Lancet* 371(9609):340-57.

Contact: dsme@sante.gov.mg, onncn@onn.mg

Box 1: Summary of recommendations arising from the assessment

Suggestions/Recommendations

1. Expand coverage of the existing community based nutrition activities (PNNC)
2. Strengthen maternal nutrition components (to address LBW and maternal anaemia)
3. Nutrition capacity in the operational health system should be strengthened, with better orientation of resources and increased national budget contributions for nutrition
4. Integrate nutrition in non-health sectors, in particular in agriculture where increased food production must reach mothers and young children in food insecure areas
5. Rationalize the collection and use of nutrition information for decision-making purposes at region, district and commune level.
6. Strengthen nutrition coordination and leadership across sectors at lower levels and clarify roles and responsibilities of different actors.
7. Strengthen consistency of nutrition communication messages from pregnancy through to two years of age linking to other activities such as WASH.
8. Strengthen public-private partnerships for improved nutrition

Landscape Analysis on countries' readiness to accelerate action to reduce maternal and child undernutrition: The Peru Assessment

Chessa Lutter (Pan American Health Organization [PAHO/WHO](#)), Carmen Casanovas ([WHO](#)), Manuel Pena (Representative of Peru, [PAHO](#)), Adrian Diaz ([PAHO](#) Country Office in Peru)

Nutrition situation in Peru

In Peru, like all other countries in the region of Latin Americas and the Caribbean, stunting is the most prevalent growth problem among children. The most recent nationally representative Demographic and Health Survey in 2004, analyzed using the new WHO Child Growth Standards, showed that 30% of Peruvian children under the age of five years are stunted (Lutter and Chaparro, 2008). However, this national estimate masks enormous regional differences, which range from 6% in the best-off areas to 60% in the poorest. Stunting is three times higher among children whose mothers speak Quechua compared to children of mothers who speak Spanish. Stunting is also higher among children whose mothers speak Aymara or other indigenous languages compared to children whose mothers speak Spanish.

A recent comprehensive analysis of nationally representative surveys over the past 15 years shows that the gap in stunting between children living in poverty versus those living in better conditions has not been reduced (Lutter and Chaparro 2008). Changes in the prevalence of stunting with regard to level of maternal education show that in 1992 the prevalence of stunting among children of mothers with post-secondary education was 9% compared to a prevalence of 65% in children of mothers with no education; a gap of 56 percentage points. In 2004, 14 years later, the gap remained virtually unchanged (6% among children of mothers with post-secondary education vs. 62% among children of mothers with no education). Between 1992 and 2004, the prevalence of stunting decreased by roughly 8 percentage points, or 0.6 percentage points per year. However, most of the decrease occurred between 1992 and 1996; thereafter very little reduction has occurred. The high prevalence of stunting of 30% is particularly striking when compared to the much lower prevalence of underweight of 6%, which translates into five children who are stunted for every child who is underweight. Weight-for-age stabilizes at approximately -0.5 Z-scores; however, length-for-age stabilizes at approximately -1.5 Z-scores. As a result of the difference in Z-score between weight and length, weight-for-length Z-scores are positive, ranging between 0.5 and 1.0 Z-scores. Thus, the "average" Peruvian child is short and "chubby".

The prevalence of anaemia is very high and affects 44.5% of children 6 to 59 months of age. Among children aged 6 to 24 months, nearly 3 in every 4 are anaemic (PAHO 2009). The highest prevalence is in children 10 to 11 months of age, where the prevalence is 83%. Between 1996 and 2004, the prevalence of anaemia declined twelve percentage points.

Country assessment in Peru: methodology

The Peru Landscape Assessment was carried out August 25-29, 2008 by a national team which included representatives from both UNICEF and PAHO/WHO and an international interagency team represented by WHO and PAHO. The international team together with the members of the national team visited two different field locations in addition to the assessment at the national level. The team members and a list of institutions and persons contacted to conduct interviews and assessment are described in detail in the mission report.

During the assessment, briefings were held with the First Lady, the Vice-Minister of Health, the Director of Strategies CRECER and JUNTOS¹, and government officials from various ministries and sectors including the National Food and Nutrition Centre ([CENAN](#)²) and Health Promotion in the Ministry of Health and officials in the Ministry of Economics and Finance. Interviews and meetings were conducted with representatives of UN Agencies (UNICEF, WFP and UNFPA), the bilateral agency USAID; and a number of non-governmental organizations ([CARE](#), [PRISMA](#), Agencia Adventista para el Desarrollo y Recursos Asistenciales ([ADRA](#)), [Caritas](#), Future Generations and the Institute for Investigation in Nutrition ([IIN](#))). The Team also met with representatives of the Mesa de Concertación para la Lucha Contra la Pobreza.⁴ Key stakeholder interviews and assessment were

1. See Box 1 describing CRECER and JUNTOS; 2. National Food and Nutrition Centre (CENAN); 3. Future Generations. www.future.org/ground-impact/peru; 4. "Coordination of the Fight against Poverty", www.mesadeconcertacion.org.pe

conducted in Ayacucho in the central mountains and Piura along the northern coast. Interviews were held with stakeholders (health, economic development) at the regional level and with health providers at the district levels. The main themes and findings from the assessments were presented and discussed at a stakeholder meeting presided over by the Vice Minister of Health.

Observations

Assessment of the commitment to scale-up nutrition actions

The Government of Peru is committed to reducing the prevalence of stunting by 9 percentage points. This commitment resulted from the Initiative to Reduce Child Malnutrition, an alliance of thirteen UN, bilateral and non-governmental organizations, including the Pan American Health Organization, that advocated for the placement of stunting as the most important problem preventing economic and social development in Peru. As part of their advocacy effort, they invited all presidential candidates to sign a commitment to reduce stunting if elected. President Alan Garcia signed this commitment and, when elected, placed the reduction of stunting as the key goal of his government's social policies. The main strategy to implement this commitment is CRECER. The many examples of this high level political commitment include, but are not limited to, the following items:

- Legal frameworks, such as the Macroeconomic Framework of 2009-2011, which includes the reduction of malnutrition as a key social and economic objective and establishes the goal of reducing the prevalence of chronic malnutrition by nine percentage points between 2005 and 2011, and two supreme declarations that prioritize both investments in nutrition and interventions to reduce chronic malnutrition and improve maternal and neonatal health.
- Normative frameworks, such as the creation of CRECER and a list of priority maternal-child health services.
- Operational frameworks, such as budgeting for results, expansion of JUNTOS, assignment of medical students to priority districts, improved information systems for monitoring and evaluation, and the identification of 880 districts for priority action
- Programmes that include the Articulated Nutrition Program, the Maternal-Neonatal Health Program, and the Integrated Nutrition Program, among others.

There were very few observations with respect to weaknesses in the willingness to act. The primary one observed was that in some districts CRECER was seen as an element of the current government rather than a long-term institutionalized non-partisan initiative and therefore concerns were raised as to its sustainability under a subsequent government.

Assessment of the capacity to scale-up nutrition actions

The National Strategy against Child Malnutrition CRECER is an example of the national governments ability to act. This Strategy seeks to coordinate the different sectors that can contribute toward the reduction of childhood malnutrition at the national, regional, and district levels. JUNTOS, a government sponsored conditional cash transfer programme to the poorest sector of the population, seeks to improve resources at the household level and to increase utilization of health and nutrition services and educational opportunities.

Field visits to Piura and Ayacucho confirmed that the national commitment to focus on reducing chronic malnutrition had reached the local level. Legal, normative and operational frameworks had been developed. Regional and district level CRECER committees had been formed, budgets committed, and personnel recruited for this task. Similar to the national level, specific targets for the reduction of chronic malnutrition had been set at the regional level. The Ministry of Health had organized networks to coordinate actions in the districts and communities. Health centres and posts appeared to be equipped with measuring boards and scales, as well as vitamin A capsules and iron for children and pregnant women.

The many NGOs and UN Agencies working in Peru possess a wealth of expertise and ground-breaking experiences in reducing undernutrition. The Initiative Against Infant Malnutrition is a particularly important example of how non-governmental stakeholders can come together to influence government action. This Initiative is made up of thirteen institutions from NGOs, UN Agencies, research centres, and mixed government-civil society entities. During the political campaign leading up to the last election, the Initiative worked to call attention to the problem of

Box 1: Main policies of Peruvian Government to Reduce Stunting

CRECER and JUNTOS

CRECER, which in English means "grow", is the National Strategy against Child Malnutrition of Peru and main policy tool to achieve stunting reduction. CRECER is an intersectoral strategy that involves all the social sectors (health, education, water and sanitation, housing, agricultural, etc.) that can contribute toward the reduction of childhood malnutrition at the national, regional, and district level. National, departmental and municipal CRECER committees have been formed to plan, budget, and coordinate the strategy and ensure the integration of the different actions which each sector is committed to implement in order to improve child nutrition. Monitoring and evaluation is also a key component of CRECER. CRECER is linked to another national programme JUNTOS.

JUNTOS, which in English means "together", is a conditional cash transfer programme to the poorest municipalities aiming to improve resources at the household level and utilization of health and nutrition services and educational opportunities.

Read more at:

www.crecer.gob.pe

www.corda.com/company/resources/case_study/peru-juntos.pdf

Figure 1: Map of Peru, with locations of field visits in Piura and Cuzco



undernutrition, its causes and consequences, and reasons why efforts to date had not been effective. At the same time, it identified a number of successful interventions that could be scaled up. The Initiative was successful in getting the majority of the presidential candidates, including the current President, to sign a commitment to reduce stunting by five percentage points. Once elected, the President was presented with his signed commitment and asked 1) to make the reduction of stunting a government priority; 2) to request that the Council of Ministers coordinate the fight against stunting among different sectors and programmes, assigning clear goals and responsibilities; and, 3) to present a Presidential report each year outlining the actions taken. The Initiative also made a number of concrete recommendations for the first 100 days of the new government in 2006 and again in 2008. It issued a report on the actions the government has undertaken to date and a series of recommendations on issues still needing to be addressed. The different organizations that make up the Initiative have also provided technical cooperation and capacity building support to the government at the national, regional and local levels in the implementation of the CRECER national strategy.

Another example of the strength in the capacity to act was the fact that the Ministry of Economics and Finance is making available in electronic format information about budget execution at the different levels (national, regional and local) provides a strong incentive to develop the capacity to plan and manage these budgets and to demand for capacity development.

Nonetheless, the team also noted some weaknesses that could reduce the potential effectiveness of the government's ability to act. The weaknesses articulated at all levels (national, regional and local) concerned the lack of coordination between different sectors and stakeholders and the capacity to plan, budget and execute programmes at the local level. Although the government is promoting the model of Budgeting for Results in the health sector, there is little capacity at the local level to budget in this manner and there does not appear to be an operational plan to develop this capacity.

In addition, at the regional and local level the following weaknesses were noted:

- In Ayacucho, the operation of the Regional CRECER Committee struggled with the fact that many members of the Committee reported to the national level rather than regional level and, therefore, didn't always share the same objectives and mandates.
- District level CRECER Committees functioned where outside technical assistance from NGOs was available to support the development of operational plans, but this assistance was not available to all districts.

- Although lack of resources was not identified as a key problem, the inability to programme and execute these resources was noted. There exists a gap between planners and executors, and there is a need for technical assistance in logical frameworks and budgeting for results.
- Regional Ministry of Health officials identified resource constraints and labour problems, particularly strikes and staff turnover, as weaknesses. In health centres, preventive actions were separated from those related to curative care and medical personnel did not necessarily think that they were responsible for nutritional assessment and counselling. Lack of knowledge of counselling techniques was also cited as a problem. There was revealed to be a need for a new kind of health professional who understands how to organize the community to improve health and nutrition outcomes.

While it cannot be stated with certainty that the failure to address these weaknesses will result in the inability to reach the government's stated goal of reducing stunting by nine percentage points, the probability that the goal will not be reached is increased. Addressing these weaknesses, in addition to facilitating the attainment of the stated goal, will also result in many other benefits related to improving the efficiency and effectiveness of government resources and the well-being of Peruvian children.

Recommendations and next steps

A draft of the recommendations listed below was developed by the international team after the assessment was completed. They were presented at the final stakeholders meeting, and as a result of the ensuing discussions, some modifications were made. Therefore, the recommendations discussed in detail below and summarized in Box 2 are final.

1. Strengthen the capacity to plan, budget and execute programmes at the local level. While lack of resources was not seen as a major problem at the local level, the capacity to plan, budget, and execute programmes and to budget for results was seen as a major challenge. An operational plan is needed for continuous technical cooperation with regional and local governments, including development of skills in planning and budgeting, as well as the execution, monitoring and evaluation of nutrition-related interventions. Specific actions could include the development of modules for capacity development (both virtual and traditional); formation of travelling teams to provide training, and exchange experiences among districts. This is the responsibility of both the Ministry of Health and the Ministry of Economics and Finance as successful implementation of nutrition-related policies and programmes requires successful planning, budgeting, and execution. In addition, it is important to ensure that information about the execution of local budgets maintained by the Ministry of Economics and Finance is available at all levels.

An important aspect of strengthening the capacity to plan is the use and interpretation of data on child nutrition and its determinants. In this regard, support to regions and districts in the use and interpretation of data for information generated from Informed Decisions¹ is necessary. It would also be helpful to agree on a simple model, adapted for different audiences and decision makers, which can be used to present all survey results of undernutrition and its determinants. Technical support to regions and districts conducting their own baseline surveys is also needed.

2. Provide technical assistance for the establishment and operational success of local CRECER committees. All regional and local governments should be supported to establish CRECER committees and prioritize the reduction of stunting. Technical assistance is needed to develop local plans of action, budget by results, and to improve management. An incentive system should be developed to encourage and reward efforts to reduce stunting. To the extent that data permits, local targets for the reduction of chronic malnutrition should be set.

3. Promote the integration of nutrition interventions with health interventions. The capacity for nutrition actions among health workers needs to be developed, while also advocating for all health workers to incorporate nutrition actions in their services to mothers and children. A major weakness observed was the apparent separation of child nutrition actions provided as part of the government's health services from curative services, and a lack of ownership by physicians of these actions. Improving infant and young child nutrition must be a priority for all health personnel— and not limited to the domain of nutritionists—and health workers must have the technical knowledge and skills needed to assess growth, and to counsel in breastfeeding, complementary feeding, and household hygiene.

1. Informed Decision is an initiative developed by the Ministry of Health involving small scale surveys to help with local decision making.

Cost-effective interventions identified in the Lancet series on Maternal and Child Undernutrition (Bhutta et al 2008), such as treatment with zinc during diarrhoea, need to be incorporated into national norms. For both pregnant women and children, actions need to be taken to improve the coverage of micronutrient supplements, and in particular iron. Messages about complementary feeding and child health need to be harmonized among the different sectors and stakeholders so that mothers/caregivers receive consistent information.

4. Strengthen nutrition coordination and leadership across sectors and at all levels and clarify the roles and responsibilities of different actors. While nutrition coordination at the national level is strong and leadership assured, specific roles, responsibilities, and coordination mechanisms need to be defined at regional and local levels. Given the large inter-regional variation in stunting prevalence, regional targets should be set and process indicators established to define progress.

5. Develop a national communication strategy to promote CRECER and the Fight Against Child Malnutrition. A sustainable programme is difficult to build if the communities benefiting from it do not see the programme as serving their own interests and needs. This requires that the population of Peru, particularly the rural poor and indigenous population, views stunting as a problem limiting the growth and development of their children and communities and understands the main aspects of its causes and solutions. In this regard, the implementation of a communication strategy appealing to the commitment of the population for reducing stunting is important.

In addition, the programmes Maternal-Neonatal Health, Articulated Program in Nutrition, Integrated Program in Nutrition and budgeting for results need to be socialized among all Regional Ministries of Health. User-friendly communications materials based on the Lancet series that include the window of opportunity for preventing growth retardation and cost-effective interventions should be developed and disseminated.

6. Strengthen the quality of services and increase funds for child nutrition activities. To respond appropriately to an increased demand for services in health and nutrition generated by the JUNTOS programme, it is necessary to improve the quality of such services, allocating appropriately trained human resources as well as supplies and equipment as needed. Inasmuch as the population most affected by poverty and malnutrition lives in rural areas, these areas should be prioritized.

It was noted that while most of the recommendations from the international team have been or are being implemented by national, regional and local governments, they require a public audience broader than the health sector and should therefore be disseminated to other relevant ministries, including the Ministry of Economics and Finance.

The opportunity to have, through the Landscape Analysis Country Assessment, the advances made by Peru in the fight against stunting highlighted in the international community was seen as important and useful. However, the need for continued support from international organizations at this stage was stressed.

All agreed upon the need for a good communication strategy in order to ensure that the population of Peru, particularly the rural poor and indigenous population, also sees stunting as a problem and understands its causes and solutions. A sustainable programme is difficult to build if the communities receiving it do not see it in their own interests.

Follow-up Actions

The Landscape Analysis has resulted in a number of follow-up actions designed to strengthen nutrition actions for pregnant women and young children, summarized as follows:

- Initiation of supplementation with microencapsulated micronutrient powder in three priority regions where CRECER is actively working (Ayacucho, Apurimar and Huancavelica). This project is being carried out by the Ministry of Health in collaboration with the Ministry of Women's Affairs and Development, PAHO/WHO, UNICEF, and the World Food Programme, as well as with other institutions such as the Institute for Investigation in Nutrition and the World Bank.
- Initiation of a comprehensive evaluation of food assistance programmes (Glass of Milk, Integrated Nutrition Program, School Feeding Program, etc) and their reformulation in the context of decentralized social programmes.
- Legislative approval of a law for Universal Health Insurance (Aseguramiento Universal en Salud), which guarantees access of the entire population to basic cost-effective health services recommended by the Lancet. Among these basic health services are many related to nutrition.

- Advances in the Strategy CRECER to peri-urban poor areas, where a large proportion of stunted children live.
- Coordination by the Ministry of Health, Pan American Health Organization, UNICEF and the World Food Programme of a major regional meeting on infant and young child feeding and nutrition (PAHO/WFP/UNICEF 2009). This meeting was attended by teams from the Ministries of Health throughout South America, including a large Peruvian delegation from all regions.

Conclusion

The Government of Peru has placed the fight against child malnutrition at the top of the political agenda and invested resources accordingly to address both the determinants of malnutrition and to improve the delivery of nutrition interventions through health services. The country has highly educated and skilled political and technical leadership to implement policies and programmes. This effort is supported by United Nations, particularly the country office of the Pan American Health Organization, and a number of other non governmental organizations. The Landscape Analysis country assessment validated the important work being done by the stakeholders in Peru, provided an opportunity for self-reflection, and identified areas where current actions could be strengthened.

References

- Bhutta ZA, Ahmed T, Black RE, Cousens S, Dewey K, Giugliani E, Haider BA, Kirkwood B, Morris SS, Sachdev HPS and Shekar M (2008) What works? Interventions for maternal and child undernutrition and survival. *The Lancet* 371(9610):417-40. ([online](#))
- Lutter CK and Chaparro CM (2008) *Undernutrition in Infants and Young Children in Latin America and the Caribbean: Achieving the Millennium Development Goals*. PAHO:Washington DC.
- PAHO (Pan American Health Organization) (2009) *Ensuring a healthy start for future development: Iron nutrition during the first 6 months of life*. PAHO:Washington DC
- PAHO/WFP/UNICEF (2009) *Alimentación y Nutrición del Niño Pequeño. Reunión Subregional de los Países de América del Sur. 2-4 de diciembre de 2008, Lima Perú*. Organización Panamericana de la Salud, Programa Mundial de Alimentos, UNICEF. WFP: Panama.

Contact: lutterch@paho.org

Box 2: Summary of recommendations

1. Strengthen the capacity to plan, budget and execute programmes at the local level.
2. Provide technical assistance for the establishment and operational success of local CRECER committees.
3. Promote the integration of nutrition interventions with health interventions.
4. Strengthen nutrition coordination and leadership across sectors and at all levels and clarify the roles and responsibilities of different actors.
5. Develop a national communication strategy to promote CRECER and the Fight Against Child Malnutrition.
6. Strengthen the quality of services and increase funds for child nutrition activities.

VACANCY ANNOUNCEMENT:

WHO Roster of qualified and experienced nutritionists with public health background

A roster of CVs is being established. Candidates with nutrition qualifications and at least five years experience in international public health nutrition are welcome to submit their CVs to nutrition@who.int. The roster is open and candidates will be contacted directly by the interested Regional and Country Offices.

In order to better respond to increased global challenges WHO has committed to strategic nutrition repositioning and refocusing. Priority functions are the development and operationalization of integrated food and nutrition policies, the intelligence of needs and response, the development of evidence-based programme guidance and the advocacy for nutrition in the context of the global and regional health policy fora.

Currently, approximately 50 staff are involved in nutrition activities in headquarters, regional and country offices and about 80 additional staff dedicate some time to nutrition-related work. In order to further strengthen capacities at regional and country level WHO is looking for qualified and experienced nutritionists with public health background.

Specific Vacancy Notices appear in the WHO e-recruitment web site www.who.int/employment/vacancies/en

Landscape Analysis on Countries' Readiness to Accelerate Action to Reduce Maternal and Child Undernutrition: Nationwide Country Assessment in South Africa

Lynn Moeng (Director, Nutrition Department, [Ministry of Health, South Africa](#))

Purpose

The main aim of the Landscape Analysis country assessment in South Africa is to identify bottle-necks for development of responsive solutions and opportunities to scale-up good practices. In particular, we see this country assessment process as an excellent opportunity to develop the capacity of the South African nutrition cadre in provinces in a way that has never happened before.

Health system

The South African national health system is made up of central (national) health department and nine provincial departments of health, which in turn are divided into 52 districts and 252 sub-districts. There are districts and sub-districts.

Site selection and country teams

The Landscape Analysis country assessment was conducted in all the nine provinces of South Africa in selected sites that included health facilities (hospitals, clinics and community health centers) and district offices. South Africa has identified 18 priority districts based on performance for extensive support by national (central) government. The criterion for site selection was to include both priority and non-priority districts from each province. Table 1 lists number of sites (total 240) included in the assessment and number of country teams who participated in the assessment in each of the nine provinces. On average the country teams consisted of three to four trained nutrition staff members from national, provincial and district levels as well as members of UNICEF and WHO Country Offices and some experts from the Medical Research Council, South Africa. In KwaZulu-Natal, they decided to cover five of eleven districts in the province for this assessment.

Data collection tools and analysis

The Landscape Analysis country assessment in South African was implemented at much larger scale than in other countries which undertook their country assessment in 2008 (i.e. Burkina Faso, Ghana, Guatemala, Madagascar and Peru). While South Africa used the same country assessment tools - adapted to the country situation - we have developed additional tools that allowed computerized analysis. These included coding of questionnaires and a detailed code book, guidance to how each question in the questionnaire links to specific indicator themes in the analytical framework, an Epi-Info database template, as well as guidance for data analysis and interpretation. We also developed an additional tool for specifically review the NGO involvement.

Progress and lessons learned to date

Processes are under way to analyse the data collected thus far and this include data coding, consolidation and cleaning. Although key nutrition interventions have been implemented for the whole population in South Africa, the Landscape Analysis came at an opportune time when the country was looking towards scaling up national actions to achieve the MDGs.

In terms of partnership building, the Landscape Analysis process provided valuable opportunities, in particular for provinces, district and national officials to engage in rigorous discussions on the national nutrition strategy and programmatic focus, and work together to implement common priority activities.

Table 1: Number of sites and teams per province

Province	Sites	Teams
KwaZulu-Natal	84	5
North West	11	2
Northern Cape	24	2
Gauteng	20	2
Eastern Cape	14	2
Free State	22	2
Limpopo	17	2
Western Cape	35	2
Mpumalanga	13	2

The Landscape Analysis enabled introspective processes to occur amongst nutrition/dietetic professionals on what their key competencies and areas of comparative advantage should be going forward. We are most hopeful that these issues will be included during the report writing process on which we are about to embark. Both the national and provincial teams who conducted the Landscape Analysis country assessment gained strong ownership in the findings and outcomes and eager to identify the way forward in meeting the challenges South Africa is facing in accelerating the reduction of maternal and child undernutrition.

Contact: MoengL@health.gov.za

[back to contents](#) *SCN NEWS # 37*

Landscape Analysis on Readiness to Accelerate in Nutrition: Development of Nutrition Landscape Tracking System (NLTS)

Jonathan Siekmann (WHO), Ann-Beth Moller (WHO) and John Shannon (TCG Systems)

Background

The Landscape Analysis on Readiness to Accelerate in Nutrition relies on a wide range of up-to-date nutrition, health, and development data. Although there exist many individual sources of publicly-available data, one of the challenges is how to identify, collect and organize data systematically from these sources and to monitor updates as new data become available. Building a new database to accomplish this systematic coordination of data would have been beyond the scope of the Landscape Analysis in the 36 high-burden countries. However, the idea to integrate existing WHO Nutrition Global Databases and then incorporate publicly-available data from outside sources either manually or through contractual agreements with these external data sources was proposed. We explored several sources for external data, and in the end utilized publicly-available data from the World Health Organization ([WHO](#)), the United Nations Children's Fund ([UNICEF](#)), the [UN Statistics Division](#) the UN Development Programme ([UNDP](#)), the Food and Agriculture Organization of the UN ([FAO](#)), Demographic and Health Surveys ([DHS](#)), [the World Bank](#), the International Food Policy Research Institute ([IFPRI](#)), and the International Labour Organization ([ILO](#)). We combined these data from external sources with data from the WHO Nutrition Global Databases, to build two-page country profiles that cover health, food, care, development and economic indicators related to nutrition. Additionally, we integrated nutrition data that had existed separately in each of the WHO Nutrition Global Databases and made it available in customizable, downloadable format at one location at www.who.int/nutrition. This Internet-based product containing country profiles and customizable downloadable data has been termed the Nutrition Landscape Tracking System (NLTS).

Objectives

The purpose of the NLTS is to provide a single source of information that draws on indicators from WHO Nutrition Global Databases and other WHO and external data sources to

- *Form a comprehensive overview of nutrition-related indicators.* The Landscape Analysis aims to examine a variety of nutrition indicators as well as health, food, care, development and economic indicators related to nutrition. It is therefore important to have these data available in a single easy-to-access and user-friendly location. By doing so, analysts can assess nutrition problems, capacity and commitment to act at-scale, and other indicators in a coordinated and comprehensive manner.
- *Track changes over time.* This comprehensive data collection system includes data from multiple time points, including historical as well as most-recent data, and has the capacity to incorporate data from future time points as these become available. By doing so, analysts can assess changes in indicators over time to measure direction of change and monitor progress.
- *Generate easy-to-interpret country profiles.* In addition to providing extensive data to analysts, it is important to provide an easy-to-understand snapshot of key nutrition, health, and development indicators at national level. A concise, succinct country profile with (1) select nutrition and related indicators, (2) definitions of these indicators to enhance understanding and importance, and (3) sourcing information for the values displayed, is a powerful tool. Such a country profile communicates to people from a variety of backgrounds, including policy makers who might not have a health or nutrition background. Furthermore, a visual presentation of these summary data is a useful advocacy tool.
- *Inform decision making and resource allocation.* Having quantitative data at-hand and in analyzable format in combination with a country profile informs decision makers and helps guide resource allocation.

Methods

The development of the NLTS is a collaborative, on-going effort between WHO Nutrition and a systems analyst. As a first step, the NLTS is integrating WHO Nutrition Global Databases to develop an integrated monitoring system. Thus the NLTS is maintained and updated in the WHO Department of Nutrition for Health and Development ([NHD](#)).

Publicly-available data in the NLTS that come from outside the WHO Nutrition Global Databases are extracted manually by WHO NHD and incorporated into the NLTS by the systems analyst. The NLTS is designed to be flexible enough to include data from countries' national databases, if they exist. Currently, these are not a component of the NLTS.

Advantage of NLTS compared to existing NHD databases

The NLTS brings together nutrition and nutrition-related indicators in one location (Figure 1). Currently, data in the WHO Nutrition Global Databases are only accessible to end-users via four separate database websites, with various levels of data access:

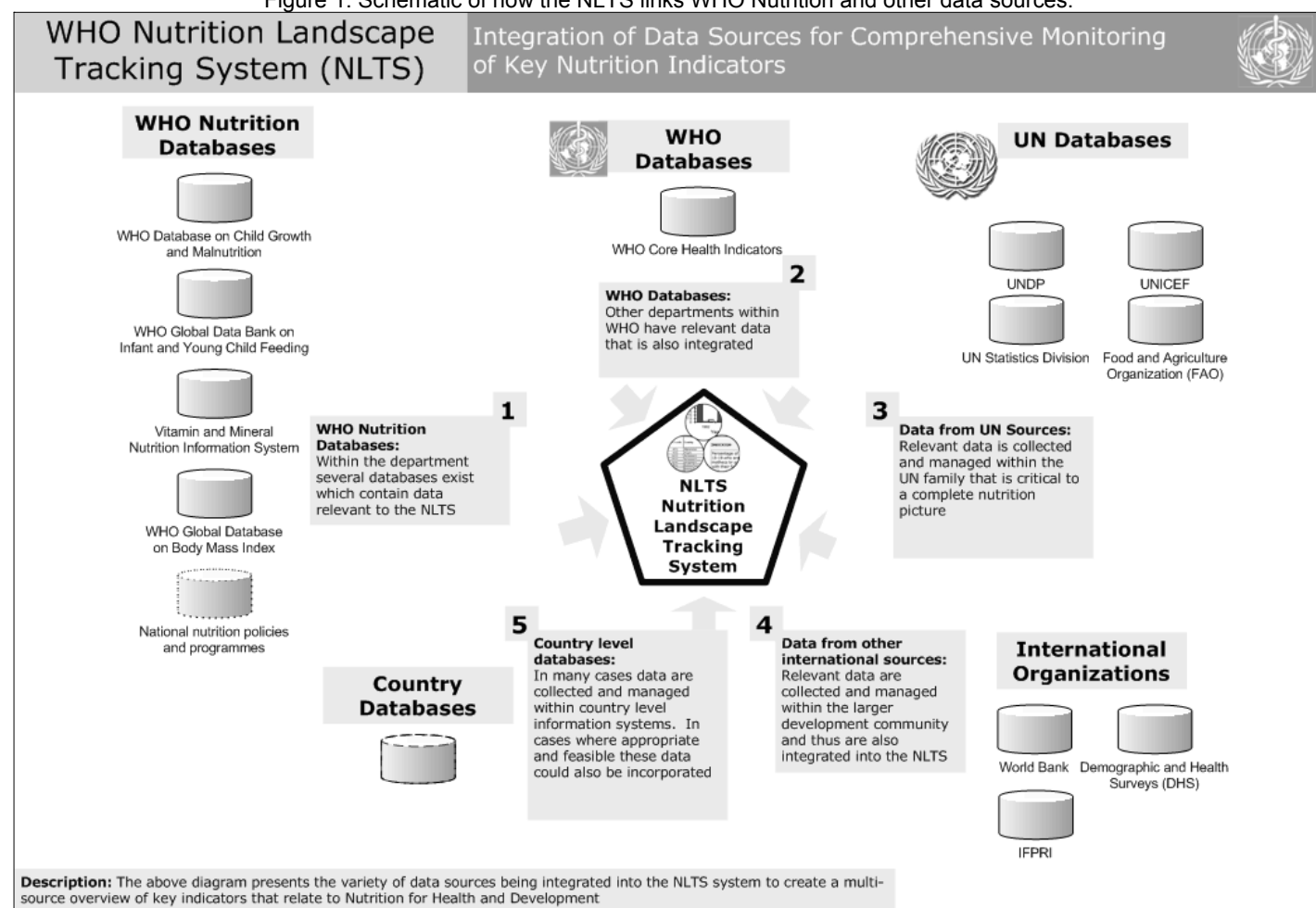
- WHO Vitamin and Mineral Nutrition Information System (VMNIS) – PDF download
- WHO Global Data Bank on Infant Young Child Feeding (IYCF) – PDF download
- WHO Global Database on Child Growth and Malnutrition – PDF download
- WHO Global Database on Body Mass Index (BMI) – Online search and graphic presentation

Because the databases are not linked, the BMI database, for example, provides the end-user with BMI-related data only. Furthermore, of the four web-based nutrition databases, only one (the BMI database) allows users to download data in Excel format. The other three databases only allow the user to view data as a PDF file, and each country's data are presented as a separate PDF file. Because the data will be linked in the NLTS, end-users will be able to select data from all available WHO nutrition indicators for their countries of interest and will be able to view and download these data in spreadsheet format using software such as Excel. Furthermore, because the eventual aim of the NLTS is to incorporate data from sources outside WHO Nutrition, end-users will be able to include these data in their customized downloadable datasets in the future.

What does the NLTS add to the nutrition database world?

While sites such as USAID's Health Systems 20/20 (www.healthsystems2020.org) and others supported by the World Bank and UNICEF provide a wealth of data on some nutrition-related indicators, there currently exists no single site like

Figure 1. Schematic of how the NLTS links WHO Nutrition and other data sources.



the NLTS where users can select from such a wide range of nutrition, health, development, economic, and other indicators at the country-level. In addition to country (national)-level information, data on many of the nutrition indicators are available according to region, urban/rural locality, education, income, and other demographic stratifications.

Content of NLTS website

The NLTS has two primary components: 1) User-defined customized downloadable data, and 2) Country Profiles – pre-configured summary designed for ease of interpretation. The front (entry) page of the NLTS website provides users with introductory information and provides links to these two features. In addition, links to the current, individual WHO Nutrition Global Databases are provided.

User-defined customized downloadable data

For researchers, analysts, and those interested in examining the nutrition landscape in greater detail or according to regional or demographic stratifications, the user-defined customized data function allows these users to select indicators of interest and view and download available data. They can then examine data to address their specific interests. After the end-user has selected all of the optional filter criteria, s/he will be able to generate an Excel spreadsheet, which can be downloaded.

Country Profiles

Data presented in the country profiles are intended to give an overview snapshot of a country's nutrition, health, and development landscape at the national level. These data are useful to policymakers interested in the broader picture, are useful for comparison purposes among countries, and are simple and straightforward enough to be appealing and communicative to people of different backgrounds and education levels. With an understanding of the indicators from the indicator definitions, these country profiles can be compelling tools for assessing a country's national nutrition landscape.

Complete country profiles will be available for 193 UN Member States. Country profiles exist in two forms: (1) as an on-line version with data sources and detailed definitions for each indicator and (2) as a 2-page printer-friendly version. In the on-line version of the country profile, when users click on the indicator name, a definition is presented to aid in interpretation and understanding of the indicator.

In the indicator interpretation guide, for each indicator, the following aspects are addressed:

1. What does this indicator tell us?
2. How is it defined?
3. What are the consequences/implications?
4. Source and further reading.

Further developments

The NLTS is a work-in-progress and will be updated and improved on an on-going basis, based on feedback received from end-users. Specific future improvements being planned include:

- Enhanced data acquisition and upload — increased collaboration with partners
- Comparison to standards or data from other countries to view values in context
- Maps, graphs, and other graphic data displays
- Tools to measure change in key indicators over time
- Automatic notification via e-mail when new data for a particular indicator are available
- Addition and translation to support multiple languages

Summary

The NLTS provides a wide range of nutrition and nutrition-related indicators in one convenient location. These data are available to users in a customized, downloadable format. In addition, the NLTS Country Profile can be an important advocacy tool for presenting a standardized collection of the most-recent key nutrition, health, and development indicators at the national level.

Contact: mollera@who.int

Special Feature

SCN Side Event at the 34th Session of the Committee on World Food Security Impact of High Food Prices on Nutrition

On 14 October 2008, the SCN held a Side Event focusing on the Impact of High Food Prices on Nutrition at the 34th Session of the Committee on World Food Security (CFS) that took place 14 to 17 October 2008 at FAO, Rome. The Session was chaired by David Nabarro and the results were reported back to the CFS on its last day of meeting.

The objectives of the Side Event were twofold: 1) Inform CFS members about the effects of high food prices (or of policies related to these) on the nutrition status of different livelihoods groups; and 2) Stimulate a debate on the possible short-term and longterm policies/actions that may help to allay the negative effects of the crisis, taking into consideration the context-specific nature of the latter.

With the recent increase in food prices, hunger and undernutrition have regained high visibility on the international agenda. Every year, 3.5 million children die from undernutrition. The food price crisis is estimated to have pushed at least 100 million people into poverty in 2008 and therefore erased at least four years of progress towards MDG1. At household level, escalating prices have increased staple food expenditure to over 60% of many poor families's meagre income. This issue was brought up at the 35th annual session of the SCN in Hanoi, and as a consequence a SCN side event was organised on occasion of the 34th Session of CFS.

The highly attended panel in FAO HQs was chaired by Dr. David Nabarro, Deputy Coordinator of the UN Task Force on Global Food Crisis and was composed of Dr. Ezzeddine Boutrif, Director of FAO's Nutrition and Consumer Protection division, Ian Darnton-Hill, formerly Special Adviser to UNICEF Executive Director on ending child hunger and undernutrition (REACH); Pablo Eyzaguirre, Bioversity and Martin Wolpold-Bosien, FIAN, who presented different dimensions of this issue.

The following debate emphasized the need for a multidisciplinary and multilevel approach involving all relevant stakeholders. To date, efforts to deal with high food prices have focussed on production and poverty and have so far fallen short of the needed impact. Participants recommended the addition of a nutrition dimension combining increased institutional and government involvement, right to food, promotion of local foods and management of biodiversity, gender as well as support to small farmers and consumer education. This echoed the opening speech of the former president of Nigeria, His Excellency Olusegun Obasanjo, who suggested that countries return to national food security since recent events had proven that reliance on international market forces was no longer adequate.

The meeting brought attention to the roles the SCN and the REACH initiative can and should play in this process and to the need for mainstreaming nutrition into relevant policies.

We reproduce here the background document developed by the SCN Secretariat in consultation with the Steering Committee and FAO entitled "**The Impact of High Food Prices on Maternal and Child Nutrition**". The paper discusses how to ensure food and nutrition security outcomes during the food prices crisis across the life course.

- Read more about this Side Event [here](#), including presentations by
 - Ian Darnton-Hill (UNICEF) on "Impact of High Food Prices on food consumption and nutrition"
 - Pablo Eyzaguirre (Bioversity International) on "Coping with high food prices: making better use of local food sources"
 - Martin Wolpold-Bosien (FIAN) on "High food prices and Right to food".
- Read more about the Committee on World Food Security (CFS) [here](#)

The Impact of High Food Prices on Maternal and Child Nutrition

Roger Shrimpton, Claudine Prudhon and Kaia Engesveen

Introduction

Food prices have surged in the last two years wiping out global gains in poverty and hunger reduction achieved over the last two decades. The Food and Agriculture Organization (FAO) index of food prices rose by 9% in 2006, 24% in 2007 and has surged by 51% in the last 12 months. FAO forecasts that the world will spend US\$1,035 billion on food imports in 2008, US\$215 billion more than in 2007. This will severely strain the budgets of low-income food-deficit countries (LIFDCs) that will see their import bills soar by more than 40% this year (1).

The food price crisis is likely to have pushed at least 100 million people back into poverty in 2008 and erase at least four years of progress towards the Millennium Development Goal (MDG) 1 target for the reduction of poverty (2). The household level consequences of this crisis are most acutely felt in LIFDCs where a 50% rise in staple food prices causes a 21% increase in total food expenditure, increasing these from 50 to 60% of income (3). In a high income country this rise in prices causes a 6% rise in retail food expenditure with income expenditure on food rising from 10 to 11%. FAO estimates that food price rises have resulted in at least 50 million more people becoming hungry in 2008 (4), going back to the 1970 figures.

In April 2008, the United Nations Secretary-General established a Task Force on the Global Food Security Crisis under his chairmanship, composed of the heads of the United Nations specialized agencies, funds and programmes, Bretton Woods institutions and relevant parts of the UN Secretariat. The primary aim of the Task Force is to promote a unified response to the global food price challenge, including by facilitating the creation of a prioritized plan of action and coordinating its implementation. The UN has organized since a series of high level events and consultations. The special session at the Human Rights Council in Geneva in May on "The negative impact on the realization of the right to food of the worsening of the world food crisis, caused inter alia by the soaring food prices" is of particular importance since this was the first time the Council met at a special session to discuss a social, economic and cultural right and on a substantive theme such as the right to food. The June High-Level Conference on World Food Security: the Challenges of Climate Change and Bioenergy organised by FAO in Rome allowed member-states to make financial commitments to address the crisis. The High-level Task force released a Comprehensive Framework for Action (CFA) (5) in July.

This paper looks at the nutrition consequences of the food price crisis, particularly among women and children who are biologically the most vulnerable members of households. The nutrition status of individual household members is a product of food security, access to health and environmental sanitation services, and maternal and child caring practices. The paper provides a perspective on what the appropriate responses are for ensuring food and nutrition security in the face of rapidly rising food prices, in the context of contributing to the achievement of the MDGs and progressively realizing the human right to adequate food.

The consequences of rapidly rising food prices

The nutritional consequences of the 2008 food price increases are likely to be considerable for poor people, especially for net food purchasers in both urban and rural areas (60-80% of rural people in sub-Saharan Africa and Asia) (6). In any crisis, the first reaction usually is to save on food costs and cut down on non-staple food consumption, affecting the quantity, diversity and safety of diets, or to cut down on other critical household expenditures which may affect nutrition status such as health care. Within the household, women are especially vulnerable as they are usually the first to make sacrifices when the financial situation deteriorates. This eventually results in increased undernutrition and morbidity, among current and future generations, as well as impaired human capital, reduced productivity, and reduced economic growth in time

Women and children who have special nutritional needs are particularly at risk, with implications in terms of maternal health and well being, as well as the survival, growth and development of children (7). Maternal undernutrition, poor foetal growth and stunting in the first two years of life lead to irreversible damage across the course of life, including shorter adult height, lower attained schooling, reduced adult income and decreased offspring birthweight (8). Such damage may occur quickly, even among previously well-nourished populations as was seen during the Dutch famine of 1944-1945. More recent evidence from developing country settings confirms that rapid increases in food prices cause maternal and child undernutrition levels to rise relatively rapidly, with first effects seen in the mother (9). Furthermore deterioration in the quality of the diet causes the damage even before food shortages become pronounced. Even small variations in the micronutrient content of diets during pregnancy are associated with significant differences in foetal and infant growth. These issues and other biological evidence for the nutritional consequences of rapidly rising food prices are explored more fully in Box 1.

As the soaring food prices reduce availability of food at household and individual level, nutritional adaption may

occur in several ways (10). First through social/behavioural mechanisms (i.e. coping strategies as described in the following section). If these are unsuccessful, individuals will adapt physiologically, through for example decreasing activity to reduce energy expenditure, which will impact on productivity and therefore household access to food. In the last instance, irreversible biological/genetic adaptations may take place, such as those caused by maternal undernutrition as described above and in Box 1, with dire consequences that will affect generations to come.

Appropriate responses: understanding local coping strategies

In the development of responses to mitigate the effects of rapid increases in food prices, and to ensure the appropriateness and effectiveness of any interventions, it is important to understand what the local coping strategies of different communities are for dealing with such events. Coping strategies are the means people employ to master, tolerate, reduce, or minimize the negative consequences of changes in their environment.

The social/behavioural mechanisms for adapting to, or coping with, food shortages and increased food prices vary enormously depending on the social group and whether they are in rural or urban environments. These coping behaviours, many of which are learnt from previous generations, can be divided into “food based” and “non food based”.

Food based coping behaviours are usually the first line of defence, with reductions in the variety of foods consumed, and especially of more expensive items such as fruit, vegetables, meat and dairy products. Staple food consumption remains largely unchanged, although a cheaper staple may be consumed. As the crisis gets worse meals are reduced in size and frequency, first among adults and especially the mother, and then among children, and eventually even items such as grass, hay or sawdust may be consumed. In rural areas more and different foods may be collected from the fields and/or the forests. People may eat seeds instead of planting them, meaning that the next crop will not be harvested, and rural incomes and food entitlements will collapse. For the urban poor, even these coping foods may go up in price, as has happened in Haiti.

Non-food coping mechanisms include taking loans, selling assets, decreasing expenditures on health, education and other non-food items, and taking children out of school so that they can work, collect food or even be traded.

Understanding local coping strategies and the way that the local community deal with rapid increases in food prices, requires a community oriented approach. This is consistent with people-centred and human-rights based approach which has a strong emphasis on participation and empowerment and is central to the provision of UN development assistance (11).

Human rights entail both rights and obligations. In ratifying a human rights convention, States assume obligations and duties under international law to respect, to protect and to fulfil human rights: respect, that is not undermine, the rights of individuals, adopting a “do no harm” principle; protect these rights against infractions by third parties; and fulfil these rights, which may entail either facilitating the individuals or household efforts to improve their resources and opportunities to feed themselves, or as a last resort for those who are completely unable to do so, providing adequate food directly.

The nutrition conceptual framework¹ originally developed by UNICEF (12) was proposed as a tool to help orient problem solving discussions at all levels, including the community level, and in so doing to help to elucidate what the local coping strategies are. The conceptual framework includes three levels of causality. The immediate causes of malnutrition in are inadequate dietary intake and disease, operating in a synergistic fashion with infections being more common in those with undernutrition and also contributing to the development of poor nutritional status. The underlying causes at household and community level concern access to food, health and environmental sanitation services, and maternal and child caring practices. Each of these three clusters of factors is an essential but alone insufficient condition for achieving nutrition security. The basic causes operating at the societal level include availability of natural resources, national income, education, and the adequacy of national infrastructure and governance mechanisms. In other words, the distribution of wealth, income, and political power is the ultimate cause of nutrition outcomes.

Appropriate responses: protecting and promoting nutrition security

Nutrition security means to be free from hunger and malnutrition. The nutrition security of a society is a reflection of the universal, indivisible, interrelated and interdependent nature of human rights. Nutrition security encompasses many rights, especially the right to adequate food, the highest attainable standard of health as in Arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), and the children's right to food, health, care as well as survival and development as defined in Arts. 6, 24 and 27 of the Convention on the Rights of the Child (CRC). Nutrition security also encompasses the right of mothers to appropriate services in connection with pregnancy, confinement and the post-natal period, granting free services where necessary, as well as adequate nutrition during pregnancy and lactation, as defined in Art. 12.2 of the

1. See illustration in Nishida et al on [p.8](#) in this SCN News

Convention on the Elimination of all forms of Discrimination Against Women (CEDAW).

In order to minimize the nutritional consequences of rapid food price increases, short term priority measures are required to assist the most vulnerable households in order to both protect their diet, and prevent further de-capitalisation. Such measures should focus on net food purchasers, such as the urban poor, small subsistence farmers and the landless in rural areas, who are the most acutely affected by food price increases. Efforts should be made to enable them to access the food they need, if needed through social safety net programmes. An appropriate response to the food crisis should include both preventive and curative interventions as mutually reinforcing elements of an effective strategy, integrated in a comprehensive approach aimed at ensuring food and nutrition security. Short term food based approaches to ensure locally-appropriate diversification of household diets as well as increased availability of safe and affordable foods on local markets are an essential component of such a strategy.

Specific attention and support should be provided to people living with HIV and their families, as high food prices will put them at further risk of food insecurity. HIV and AIDS affected families experience a drop in household food consumption, whereas an adult living with HIV has a 10-30% higher energy requirement and a child living with HIV has a 50-100% higher energy requirement. A recent study in Botswana and Swaziland found that food insecure women were 50% more likely to engage in intergenerational sex; 70% more likely to engage in uncontrolled and unprotected sex; and 80% more likely to engage in transactional sex, thereby accelerating the propagation of the epidemic. Food insecurity was found to be a significant predictor of risk-taking behaviour among women, even after controlling for income, education and HIV knowledge (13). Good nutrition on the other hand reduces the risks of vertical transmission to an infant and reduces the body's susceptibility to sexually transmitted infections, further reducing HIV susceptibility when exposed.

Urgent attention should be given to support food and nutrition policy making at global and national level and the necessary dialogue needs to be initiated immediately. The present crisis requires, and provides an opportunity for, advocacy and awareness-raising on the need for synergies and urgent action. This should be based on a review of existing institutional arrangements an understanding of their implications in terms of priority setting, and an assessment of the strength of the political coalition for better nutrition (as compared to the constituencies for setting up other policy priorities). Also, as rights holders, poor and food insecure people must be given a voice and empowered to advocate for their rights.

It is particularly important to ensure the mothers right to adequate food and to health, as well as the right of infants to grow and develop. Where epidemiological evidence shows that food and nutrition security problems already exists and levels of maternal and child undernutrition are already high, then nations states should take extraordinary action to provide food and nutrients as appropriate, directly to pregnant and lactating mothers and/or their young children. Such "immediate level" interventions are aimed at the individual level as illustrated in the UNICEF framework, especially at the "window of opportunity" from conception to 24 months of age, the most vulnerable phase of the life course where growth failure is concentrated (14). These "short route" measures (15) to improving food and nutrition security are to be implemented on top of and not instead of the "long route" measures aimed at the underlying level of causality to improve the situation of the general population as a whole.

The interventions that should be considered for implementation in order to protect food and nutrition security, especially in response to a rapid rise in food prices are listed in Table 1. The appropriateness of the interventions will depend on the local situation, including current levels of maternal and child undernutrition, maternal and child caring practices, and the presence of diseases. The "triggers for action" are the prevalence levels of the condition that are considered either "severe" or "moderately severe", and that from a public health perspective require action to ensure that rights to adequate food and health are not being violated. This list of interventions draws on the recommendations agreed at the SCN 35th Session (16), which are largely based on the Lancet Nutrition Series set of essential nutrition actions (17) that if taken to scale would help accelerate the rate of reduction of maternal and child undernutrition. Evidently, these interventions are needed on the top of actions that address the basic causes of malnutrition concerning the distribution of wealth, income, and political power.

Food supplements should be provided to women during pregnancy and lactation, in food insecure areas, or where low birth weight rates are greater than 15%, which is already the case for about a quarter of the 82 Low-Income Food-Deficit Countries (LIFDC) identified by FAO (18), (19). In populations where more than 40% of women of reproductive age are anaemic, iron and folic acid supplements should be given to all women during pregnancy and lactation (20). A quarter of the 82 LIFDC have rates of anaemia among non-pregnant women of more than 40% (21), and with the food price crisis this will get worse. Iron deficiency anaemia accounted for 20% of maternal mortality even before the food price crisis (22). Anaemic mothers are rarely just iron deficient, but instead have multiple micronutrient deficiencies. For these reasons a multiple micronutrient supplement (MMS) that could potentially replace the iron-folic acid supplement has been developed for trial purposes (23). Although a joint statement has been issued on the use of MMS in populations affected by an emergency (24), there are no

recommendations yet on their use in non-emergency situations. The control of anaemia should also consider the control of infections such as malaria and intestinal parasites (25).

In order to ensure food and nutrition security for the infant and young child a first priority is the universal promotion of exclusive breastfeeding for the first six months of life, and continued breastfeeding and adequate complementary feeding through the second year (26). Three quarters of the 82 LIFDC have less than 50% exclusive breastfeeding among 0-6 month old infants, and the food price crisis will exacerbate the risks related to sub-optimal breastfeeding, for example if mothers start diluting substitutes. Suboptimal breastfeeding, especially non-exclusive breastfeeding in the first six months of life, already results in 1.4 million deaths each year and 10% of the disease burden in children younger than 5 years (22). In addition to facilitating community based efforts to promote breastfeeding, a nation state should also take steps to ensure that breastfeeding is respected by government procedures and throughout state facilities, as well as protected from the activities of third parties. The most important strategies for respecting, protecting, promoting and supporting breastfeeding are the Baby Friendly Hospital Initiative (BFHI) based on the WHO/UNICEF Ten Steps to Successful Breastfeeding (27) and the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions (28), (29).

In food secure areas or where wasting levels in children are less than 5%, behaviour change communication alone can improve complementary feeding and continued breastfeeding rates, as well as reduce stunting levels (17). The role of the state in such food secure areas is mainly one of facilitation and provision to disabled people and social cases. But only one third of the LIFDC have a wasting prevalence of less than 5%, which means that in the other two thirds of LIFDC the role of the state is, while continuing facilitate livelihoods, to also provide as necessary. In areas with food insecurity or where wasting is greater than 15% blanket provision of appropriate food supplements is needed. In addition, all children with severe acute malnutrition need to be treated with ready to use therapeutic foods (RUTF) that can be provided in the community in conjunction with facility based treatment, with much reduced case fatality. Even before the food price crisis there were some 20 million children with severe acute malnutrition globally, with one million dying annually (22). Clearly much more needs doing to deal with the problem of wasted children in non-emergency settings (30).

It is difficult to meet the recommended intakes of certain key nutrients (particularly iron, zinc and calcium) of children aged 6-24 months through complementary food mixtures without the inclusion of animal food sources. As these increase the cost and/or may not be culturally appropriate, the use of either fortified complementary foods or vitamin-mineral supplements is needed in most settings (31), and can help to mitigate the effects of the rapidly rising food prices. Even in developed country settings the prevention of anaemia in children has largely been achieved by fortifying complementary foods. Around half of the LIFDC already had rates of anaemia in preschool children above 40% before the crisis.

Strong community participation is essential to ensure full coverage of the preventive and curative "short route" interventions described above that can help mitigate the impact of rapid increases in food prices and protect nutrition security. These interventions are best delivered by local community based mobilizers that extend selective preventive health service delivery to all mothers in their neighbourhood during pregnancy, lactation and early childhood (32). This outreach is best facilitated by health service staff such that training and supply with supplements is part of regular supportive supervision, and the reference for health facility treatments is ensured. Community based growth monitoring promotion provides a useful platform, that has been successfully used in many countries to mobilize community resources in favour of improved maternal and child survival growth and development (33).

Appropriate responses: protecting and promoting food security

A household is food secure when all of its members have access at all times to food of adequate quantity and quality, consistent with leading an active and healthy life. Access to food is an underlying determinate of undernutrition, and as such one that requires both short term and long term interventions in order to achieve food and nutrition security (34). Such approaches will clearly differ according to the local context given that constraints and opportunities will differ according to ecosystem, livelihood and economic characteristics.

In urban areas social protection policies and programmes are needed to provide safety nets that can cushion and mitigate the effects of poverty, especially when faced with rapid increases in food prices for example. Conditional cash transfer programmes link the transfer of cash to poor households with a commitment of the family head to keep children in school and/or for the mother and child to receive/make health service visits, i.e. the short route interventions described above. Cash transfer schemes can be targeted to poor women who are heads of households, and or to areas where the prevalence of women with low Body Mass Index (BMI) is greater than 20% (moderate and severe population risk).

Home gardens and distribution of plots for urban and periurban agriculture can also improve diets and strengthen livelihoods of poor urban consumers. According to the cities, such gardens can increase availability of, and access

to micro-nutrient rich foods, such as fresh vegetables and fruits, roots and tubers and meat and dairy products from small livestock, Community gardens also allow sharing of knowledge and constitute a good entry point for food and nutrition education.

In rural areas, it is essential to promote more resilient food systems. Agricultural policies should provide specific attention to homestead food production and best use of local biodiversity for both healthy diets and economic development. They should ensure year round availability on the local market of the variety of safe and affordable foods required, including staple foods and micronutrient rich foods such as fruits and vegetables and meat and dairy products. They should also protect and strengthen the livelihoods of the poorest of the poor. Women should be given priority both as actors and recipients of programmes aimed at increasing access to food, as they have a leading role in achieving nutrition security. For net-food buyers, direct transfers for income support can increase access to adequate food and stimulate the local economy

Part of the reason for the present crisis has been the increasing gap between agriculture policies and food policies, and the insufficient attention given to rural-urban linkages, in particular in terms of food practices, preferences and exchanges. This should be systematically incorporated into food and agriculture policy and planning with a view to more resilient, sustainable and acceptable food systems. In a context when the increase in food prices is due in part to increasing transport costs, sourcing foods from local agro-biodiversity can reduce dependence on the limited range of staple foods that are transported over long distances

In the face of food price crisis and food shortages school meals are important both for keeping children in school, as well as protecting school children from the effects of food shortages. School meals are especially important for keeping the girl child in school, as it is she who is most likely to be removed from school in the event of a financial crisis and/or to help increase food collection and/or harvest (research shows that investment in girls education helps improve child nutrition over the next generation). Schools can also provide a route for reaching the most vulnerable members of the community with food assistance, such as those that are orphans or that have HIV/AIDS and/or tuberculosis. School gardens can be used to cultivate foods and small animals. The fresh garden produce can contribute to the quality of the regular school meals. Gardening techniques and healthy eating habits can be transferred from the school child to the home, benefiting the entire family.

It is essential to increase resilience of vulnerable households and reverse the spiral of decapitalisation that each additional shock generates. A sustainable livelihoods approach providing integrated support to poor families can alone ensure both good nutrition and sound environmental management and prevent social disintegration. With increasing food prices and demand for land for bio fuel production, it is essential to secure people's access to natural resources and prevent property grabbing, in particular for women. rights as a pre-condition for food security, taking into consideration these emerging issues. This is particularly important for households with chronically sick or disabled members who require both livelihoods and psychosocial support,

There is a need to achieve a balance between investments in export oriented agriculture to earn revenues, and local oriented agriculture to guarantee production not just of grains, but of a diversity of foods for local consumption. It is increasingly recognized that poverty reduction strategies in the least developed countries, especially those with more than 60% of the population on less than a dollar a day, should first concentrate on engaging the poor in the production of foods for sale in the local market before investing in more intensive export oriented agriculture (35).The former will not only create localized income, but also contribute to assuring the quality of the diet available for local consumption. Improving the productivity of small farmers has a ripple effect that spreads benefits throughout poor rural communities, and stimulate urban economic activity as well. When small farmers have more money to spend, they tend to spend it locally on labour-intensive goods and services that come from the rural non-farm sector, boosting the incomes of the rural population as a whole, including landless labourers who make up a large proportion of the hungry and poor in many countries (36).

Conclusions

Rapid increases in food prices will cause maternal and child undernutrition levels to rise relatively rapidly, with the first effects more likely to be seen in the pregnant mother, leading to irreversible damage to the fetus that will persist across the course of life. Furthermore deterioration in the quality of the diet is likely to cause such damages even before food shortages become pronounced. Efforts to mitigate the effects of the food price crisis must therefore ensure that the right to food, that is adequate in quality not just quantity, is respected, protected and fulfilled. While such efforts are needed urgently, they should be placed in a development rather than only an emergency or humanitarian context, since this is not a new problem just the worsening of the existing situation, which was already serious.

From a rights-based programming perspective, every effort should be made to empower individuals working together at the community level to try to resolve their own nutrition problems during the food price crisis. The

underlying causes of malnutrition related to food, health and care at the household level, are ideally suited to resolution through collective community action, such as the creation of community-based crèche facilities by mothers who have to work for example. For the success of such efforts, individuals and groups at the local level must also be empowered to demand and obtain adequate services and support from the government, from the local to the national level. Linking the "short route" interventions from Table 1 with the "long route" interventions for ensuring food health and care, as appropriate to local conditions is the challenge for local governments. Building food and nutrition policy and programme experience from the bottom up can help identify state obligations in the right to adequate food, since while it is first and foremost the responsibility of individual right-holders to find their own solutions to feeding themselves, the state has a duty to facilitate through strengthening their capacity (37). In addition, an enabling international environment with clearly defined obligations needs to be created, as proposed by the Rapporteur on the Right to Food (38).

Achieving food and nutrition security requires a multi-sectoral approach, often involving many ministries. Local coping strategies to increased food prices will most likely affect all of the underlying causes of malnutrition, namely food insecurity, poor utilisation of health services and inadequate maternal and child caring practices, with implications for Ministries of Health, Agriculture, Education and Social Security. Ensuring the successful implementation of integrated strategies of all of these ministries at local, national and regional level requires a close integration with efforts to decentralize social development programmes. Establishing food and nutrition surveillance systems that can inform decision making at all levels, not just by central policy makers, is a first priority for all nation states. Such information can provide the elements of predictability and accountability that are required in a human rights based approach to developing national government responses to crisis, such as those provoked by the increases in food prices.

Contact: scn@who.int

References

1. FAO 2008. Food Outlook. Rome: Food and Agriculture Organization. ([online](#))
2. Ivanic M and Martin W. 2008. Implications of higher global food prices for poverty in low income countries. Policy Research Working Paper 4594. Washington: The World Bank
3. Trostle R 2008. Global agricultural supply and demand: factors contributing to the recent increase in food commodity prices. WRS-0801. Washington: Economic Research Service/USDA.
4. FAO 2008. The State of Food Insecurity in the World 2008: High food prices and food security - threats and opportunities. Rome: Food and Agriculture Organization. (forthcoming) ([online](#))
5. High-Level Task Force on the Global Food Crisis. 2008. Comprehensive Framework for Action. ([online](#))
6. IFPRI Minot N. June 2008 Implications of the Food Crisis for Long - term Agricultural Development- House Hunger Caucus Briefing ([online](#))
7. ACC/SCN. 2000. Fourth Report on the World Nutrition Situation: Nutrition Throughout the Life Cycle. Geneva: ACC/SCN in collaboration with IFPRI. ([online](#))
8. Victora CG, Adair L, Fall C, Hallal PC, Martorell R, Richter L, Sachdev HS. 2008. Maternal and child undernutrition: consequences for adult health and human capital. Lancet 371(9609):340-57.
9. Block SA, Kiess L, Webb P, Kosen S, Moench-Pfanner R, Bloem MW, Timmer CP. 2004 Macro shocks and micro outcomes: child nutrition during Indonesia's crisis. Econ Hum Biol. 2(1):21-44.
10. Waterlow JC 1985. What do we mean by adaptation? In "Nutritional Adaptation in Man" Blaxter K and Waterlow JC (Eds). London: John Libbey.
11. UNDG. 2003. UN Statement of Common Understanding on Human Rights-Based Approach to Development Cooperation and programming. ([online](#))
12. Jonsson U. 1995. Ethics and Child Nutrition. Food and Nutrition Bulletin 16(4), available at URL: ([online](#))
13. Weiser SD, Leiter K, Bangsberg DR, Butler LM, Percy-de Korte F, et al. (2007) Food Insufficiency Is Associated with High-Risk Sexual Behavior among Women in Botswana and Swaziland. PLoS Med 4(10): e260.
14. Shrimpton R., Victora CG, de Onis M, et al. 2001. Worldwide Timing of Growth Faltering: Implications for Nutritional Interventions. Pediatrics. 107(5), e75.
15. World Bank 2006. Repositioning Nutrition as Central to Development: A strategy for long term development. Washington: The World Bank. ([online](#))
16. SCN 2008. Accelerating the reduction of maternal and child undernutrition. SCN News No 36. Geneva: UN Standing Committee on Nutrition. ([online](#))
17. Bhutta ZA, Ahmed T, Black RE, Cousens S, Dewey K, Giugliani E, Haider BA, Kirkwood B, Morris SS, Sachdev HPS and Shekar M, for the Maternal and Child Undernutrition Study Group 2008. What works? Interventions for maternal and child undernutrition and survival. Lancet 371(9610):417-440.
18. UNICEF 2006. Child Info, Statistical Tables. ([online](#))
19. FAO 2008. Low-Income Food-Deficit Countries. ([online](#))
20. UNICEF/UNU/WHO 2001. Iron Deficiency Anaemia: Assessment, Prevention and Control. A guide for programme managers. ([online](#))
21. WHO. Database on anaemia. ([online](#))
22. Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, Mathers C, Rivera J, for the Maternal and Child Undernutrition Study Group. 2008. Maternal and child undernutrition: global and regional exposures and health consequences. Lancet 371, 9608: 243-260
23. UNICEF/WHO/UNU 1999. Composition of a Multi-Micronutrient Supplement to Be Used in Pilot Programmes among Pregnant Women in Developing Countries. Report of an UNICEF/WHO/UNU workshop. ([online](#))

24. WHO/UNICEF/WFP 2007. Preventing and controlling micronutrient deficiencies in populations affected by an emergency. Geneva: World Health Organization. ([online](#))
25. WHO/UNICEF 2004. Focusing on Anaemia: Towards an integrated approach for effective anaemia control. Joint UNICEF/WHO statement. ([online](#))
26. WHO/UNICEF 2003. Global Strategy for Infant and Young Child Feeding. ([online](#))
27. UNICEF/WHO. 2006. *Baby Friendly Hospital Initiative, revised, updated and expanded for integrated care, Section 1, Background and Implementation*, Preliminary Version, January 2006. Geneva: World Health Organization. ([online](#))
28. WHO 1981. International Code of Marketing of Breast Milk Substitutes. Geneva: World Health Organization. ([online](#))
29. International Baby Food Action Network. 2008. WHA RESOLUTION 33.32 . ([online](#))
30. Gross R and Webb P. 2006. Wasted time for wasted children: severe child undernutrition must be resolved in non-emergency settings. *The Lancet* 367: 1209-11
31. PAHO/WHO 2003. Guiding principles for complementary feeding of the breastfed child. Washington DC: PAHO/WHO, Division of Health Promotion and Protection/Food and Nutrition Program. ([online](#))
32. Tontisirin K and Gillespie S. 1999. Linking community-based programs and service delivery for improving maternal and child nutrition. *Asian Development Review*. 17(1-2): 33-65
33. Ashworth A, Shrimpton R, Jamil K. 2008. Growth monitoring and promotion: review of evidence of impact. *Matern Child Nutr*. 4: Suppl 1:86-117.
34. Ruel M. 2008. Addressing the underlying determinants of undernutrition: examples of successful integration of nutrition in poverty-reduction and agricultural strategies. *SCN News* 36: 21-29. ([online](#))
35. UNCTAD 2002. The least developed countries report 2002. Escaping the poverty trap. Geneva: United Nations Conference on Trade and development. ([online](#))
36. FAO (2004) The State of Food Insecurity in the World 2004: monitoring progress towards the World Food Summit and Millennium Development Goals. Food and Agriculture Organization, Rome, Italy. ([online](#))
37. Eide WB. 2002. Nutrition and Human Rights. In *Nutrition: A Foundation for Development*. Geneva: ACC/SCN
38. De Schutter, Olivier (2008) Building resilience: a human rights framework for world food and nutrition security. Report of the Special Rapporteur on the right to food. UN Doc A/HRC/9/23.
39. Drawn from appropriate WHO technical documents, including: WHO 1995. Physical Status: The use and interpretation of anthropometry. WHO Technical Report Series No 854. Geneva: World Health Organization; WHO 2000. The management of nutrition in major emergencies. Geneva: World Health Organization
40. Haddad L, Alderman H, Appletan S, Song L, Yohannes Y, 2003. Reducing child malnutrition; how far does income growth take us? *World Bank Economic Review* 17(1):107-131
41. Stein Z, Susser M. 1975. The Dutch famine, 1944-1945, and the reproductive process. I. Effects of six indices at birth. *Pediatr Res* 9(2):70-6
42. Ravelli GP, Stein ZA, Susser MW. 1976. Obesity in young men after famine exposure in utero and early infancy. *N Engl J Med* 295(7): 349-53
43. Susser ES, Lin SP. 1992. Schizophrenia after prenatal exposure to the Dutch Hunger Winter of 1944-1945. *Arch Gen Psychiatry* 49(12):983-8
44. Neugebauer R, Hoek HW, Susser E. 1999. Prenatal exposure to wartime famine and development of antisocial personality disorder in early adulthood. *JAMA* 282(5):455-62
45. Roseboom TJ, van der Meulen JH, Ravelli AC, Osmond C, Barker DJ, Bleker OP. 2001. Effects of prenatal exposure to the Dutch famine on adult disease in later life: an overview. *Mol Cell Endocrinol* 185(1-2):93-8
46. Martin-Prevel Y, Delpeuch F, Traissac P, Massamba J-P, Adou-Oyila G, Coudert K, Treche S. 2000. Deterioration in the nutritional status of young children and their mothers in Brazzaville, Congo following the 1994 devaluation of the CFA franc.
47. Gitau R, Makasa M, Kasonka L, Sinkala M, Chintu C, Tomkins A, Filteau S. 2005 Maternal micronutrient status and decreased growth of Zambian infants born during and after the maize price increases resulting from the southern African drought of 2001-2002. *Public Health Nutr*. 8(7):837-43.
48. Rao S, Yajnik CS, Kanade A, Fall CH, Margetts BM, Jackson AA, Shier R, Joshi S, Rege S, Lubree H & Desai B. (2001) Intake of micronutrient-rich foods in rural Indian mothers is associated with the size of their babies at birth: Pune Maternal Nutrition Study. *Journal of Nutrition*: 131 :1217-24.
49. Mathews F, Yudkin P, Neil A. 1999 Influence of maternal nutrition on outcome of pregnancy: prospective cohort study *BMJ* 319:339-343.
50. Hong J, Park EA, Kim YJ, Lee HY, Park BH, Ha EH, Kong KA, Park H. 2007. Association of antioxidant vitamins and oxidative stress levels in pregnancy with infant growth during the first year of life. *Public Health Nutr*. 7:1-8.
51. Gupta P, Ray M, Dua T, Radhakrishnan G, Kumar R, Sachdev HP. 2007. Multimicronutrient supplementation for undernourished pregnant women and the birth size of their offspring: a double-blind, randomized, placebo-controlled trial. *Arch Pediatr Adolesc Med*. 161(1):58-64.
52. Cogswell ME, Parvanta I, Ickes L, Yip R, and Brittenham GM. 2003. Iron supplementation during pregnancy, anemia, and birth weight: a randomized controlled trial. *Am J Clin Nutr* 78:773-81.
53. Siega-Riz AM, Hartzema AG, Turnbull C, Thorp J, McDonald T, Cogswell ME. 2006. The effects of prophylactic iron given in prenatal supplements on iron status and birth outcomes: a randomized controlled trial. *Am J Obstet Gynecol*. 194(2):512-9.
54. Smith GCS, Stenhouse EJ, Crossley JA, Aitken DA, Cameron AD & Connort JM. (2002) Early-pregnancy origins of low birth weight. *Nature* 417: 916.
55. Ruowei, L., Haas, J.D., Habicht, J-P. 1998. Timing of the influence of maternal nutritional status during pregnancy on fetal growth. *Am J Hum Biol*. 10:529-539.
56. Bukowski R, Smith GC, Malone FD, Ball RH, Nyberg DA, Comstock CH, Hankins GD, Berkowitz RL, Gross SJ, Dugoff L, Craigo SD, Timor-Tritsch IE, Carr SR, Wolfe HM, D'Alton ME; FASTER Research Consortium. 2007. Fetal growth in early pregnancy and risk of delivering low birth weight infant: prospective cohort study. *BMJ*. 334 (7598):836.
57. Cole T. 2000. Secular trends in growth. *Proc. Nut Soc*. 59:317-324.
58. Binkin NJ, Yip R, Fleshwood L, & Trowbridge FL. 1988. Birth weight and childhood growth. *Pediatrics* 82(6):828-34

Table 1: Essential interventions to ensure food and nutrition security outcomes during the food prices crisis across the life course*

Stages in the Life Course	Target Groups	Indicators	Triggers for action ³⁹	Interventions	Other Considerations	
Pregnancy, birth and lactation	Women during pregnancy and lactation	Anaemia	> 40%	Universal Iron-folate supplementation and/or multiple micronutrient supplementation	-Deworming -Malaria (bed nets and presumptive radical treatment during pregnancy) -Smoking and air pollution	
		Low Birthweight	> 15%	Food supplementation		
Infant and toddler	Infants (0-6 months)		Universal	Promotion of exclusive breastfeeding	-Code of Marketing of Breast-milk Substitutes -Baby Friendly Hospital Initiative	
		Young children (6-24 months)	Universal	Behaviour change communication for adequate complementary feeding and continued breastfeeding	-Zinc in diarrhoea -Deworming -Malaria (bed nets)	
Childhood and adolescence	Preschool (2-5 years)	Wasting	> 15%	Food supplements targeted to wasted children Ready to Use Therapeutic Food (RUTF)		
		Anaemia	> 40%	Iron (or multiple micronutrient) supplements		
			> 5%	Fortified complementary foods (sprinkles)		
		Anaemia	> 40%	Iron (or multiple micronutrient) supplements		
			> 5%	Fortified foods (sprinkles)		
	Schoolchildren (5-16 years)		Universal	Nutrition education School meals		
		Anaemia	> 40%	Iron-folate supplementation		
	Adulthood	Women of reproductive age (15-45years)	Low BMI	> 20%	Cash transfers	-Teenage pregnancy -Too many pregnancies
			Anaemia	> 40%	Iron-folate supplementation	-Deworming -Malaria (bed nets)
		Others	Anaemia	Universal	Food diversification and food fortification	-Sicknesses (HIV/AIDS, Tuberculosis)
		Iodine deficiency	NA	Universal Salt Iodization		

* This table builds on previous efforts to define priorities for nutrition intervention and to define prevalence cut-offs which indicate when action is required and what those actions are, developed by the Institute of Medicine as well as the Commission on Nutrition Challenges of the 21st Century

Box 1: Technical note on maternal and child undernutrition and the food price crisis

The nutritional consequences of the food price increases are likely to be considerable, especially in poor urban populations of low income food deficit countries. Although economic improvements only produce slow reductions in child undernutrition rates (40), this relationship doesn't seem to be the same in reverse. Whereas women are usually the last to benefit from increasing income, when the financial situation deteriorates they are first to make sacrifices. This has special consequences because of the critical importance of maternal nutrition both for her own health and well being, as well as for the survival, growth and development of her children (7).

Food shortages are known to impact most acutely on women during pregnancy. The Dutch famine of 1944-1945 showed that even in a previously well nourished population that were receiving food rations, food restriction during pregnancy produced significant reductions in birth weight, length and head circumference. Third trimester exposure accounted for the whole of the famine effects on birth weight, which were apparent only below a threshold value of official food rations (41). Although the effects of the Dutch famine on birth weight were small (about 100g), many negative consequences of constricted foetal growth appeared, but only later in life. These included increased obesity (42), increased risk of schizophrenia (43), increased behavioural problems (44), and increased blood pressure and coronary heart disease (45).

Recent evidence from developing country settings confirms that rapid increases in food prices cause maternal and child undernutrition levels to rise relatively rapidly. During the Indonesian financial crisis in 1997/8 wasting increased in Javanese women, although without increases in child undernutrition, suggesting that mothers buffered children's food intake. An increased prevalence of anaemia in mothers and children was associated with a reduction in consumption of high quality foods. The combined effects were particularly severe for cohorts conceived and weaned during the crisis (9). The currency devaluation in the Congo in 1994 increased the price of imported staple foods resulting in increased wasting among mothers, more low birth weight babies and greater levels of stunting and wasting among children (46). In Zambia during the drought of 2001-2002, mothers who experienced high maize prices while pregnant had reduced Vitamin E and Vitamin A status and stunting increased among infants (47).

Our understanding of the nutritional consequences of food price crisis is also informed by new evidence that quality not just the quantity of the diet during pregnancy is important for successful birth outcomes. The consumption of more expensive micronutrient rich food (milk, green leafy vegetables and fruits) during pregnancy and erythrocyte folate at 28 weeks of gestation were found to be independently and positively associated with the size of the infant at birth in rural India (48). Even in developed country settings increased intake and/or status during pregnancy of antioxidant nutrients (Vitamin C and E especially) which largely come from more expensive fruit and vegetables, positively influences foetal and infant growth (49),(50). Multiple micronutrient supplementation, in addition to iron folate supplementation, during the latter part of pregnancy in thin Indian women (BMI<18.5) significantly increased birth weight by 98 g, birth length by 0.80 cm, and reduced early neonatal morbidity by 50% as compared to a placebo group (51). This small increase in mean birth weight meant that the incidence of low birth weight was reduced from 43.1% to 16.2%. Randomized controlled trials of iron-folate supplementation versus a true placebo in non-anaemic women during the latter part of pregnancy in the USA increased mean birthweight by 200g in Cleveland Ohio (52) and 108 g in Raleigh North Carolina (53). All of these studies clearly demonstrate that small variations within the normal range in the micronutrient content of maternal diets and/or maternal micronutrient status during pregnancy are associated with small but significant differences in foetal and infant growth.

Rapidly increasing food prices are also likely to cause nutritional insults very early in pregnancy that will influence later foetal and infant growth and increase stunting among those children that survive. The risk of delivering a low-birth-weight baby seems to be set in the first 10 weeks after conception and related to the maternal circulating concentrations of a placental protein, pregnancy-associated plasma protein-A (PAPP-A) (54). Prospective studies during pregnancy in Guatemalan mothers has shown that whereas birthweight is more influenced by weight gain in the second half of pregnancy, birth length is most influenced by weight gain in the first half of pregnancy (55). A recent prospective cohort study in the US confirms that variation in birth weight is determined, at least in part, by foetal growth in the first 12 weeks after conception, probably through effects on timing of delivery and foetal growth velocity (56). Adult height is largely determined by height at two years of age (57) and length growth trajectory during infancy is largely set in uterus (14), (58).

Indeed it may well be that the relatively small impact of food and micronutrient supplements provided to mothers during pregnancy (about 100g) is in part because they are normally provided only in the latter half of pregnancy, which maybe too late for maximal effect. A diet that is adequate in quantity and quality that is available and accessible for the whole population will help to ensure peri-conceptual nutrient status of the mother to be, thus contributing to improved foetal and infant survival growth and development. Sustainable efforts should be made in this direction which needs a strong partnership between agriculture and health sector.

Programme News

Joint letter from Directors-General of FAO and WHO and the Executive Directors of UNICEF and WFP on REACH: ending child hunger and undernutrition to respective country offices

REACH

The REACH team is pleased to announce the dissemination of a joint letter signed by the Directors-General of FAO and WHO and the Executive Directors of UNICEF and WFP committing to a renewed effort against child hunger and undernutrition: REACH. The letter is available in [English](#), [Arabic](#), [French](#), and [Spanish](#) at the REACH and SCN websites.

The REACH: ending child hunger and undernutrition partnership was jointly established by FAO, WHO, UNICEF, WFP and partners to address challenges and support countries to accelerate progress toward MDG 1, Target 3 (halve the proportion of underweight among under-fives).

REACH builds on partners' existing work, but its coordinated, solution-oriented approach represents a change from 'business as usual'. Most assistance programmes are oriented toward a single product, with each agency focusing on its own interventions. REACH turns this around to start with the overall objective of meeting children's needs, and then focuses on how each partner can contribute to a common, country-led solution.

The four expected outcomes of the initiative are:

1. increased awareness of the underlying problem of hunger and undernutrition and of the potential solutions;
2. strengthened, resourced and effectively monitored national policies and programmes;
3. increased capacity at the international, national, community and household levels for action; and
4. increased efficiency and accountability of the global efforts to reduce child hunger and undernutrition.

The nutrition divisions of participating agencies will provide technical leadership to the REACH roll-out between 2009-2011, and will sustain the effort thereafter. REACH advocates to strengthen in-house nutrition capacity of all participating members. Partners are already testing some of the innovative processes for country support. REACH represents a decisive, integrated and renewed effort to bring known and proven solutions within the reach of all countries. To date, REACH has been shown to be a highly dynamic process with a constant flow of new lessons learned. REACH draws upon the current thinking and best practice of a wide number of partners in addressing the urgent global problem that is maternal and child undernutrition. Today, there are striking new opportunities to extend and accelerate efforts already being made on the ground to address undernutrition, and collectively to deploy known and effective solutions on a wider scale in the most-affected countries and communities. The REACH inter-agency team invites you to join and engage in our renewed effort to end child hunger and undernutrition.

Contact the REACH team at team@reach-partnership.org Additional information is available at: www.reach-partnership.org

Fortify West Africa: Millers commit to fight vitamin and mineral deficiencies

West Africa

All 13 wheat flour millers of French speaking West Africa and key development partners met for three days in Abidjan to launch a new commitment by the private sector to combat vitamin and mineral deficiencies. Deficiencies in essential vitamins and minerals, such as vitamin A, iron, folic acid and zinc, are major causes of premature death, disability and reduced work capacity throughout the world. Eliminating vitamin and mineral deficiencies (VMDs) is critical to improving the survival, growth and development of children and the health and survival of women. One of the most cost - effective strategies for sustainable control of VMDs is food fortification – engaging private sector food companies to add vitamins and minerals to commonly consumed staples and condiments.

Wheat flour is widely consumed throughout West Africa, and is the ideal food vehicle for delivering iron, folic acid and zinc to the general population. Helen Keller International (HKI) in partnership with the West African Health Organization, the UEMOA Commission (the 8 - nation monetary union of West Africa), and with financial support from the Michael & Susan Dell Foundation, the Global Alliance for Improved Nutrition (GAIN), the United States Agency for International Development (USAID) and the Micronutrient Initiative (MI) has been catalyzing partnerships between the private sector and the public sector to engage in food fortification in West Africa.

The Abidjan Millers Meeting was a major step forward as the 13 flour millers of the UEMOA zone have created a professional association – AIM - UEMO (Association des Industries Meunières). All of the industries pledged their support to flour fortification and were trained in the technical aspects of the process.

This meeting was part of the "Fortify West Africa" initiative which aims to reach at least 70% of the population of the UEMOA zone with fortified food products. UEMOA has a total population of over 85 million of whom 15.6 million are children under 5 years old. The representative of the West African Health Organization, the official health agency of the 15 - nation Economic Community of West African States (ECOWAS, which includes all 8 UEMOA countries), pledged the institutional support of the ECOWAS Commission to enlarge the food fortification initiative to all 15 nations of West Africa.

Contact: Mawuli Sablah, Regional Fortification Coordinator, Helen Keller International at msablah@hki.org

[back to contents](#) SCN NEWS # 37

WHO**Consultation on strengthening actions to improve feeding of children 6-23 months of age through nutrition and child health programmes**

The objectives of this consultation held in Geneva, 6-9 October 2008, were to 1) Discuss a framework to translate the Guiding Principles for feeding breastfed and non-breastfed children 6-23 months of age in context-specific interventions and intervention combinations; 2) Review effective interventions and delivery approaches to optimize feeding of children 6-23 months of age, considering various scenarios of food security; 3) Discuss how best to integrate effective interventions and delivery approaches into existing programmes to accelerate service delivery; 4) Identify existing tools to facilitate the implementation of the framework and agree on priorities for new tools; 5) Identify operational research priorities and means to address them; and 6) Recommend how to promote accelerated and strengthened action for IYCF, in particular for children 6-23 months in low-income countries

Undernutrition is an underlying cause of 35% of child deaths and a major disabler for children to reach their full developmental potential. It is estimated that among children less than 5 years of age in developing countries, 32% are stunted and 10% wasted. Lack of appropriate breastfeeding and complementary feeding practices are main causes of both undernutrition and overweight/obesity. The critical window of opportunity for improving child nutrition is from pregnancy through the first 24 months of age. The question is how best to integrate effective interventions and delivery approaches into existing programmes to accelerate service delivery.

Effective interventions include sound educational approaches, which have even greater impact when food or food supplements are provided as well. Especially nutrient-rich, animal-source food has beneficial effects on growth and developmental outcomes. Educational approaches are essential to improve feeding practices and should be a core element of IYCF interventions. Besides increasing dietary diversity, effective interventions to improve quality of diet include point of use enrichment and use of appropriately fortified blended foods.

Effective delivery channels and programmes based on extensive experience in successful breastfeeding communication interventions are characterized by: formative research, promotion of a limited set of consistent and doable messages/actions through multiple channels, emphasis on the use of nutrient-rich, animal-source foods, creation of demand for improved feeding practices, integration of interventions into existing platforms (IMCI, growth monitoring, etc.), and the use of delivery platforms provided by sectors other than health and support by appropriate policies and commitment by governments. A framework for planning and evaluation should follow a systematic process (assessment, programme planning, monitoring and evaluation) highlighting the fact that formative research is essential. In addition, planning should include design of a programme implementation pathway to help in monitoring and evaluation, impact assessment should not only consider growth but also development and other functional outcomes where the availability of more complete set of indicators will allow better monitoring.

The WHO growth standards will enable more accurate follow-up of growth and development of children. Various tools are available to support planning and implementation process, although some gaps exist. WHO and its partners are planning the next steps including disseminating the conclusions widely, providing guidance on integrated planning for IYCF interventions and updating the planning guide for the Global Strategy for Infant and Young Child Feeding together with development of an instrument to prioritize options. The next steps will also include preparation of a toolkit to help in the development, implementation, M&E of strategy and plan and ensuring collaboration with the technical WG formed in the moderate malnutrition meeting to prepare standards, development of information material of costing of various interventions and appropriate approaches for working with the private sector.

WHO Nutrition for Health and Development, www.who.int/nutrition/topics/infantfeeding, Email: Randa Saadeh saadehr@who.int

WHO**Consultation on the Dietary Management of Moderate Malnutrition**

Organized by WHO (Departments of CAH and NHD) in collaboration with UNICEF, UNHCR, WFP and supported by the IASC Nutrition Cluster, 30 September to 3 October 2008 at WHO, Geneva

Moderate malnutrition (MM) is defined as a weight-for-age between -3 and -2 z-scores below the median of the WHO child growth standards. It can be due to a low weight-for-height (wasting) or a low height-for-age (stunting) or to a combination of both. Similarly, moderate wasting and stunting are defined as a weight-for-height and height-for-age, respectively, between -3 and -2 z-scores.

MM affects many children in poor countries. Children with moderate malnutrition have an increased risk of mortality and MM is associated with a high number of nutrition - related deaths. If some of these moderately malnourished children do not receive adequate support, they may progress towards severe acute malnutrition (severe wasting and/or oedema) or severe stunting (height-for-age less than -3 z-scores), which are both life-threatening conditions. Therefore, the management of MM should be a public health priority.

In contrast to severe malnutrition, programmes for the management of MM in children have remained virtually unchanged for the past 30 years, and it seems timely to review efforts to improve their efficacy and effectiveness.

The Departments of Child and Adolescent Health (CAH) and Nutrition for Health and Development (NHD) in WHO organized a consultation on this topic with the following objectives:

- To provide an estimate of nutritional requirements of children with MM (as defined above). These nutritional requirements will be examined separately for children who are moderately wasted and those who are stunted.
- To examine if current approaches for MM management, based either on dietary counselling or on the provision of food supplements, provide all nutrients needed for the recovery of children with MM.
- To formulate recommendations to improve the dietary management of MM, either through dietary counselling or food supplementation.
- To recommend which type of research is needed to address current knowledge gaps.

Four background papers were commissioned by WHO in advance of the meeting and circulated among participants:

1. Nutrient content of diets suitable for feeding moderately malnourished children;
2. Foods and ingredients suitable for use in moderately malnourished children;
3. Nutrition counselling for moderately malnourished children;
4. Food supplements used to treat moderate malnutrition in children.

In addition to these background papers, a call for abstracts was circulated to a large number of agencies implementing programmes or carrying out research on the management of MM. During the meeting, authors were asked to present key elements of their initiatives to improve management of MM. The presentations were followed by discussions and working group sessions to develop consensus statements and identify areas for research on the improved dietary management of MM. About 70 participants took part in the meeting. The meeting report is currently being finalized. It is expected that it will be released early in 2009.

There was agreement during the meeting that nutritional requirements in relation to energy for moderately wasted children lies between those of a well nourished child and those of severely wasted children during their recovery phase. These children also need at least an additional 25 kcal/kg/day. WHO will set up within the next 6 months a technical group that will define specifications of diets or food supplements suitable for the recovery of moderately wasted children.

Some uncertainties remain on diets needed for the recovery of stunted children. It is possible that currently used diets lack some specific nutrients needed for bone growth, including available phosphorus, zinc, sulfur and magnesium. The effect of antinutrients on the recovery of stunted children is unknown. Trials with linear growth as main outcome are needed to better define diets needed by these children.

The meeting also concluded that animal source foods are superior to unprocessed plant foods to promote growth, and that more attention should be given to the essential fatty acid content of the diets given to malnourished children. Reformulation of foods currently used in food aid programmes is expected as an immediate follow-up of this meeting.

See following links for further information on the meeting:

www.who.int/nutrition/topics/consultation_dietarymanagement_malnutrition/en/index.html

www.who.int/child_adolescent_health/news/newsletters/newsletter_nov2008.pdf

Parallel session on “Food Security, Nutrition and Health” at the Global Ministerial Forum on Research for Health, 17-19 November 2008

IFPRI

Under the auspices of the Agriculture and Health Research Platform (AHRP), IFPRI convened a parallel session on “Food Security, Nutrition and Health” at the Global Ministerial Forum on Research for Health, held in Bamako, Mali, 17-19 November 2008. The focus on “research for health” (as opposed to health research) is a positive step toward recognizing the critical importance of other sectoral actions for health outcomes.

Agriculture is the primary source of livelihood for the majority of the world's poor who are in turn the most vulnerable to ill-health. Agricultural policy and practice impact human health that in the reverse, affects agricultural productivity and output. Good health and productive agriculture are both essential for poverty reduction, and key instruments to achieving the Millennium Development Goals.

Yet the two sectors of agriculture and health rarely come together to discuss common interests and collaborative approaches to research and action. This session was motivated by a growing understanding on the part of both sectors that new approaches are needed -- ranging from acquiring new knowledge about the interactions between agriculture, nutrition, water and health, to developing joint efforts to disseminate and apply this knowledge more widely and effectively. When considering food and health security – the role of nutrition is pivotal.

This panel session comprised five presentations on key issues at this interface by leaders in this field from IFPRI, WHO, World Bank, FAO and the AIDS Support Organization (TASO) of Uganda. Current and emerging threats -- such as the food price crisis, transboundary disease, pervasive child malnutrition, the AIDS epidemic, and the critical importance of safe water for agriculture and health – were addressed. The importance of such intersectoral challenges was recognized in the resulting Bamako Call for Action (www.bamako2008.org).

The Agriculture and Health Research Platform is presently focusing on five priority areas of research: a) nutrition, diet and health; b) zoonotic disease (including avian influenza) and food security; c) food-borne disease and food safety; d) water-related disease; and e) HIV and agriculture.

Further details can be found on the AHRP site: www.ifpri.org/ahrp/ahrp.asp

[back to contents](#) SCN NEWS # 37

SCN**SCN "One-Stop-Shop" Food and Nutrition Resource Portal**

The SCN Secretariat is developing a Food and Nutrition Resource Portal that shortly will be available on the SCN website. The Resource Portal including a special section on Nutrition in Emergencies Repository is being funded by USAID and the Global Nutrition Cluster hosted by UNICEF. The "One-Stop-Shop" Food and Nutrition Resource Portal is being developed simultaneously with an overall upgrade of the existing SCN website.

- *Aim:* Through this web-based feature the nutrition community will be able to access - in one place - the nutrition resources published by the SCN as well as those published by the SCN members from the three constituencies. The SCN aims to provide the platform through which the agencies and organizations participating in the SCN can market their publications and resources to the SCN network worldwide.
- *Features:* The Portal will have a user-friendly design, allowing both user-defined key word search as well as categorized listing of resources. Building on the existing Food&Nutrition Library CD Rom (which can be ordered from scn@who.int), the Portal will be organized so that each resource can be attributed with a set of characteristics that will allow multi-level listing according to document type(s), theme(s), life-cycle focus, geographical location(s), etc. Depending on authorization, the resources will be physically located on the SCN website server and/or hyperlink to the webpage where it was originally web published.
- *Rationale:* The Lancet Nutrition Series (LNS) Paper 5 cites the lack of clear programme guidance as one of the shortcomings of the international nutrition system. The LNS provides little or no links to the programme guidance that is available, but then the LNS is much more about the "what" and the "why" of improving maternal and child undernutrition, and less about the "how". Given its tripartite structure, the SCN website is a unique portal to access policy and programme guidance developed by the agencies and organizations and provides a platform to promote cooperation among UN agencies and partner organizations.
- *Development:* A prototype Resource Portal is being established on the upgraded SCN website (soon to be launched!). The Secretariat has undertaken one consultation with the SCN Steering Committee members and SCN Working Group Chairs, representing no less than ten UN Agencies, six Bilateral Partners, four NGOs, and nine universities and research institutions, to get feedback on resource types and themes. A second consultation is just being launched with this group of SCN core members to test the prototype that has been developed.
- *How to use the SCN "One-Stop-Shop" Food and Nutrition Resource Portal?* Users will be able to identify and access resources added to the Resource Portal through searching for one or more self-defined key words, as well as through browsing in pre-defined categories of themes, resource types, geographical locations or life cycle focus. Linked to each resource, there will a short description and link to the authoring institution.
- *How to add your resources to the SCN "One-Stop-Shop" Food and Nutrition Resource Portal?* Visitors to the website will be able to submit their own resources, which will be marketed through the SCN website. The Secretariat will soon send out a call for material and permission to post this through the [SCN EMail Update](#)

Contact: scn@who.int Website: www.unscn.org

YPHN**Young Public Health Nutrition Network**

Many of this century's health challenges will be related to food and agriculture policies: food safety, security and cost; famines and obesity; climate change etc. The field of public health nutrition will therefore emerge as a high profile and important profession globally.

Every year, hundreds of young people trained in public health nutrition graduate around the world. They wish to make a meaningful contribution to the international arena of public health and to successfully integrate into the global health workforce. In an effort to bring together these young professionals, a group of young public health nutritionists founded the Young Public Health Nutrition (YPHN) Network.

The vision of the YPHN Network is to advance and promote international public health nutrition by uniting young public health nutritionists and facilitating collaboration and cooperation among them. In order to pursue this, the YPHN Network aims: to devise approaches for young public health nutritionists to influence relevant policies; to provide opportunities to enable the exchange of individuals, and ideas across institutions and networks, within and between countries; and to collaborate with other public health nutrition initiatives, including the Steering Committee of the New Nutrition Science project and the World Public Health Nutrition Association.

The YPHN Network is open to all who are interested in improving the next generation of public health nutrition: 'young', proficient and more senior experts in public health nutritionists, with experience and knowledge to pass on to the others, are welcome to join.

For further information or to become a member of this network please contact: yph.nutrition@gmail.com

Visit the YPHN blog site at <http://yphnutrition.blogspot.com>

Speaker's Corner

The spectacular fall of child undernutrition in Brazil

Carlos A. Monteiro (School of Public Health, University of Sao Paulo)

Scientists and scholars usually report their findings in neutral language, especially in the titles of their texts. Sometimes, though, the facts demand adjectives and superlatives, such as in the case of the remarkable change in nutritional status of Brazilian children revealed by the most recent Brazilian Demographic Health Survey (Br_DHS 2006/07) (1). Below, we summarize the most striking findings arising from comparisons between this survey and the Br_DHS of 1996 (2). In these comparisons, we explore traditional anthropometric indicators for children under 5 years of age (3), calculated using the new WHO standard (4).

First, both child underweight and child wasting were virtually eliminated across the entire country, including the less economically developed Brazilian Northeast, and lower income groups among which these forms of malnutrition were still prevalent in the mid-1990s. Second, child overweight did not increase, remaining stable at around 6% across all regions and income groups. Third, prevalence of child stunting – a highly sensitive indicator of chronic poverty and of the cumulative effects of inadequate food intake and poor health (3) – fell from 13.5% to 6.8% between 1996 and 2006/07. Fourth, child stunting declined spectacularly in the Northeast (from 22.2% to 5.9%), eliminating the traditional, often regarded as intractable, difference that existed between this region and the country's Centre-Southern regions. Fifth, the especially sharp decline in child stunting among the 20% lowest income group and the modest reduction seen in the 20% highest income group has slashed by three-quarters the absolute disparity between children from economically poorer and richer families (from 24.6 to 6.2 percentage points).

Statistical modelling on the 1996 and 2006/07 data sets, detailed elsewhere (5), indicates that favourable trends in four key determinants of child nutritional status can explain two-thirds of the decline in child stunting in the period. Improvements in maternal education, particularly the 100% increase in the proportion of mothers with at least elementary schooling, were able to explain 25.7% of the decline in child stunting. Another 21.7% can be attributed to the substantial increase in the purchasing power of the country's poorer families. An additional 11.6% of the decline can be attributed to the expansion of maternal and child primary health care, and another 4.3% to a relatively modest increase in the outreach of water supply and sewage services. In summary, the factors causing the outstanding decline in child undernutrition in Brazil seem to relate to improvements in coverage of essential public services (elementary education, primary health care, and sanitation) as well as in increases in family income, both of which were particularly beneficial to the poor.

It should be pointed out that the improvement in maternal schooling between 1996 and 2007 was a consequence of positive changes in the access and attendance of girls to elementary schools that took place 10 to 20 years ago, whereas increased coverage of maternal and child healthcare and sanitation reflects increasing population access to these services throughout the entire period from 1996 to 2007. On the other hand, the increase in purchasing power among the Brazilian poor is a more recent phenomenon, which began in 2003, following the election of a national government with strong support from workers' unions and grass-root movements. The increasing income among the poor has been attributed to the return of economic growth, to falling unemployment rates, and more importantly, to vigorous income redistribution policies – especially increases in the national minimum wage and expansion of federal income transfer programmes (6). In summary, credit for the outstanding decline in child stunting between 1996 and 2006/07 should be given to social investments and public policies implemented by the various elected governments that have run the country since the end of the extended military dictatorship (1964-1985).

In any case, and most importantly, the definitive control of child undernutrition in Brazil that has been so dramatically reduced during the last decade, now depends on the maintenance of economic growth and income redistribution policies, as well as on the yet to be attained access of all Brazilian families to elementary and secondary education and adequate healthcare and sanitation services.

The experience of Brazil in the last decade emphasizes the critical impact that policies on income redistribution and universal access to education, health, and sanitation services may have on child undernutrition. Such policies should be a top priority of governments who claim to be truly committed to reducing undernutrition and improving the quality of life of future generations.

References

1. Sociedade Civil Bem-Estar Familiar no Brasil (1997) *Demographic Health Survey 1996*. Technical Report. BEMFAM:Rio de Janeiro. ([online](#))
2. Centro Brasileiro de Análise e Planejamento (2008) *Demographic Health Survey 2006*. Technical Report. CEBRAP:São Paulo. ([online](#))
3. WHO (1995) *Physical status: the use and interpretation of anthropometry*. [Report of a WHO Expert Committee. Technical Report Series n° 854]. WHO:Geneva. ([online](#))
4. WHO (2006) *WHO child growth standards: length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: methods and development*. WHO:Geneva. ([online](#))
5. Monteiro CA, D'Aquino Benicio MH, Konno S, Silva ACF, Lima ALL and Conde WL (2009) Causes of the decline in child under-nutrition in Brazil (1996-2007). *Revista de Saúde Pública* 43 (1) ([online](#)).
6. Neri MC (2007) *Poverty, inequalities, and income policies: Lula's Real*. FGV/IBRE/CPS:Rio de Janeiro. ([online](#))

Contact: carlosam@usp.br

Response to Commentary to the Lancet Nutrition Series (Briend et al 2008)

Robert E Black (Johns Hopkins Bloomberg School of Public Health), Zulfiqar A Bhutta (Aga Khan University), Simon Cousens (London School of Hygiene and Tropical Medicine), Tahmeed Ahmed (International Centre for Diarrhoeal Disease Research, Bangladesh)

We wish to correct two erroneous statements made in the Comments to the Lancet Nutrition Series published in SCN News #36 by Briend et al (2008). First, the statement that the Series “only recommends the scale-up and improvement of hospital based SAM [severe acute malnutrition] management” is not true. In fact, the list of interventions with sufficient evidence to implement in all countries simply says “treatment of severe acute malnutrition”. Because the evidence is more robust on the size of the effect for hospital based management than for community-based management, we used results of trials of WHO-recommended hospital case management to estimate the potential effect of treatment of SAM on mortality. However, we then go on to say that community management of severe acute malnutrition with ready-to-use therapeutic foods has been recommended by WHO, UNICEF and the World Food Programme and provide data on observational studies with this approach, concluding that the case-fatality rates compare favourably with those achieved with facility management. We do use the data on reduction of mortality from facility management for modelling the effects but in the discussion of the modelling methods state the limitation that children would need to reach facilities and that “community- and home-based management of severe acute malnutrition with ready-to-use therapeutic foods is now possible and has been recommended”. In essence, we reach the same conclusions as Briend et al and reference the same informal consultation (Prudhon et al 2006) as they do as the basis for those conclusions. Second, while we did call for better documentation of the effects of community-based preventive and treatment strategies for severe acute malnutrition, we did not say that this should be in isolation i.e. without the availability of hospital care. We believe that there is a role for both community and hospital management of severe acute malnutrition and that the appropriate balance of the two depends on local conditions of facility utilization, feasibility and cost-effectiveness.

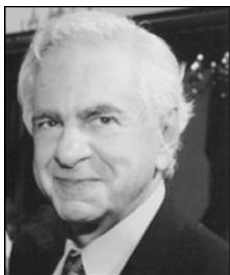
These clarifications have already been provided in correspondence in the Lancet following the series (Bhutta et al 2008) and we are at a loss to understand why the debate is being perpetuated. We fervently believe that the serious global problems of undernutrition are best addressed by seeking consensus based on the best evidence and programme experience, and not by polarizing debates based on misinterpretations of publications produced for the purpose of accelerating intervention programmes to reduce maternal and child undernutrition.

References

- Bhutta ZA, Black RE, Cousens S and Ahmed T (2008) Authors reply. *Lancet* 371:1749
- Briend A, Weise-Prinzo Z, Sibanda-Mulder F, Khara , Bloem M, van den Briel T and Prudhon C (2008) Management of severe acute malnutrition. A comment to the Lancet Series on maternal and child nutrition. *SCN News* 36:64-5. ([online](#))
- Prudhon C, Briend A, Weise-Prinzo Z, Daelmans B, Mason J (guest eds) (2006) WHO, UNICEF, and SCN Informal Consultation on Community-Based Management of Severe Malnutrition in Children. *SCN Nutrition Policy Paper No. 21. Food and Nutr Bull* 27 (suppl): S3-108.

Contact: rblack@jhsph.edu

Obituary: Tom Marchione



Thomas J. Marchione, 67, Reston, VA, died on September 27, 2008. He suffered an aortic dissection on September 16. Tom was a passionate advocate for the poor, hungry and malnourished, bringing a rare set of skills in anthropology, nutrition and statistical analysis to bear in finding solutions. Tom was a true humanitarian, committed to making this a better world and to his faith.

He finished his brilliant dissertation in the 1976-77 academic year and published several important papers from it in the following 2-3 years. The research for it was done in Jamaica where he found that families growing their own food were less likely to have malnourished children than those growing bananas for export. Local food increased in price following local inflation but the price of bananas did not. He then became among the first to highlight the problems of delocalization of food supplies as a major livelihood and nutrition issue. Since then, poor countries have been pressured into increased import dependency for food, and his theories accurately predicted the impact the current meteoric price rise in food would have. He recently wrote a paper drawing attention again to this issue for the American Anthropology Association Newsletter which has been reprinted in Field Exchange No. 34.*

Tom worked as a Peace Corps Volunteer in Liberia; at the Caribbean Food and Nutrition Centre in Jamaica; at Case Western Reserve University, at the Ecumenical Great Lakes Project on the Economic Crisis in Ohio, and finally at USAID in Washington DC until his recent retirement. He was then an adjunct faculty member at George Mason University.

At USAID Tom worked on food aid, somewhat to his own chagrin. However, within the limitations of his job description, his achievements were impressive. He helped ensure that the foods were rationally fortified and that adequate quality control was done. He worked a great deal with monetization, showing that food aid often had a better impact on nutritional status when "monetized," with the money going to community nutrition programs, than when given directly to the community.

He brought a quiet passion to everything he worked on, never wanting the limelight for himself, but simply to make things better for those who most needed it. An example is breastfeeding, one of his early areas of work. He was the technical leader of a Scandinavian-funded cross national breastfeeding study in the late 70s and early 80s that provided the first strong evidence regarding factors influencing breastfeeding, informing much of the early international policy development in that area. As in other fields like food security, he brought this concern for breastfeeding to bear at every level from the work place (his efforts succeeded in getting USAID to establish a workplace breastfeeding policy) to the international community--his efforts ensured that in food aid, milk powder was used only in ways that did not threaten to undermine breastfeeding. He was also instrumental in securing funding for the Emergency Nutrition Network, which, among other things, has done a superb job in developing guidelines and courses on infant feeding in emergencies.

When Tom retired from USAID he left a work in progress, the development of various high nutrient density emergency foods. Production of three of these products will be starting soon.

Tom was an avid supporter of the UN Standing Committee for Nutrition (SCN); his enthusiasm for the work of the SCN probably influenced much of the support provided to it from USAID.

He leaves his wife Janna, daughter Adriana, son Matthew, sisters Jane Thomas and Regina Marchione, as well as many other relatives and friends both here and abroad.

He loved well and was greatly loved in return.

For those wishing to make contributions in his name, his family suggests Doctors without Borders or The Institute for Food and Development Policy/Food First.

Ted Greiner

Chair of the SCN NGO/Civil Society Group

* Available [online](http://www.enonline.net/fex) from Emergency Nutrition Network website www.enonline.net/fex

Obituary: Lucie Malaba



A dear friend and colleague of many in the international nutrition community, Associate Professor Lucie Malaba of the Department of Food, Nutrition and Family Science at the University of Zimbabwe died on 30 November 2008. Three months earlier she wrote in an e-mail to one of us: *"I finally have internet and electricity at the same time and can now use gmail!... We are all fine like typical Zimbabweans smiling at our woes... After surviving the last 10 years in Zim, I reckon I can survive anywhere in the world. I am sure we shall get an opportunity to narrate the experiences!"*

We did not get that opportunity, Lucie did not survive. She died because of the atrocious mal-governance by President Robert Mugabe which led to serious deterioration of the economic and social order in a once promising African state. She died because of a health system no longer able to cure an infection in the cumbersome, but otherwise successful renal dialysis routine she had been following over several years, using nightly hospital hours greatly facilitated by husband Joe, so as to appear in time in the morning at the University for her work to which she was so dedicated.

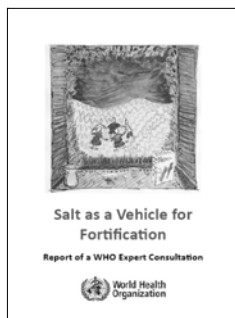
Lucie Carolyn Malaba was born in Harare in 1955. She studied nutrition as part her MSc in Food Science obtained in 1984 at the University of Zimbabwe, at the time organised under Department of Biochemistry. Within a broad collaborative programme established between the University of Oslo and UoZ shortly after independence, staff development in nutrition was included as one priority. In 1986 the two of us visited Zimbabwe to interview candidates for a doctoral programme in nutrition in Oslo. Lucie was invited and in 1987 included in the Vitamin A group of professors Kaare Norum, Trond Berg, Rune Blomhoff and others at the then Institute for Nutrition Research, UiO. In 1992 she defended her thesis "The Mechanism of uptake of Vitamin A and Retinol Binding Protein by the Liver", and returned to Zimbabwe to take up work at the Department of Food, Nutrition and Family Science now established at UoZ. She was in charge of the Department from 2006 until her untimely death.

Lucie was active in both basic and applied nutrition research across several topics, with a wide publication record, and also engaged in a range of educational and policy-oriented activities, nationally and internationally. Gradually she became interested in the links between national *governance* and the control and prevention of malnutrition. She learned the hard way in her beloved home country about how the nature of a state's governance will impact on access to food and nutritional health conditions of a whole population. She developed ideas about requirements for "*good governance*" for nutritional health and wellbeing. She had a dream to establish a "Global Alliance for Nutrition and Governance" – GANG – and a broad network to ensure training in the principles of good governance for nutrition workers worldwide. She raised the idea with us whether one should try to arrange a Satellite meeting on the topic at the IUNS Congress in Bangkok in 2009. That will not happen, but a symposium will be dedicated to her memory, entitled "The Human Right to Adequate Food as a Basis for Good Governance for Nutritional Wellbeing."

Lucie's death was a shock to all who knew her personal warmth, dedication and courage, together with her ever-optimistic smile and sense of humour in spite of her struggles both health-wise and as related to her country's dire circumstances. The loss is lamented even more as the new Zimbabwean coalition government is now crying for help to rebuild what Mr. Mugabe destroyed during a long period of hardship for the Zimbabwean people, which for Lucie resulted in the ultimate violation of her right to life. She would have been deeply needed in the coming period for Zimbabwe: as an academic nutrition scholar she had her scientific credentials and international record in place, but increasingly saw the need to assure that the nutritional sciences would benefit all her fellow country-women, men and children - notably in combination with a public order fostering good governance in respect for people's dignity, human rights, and nutritional wellbeing for all. We are persuaded that Lucie would have contributed to a restoration of the opportunities Zimbabwe once had for this. We are however confident that her scholarly and government colleagues will further her enthusiasm and proceed in the same direction; this includes her own daughter who prepares to follow in her mother's nutrition research footpaths. Our thoughts go to her husband Joe and their children, Thoko, Tshala and Mjele, and her UoZ colleagues in Zimbabwe, who have lost a beloved and devoted wife, mother and inspirator.

Wenche Barth Eide and
Department of Nutrition, University of Oslo

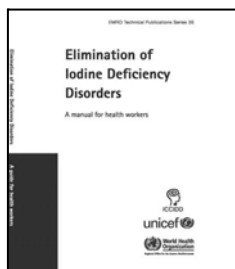
Arne Oshaug
Akershus University College, Norway



Salt as a vehicle for fortification WHO ([online](#))

The specific objectives of the meeting were to review and discuss: the benefits and disadvantages of using salt as a vehicle for micronutrient fortification; the public health significance of mild-to-moderate iodine deficiency; the public health significance of cardiovascular disease; the impact of the message «Use iodized salt» on the overall salt consumption of the population; the best way to deliver to the public a message addressing both the reduction of salt consumption and the consumption of iodized salt. www.who.int

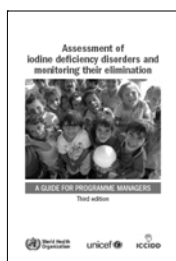
Elimination of Iodine Deficiency Disorders: A manual for health workers



ICCIDD, UNICEF, WHO ([online](#))
This manual presents an overview of iodine deficiency disorders (IDD) and provides detailed instructions in the monitoring and evaluation of IDD control and prevention programmes. Health and nutrition programme staff working at the provincial, district and field levels in the public health sector will find this guide particularly useful. It

may also be used by interested iodized salt producers and those involved in the formulation of health and nutrition policy and programmes. The manual provides information on the selection of appropriate process and impact indicators and techniques on conducting IDD programme assessments.

www.who.int www.unicef.org www.iccidd.org

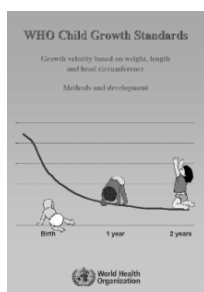


Assessment of iodine deficiency disorders and monitoring their elimination: A guide for programme managers Updated September 2008

WHO, UNICEF, ICCIDD ([online](#))

www.who.int www.unicef.org www.iccidd.org

WHO Child Growth Standards:



Growth Velocity based on Weight, Length and Head Circumference WHO ([online](#))

This report presents the WHO growth velocity standards and describes the methods used to construct the standards for weight conditional on age, weight conditional on age and birth weight, length conditional on age, and head circumference conditional on age. www.who.int



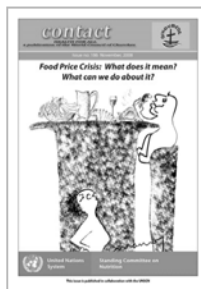
The World Health Report 2008: Primary Healthcare Now More Than Ever

WHO ([online](#), E/C/R)

www.who.int

Publications

Contact magazine 186: Food Price Crisis What does it mean? What can we do about it?

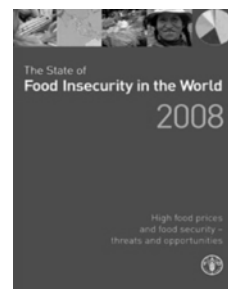


WCC/SCN ([online](#))

This edition of the 'Contact' magazine has been produced in collaboration between the World Council of Churches (WCC) and the UN Standing Committee on Nutrition (SCN), with Lida Lhotska as Guest Editor. It tries to understand the causes of the ongoing food price crisis and to promote advocacy and action to counter it.

www.oikoumene.org

The State of Food Insecurity in the World 2008

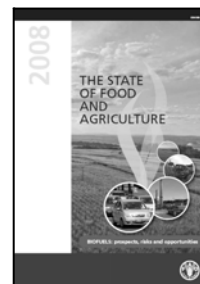


FAO ([online](#))

The State of Food Insecurity in the World raises awareness about global hunger issues, discusses underlying causes of hunger and malnutrition and monitors progress towards hunger reduction targets established at the 1996 World Food Summit and the Millennium Summit. The publication is targeted at a wide audience, including policy makers, international organizations, academic institutions and the general public with a general interest in linkages between food security, human and economic development.

www.fao.org

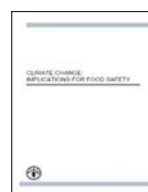
The State of Food and Agriculture 2008



FAO ([online](#))

This report explores the implications of the recent rapid growth in production of biofuels based on agricultural commodities. The boom in liquid biofuels has been largely driven by policies in developed countries in support of climate-change mitigation, energy security and agricultural development. The growing demand for agricultural commodities for the production of biofuels is having significant repercussions on agricultural markets, and concerns are mounting over their negative impact on the food security of millions of people across the world. At the same time, the environmental impacts of biofuels are also coming under closer scrutiny. But biofuels also offer the opportunity for agricultural and rural development — if appropriate policies and investments are put in place.

www.fao.org



Climate Change: Implications for Food Safety

FAO ([online](#))

www.fao.org

Global Future: The global food price crisis: Ensuring food security for all



World Vision ([online](#))

This edition examines the numerous drivers of the current crisis – not least the effects of climate change, diversion of food crops to bio-fuels, chronic underinvestment in agriculture and small-scale production, unfair international trade rules and flawed development frameworks and agreements.

www.globalfutureonline.org

Building resilience: a human rights framework for world food and nutrition security

Report from Special Rapporteur on the Right to Food Oliver de Schutter ([online](#))

The Special Rapporteur's report is a follow-up to the 22 May special session of the Human Rights Council on the impact of the world food crisis, which urged measures be taken to "ensure the realization of the right to food as an essential human rights objective." The report recommends a range of national and international measures to redress the negative effects of the food crisis on the enjoyment of the right to food. www2.ohchr.org

Seasons of Hunger: Fighting Cycles of Quiet Starvation Among the World's Rural Poor



Action Against Hunger-UK
Hunger Watch

Every year, millions of people across the world suffer from predictable and preventable seasonal hunger. Seasonal fluctuations in food stocks, prices and employment are responsible for much of the malnutrition and poverty that the MDGs are aiming to halve, yet seasonality gets

very little attention in policy formulation and programme design. 'Seasons of Hunger' documents the processes and consequences of seasonality in India, Malawi and Niger, drawing on personal stories as well as quantitative data. It documents the failure of past and current policies to recognise and address seasonal dimensions of poverty. www.aahuk.org

International Workshop on the Integration of Community-Based Management of Acute Malnutrition: Workshop Report

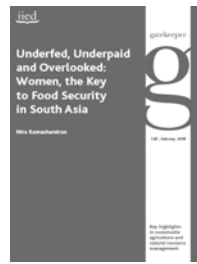


FANTA ([online](#))

This Workshop was the third in a series of workshops on Community-Based Management of Acute Malnutrition (CMAM) over the past five years. Due to the growing demand for implementation and integration of CMAM in many countries, the overall goal of this workshop was to "share experiences and identify the main challenges to integration and scale up

of CMAM at country level." The helped to provide a clear idea of where and how CMAM is being implemented, as well as in raising a number of issues regarding the scale up of CMAM and its integration with national programmes.

www.fantaproject.org



Underfed, Underpaid and Overlooked: Women, the Key to Food Security in South Asia

Ramachandran N
IIED ([online](#))

www.iied.org



Improving nutrition as a development priority: Addressing undernutrition in national policy processes in Sub-Saharan Africa

Benson T
IFPRI ([online](#))

www.ifpri.org



The Rise of Supermarkets and Their Development Implications: International Experience Relevant for India

Reardon T, Gulati A
IFPRI ([online](#))

www.ifpri.org



How Effective are Food for Education Programs? A Critical Assessment of the Evidence from Developing Countries

Adelman SW, Gilligan DO, Lehrer K
IFPRI ([online](#))

www.ifpri.org

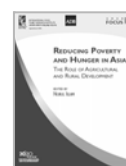
Progress on Drinking Water and Sanitation: Special Focus on Sanitation



UNICEF, WHO ([online](#))

This report details global progress towards the Millennium Development Goal target for drinking water and sanitation, and what these trends suggest for the remainder of the Water for Life Decade 2005-2015.

www.unicef.org www.who.int



Reducing poverty and hunger in Asia: The Role of Agricultural and Rural Development

Nurul I, IFPRI ([online](#))

www.ifpri.org



Emergencies in urban settings: a technical review of food-based program options

FANTA/USAID ([online](#))

www.fantaproject.org

Dietary Diversity as a Measure of Women's Diet Quality in Resource-Poor Areas: Results from Rural Bangladesh Site

FANTA ([online](#))



In developing countries, where low-quality, monotonous grain- and tuber-based diets are the norm, the risk for micronutrient deficiencies is high. Women of reproductive age are among those most likely to suffer from micronutrient deficiencies, yet in developing countries there

are very little data on women's micronutrient status and the quality of women's diets. Simple indicators are urgently needed to characterize diet quality, assess key diet problems and identify subgroups of women that are particularly at risk of micronutrient deficiencies. This report presents simple indicators that can predict the micronutrient adequacy of the diet of non-pregnant, non-lactating women of reproductive age with acceptable sensitivity and specificity. www.fantaproject.org

Guidelines for Measuring Household and Individual Dietary Diversity

FAO, FANTA ([online](#))



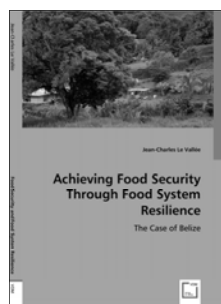
This is the fourth version of the guidelines for measuring dietary diversity. The main updates are i) update of the classification of individual food items into food groups ii) new questionnaire form with space for an open recall, followed by list based probing and iii) revised indicator for consumption of

foods rich in vitamin A. The guidelines describe how to adapt and use the dietary diversity questionnaire and how to create indicators of interest from the data collected.

www.foodsec.org

Achieving Food Security Through Food System Resilience

JC Le Vallée



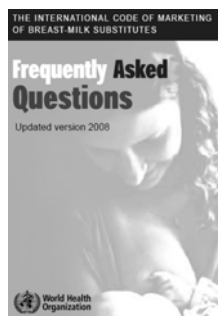
The book conceptually designs and appraises a more robust and dynamic food provision system framework that integrates resilience and food security, that is, devises a framework to reconnect food, people and ecosystems to guard all three. I use Belize as a case

study to define food provision systems; illustrate food system resilience patterns and adaptive cycle pathological traps; demonstrate indigent levels in smaller, asset poor, inadequately connected systems; and explain through Panarchy theory why lower-level food system participants are food insecure, their systems vulnerable, and their higher-level food system counterparts rigidly trapped. In fact, field research effectively demonstrated how the latter constrains the shape of smaller food provision systems, a large reason why they remain vulnerable and indigent. The book also examines the extent to which Belize's National Food and Nutrition Security Policy can further support a stable foundation for long-term food security through enhancing both food system resilience and social cohesion.

www.vdm-publishing.com

The international code of marketing of breast-milk substitutes: Frequently asked questions

WHO ([online](#))



Many people who have heard about the International Code of Marketing of Breast-milk Substitutes have expressed interest in knowing more about it. The purpose of this document is to provide easy-to-read detailed information on specific questions related to the Code. It is intended for policymakers and others concerned with the Code, as well as the general public. www.who.int

Nutrition and HIV/AIDS: A training manual for nurses and midwives.

FANTA ([online](#))



Nutrition interventions are an important component of comprehensive care and support for people living with HIV (PLHIV), helping to manage symptoms, promote response to treatment and improving functioning and quality of life. As front-line care providers, nurses play a critical role in HIV care. In many settings

it is nurses who have the strongest opportunity to provide routine counseling and other support to PLHIV. Equipping nurses with nutrition and HIV knowledge and skills enables them to provide effective nutrition care and support. Nursing school curricula in the region often include little or no information on the subject. This manual is designed to address this gap by providing materials that nursing school instructors can use to teach nursing students the knowledge and skills needed for nutrition care and support of PLHIV. www.fantaproject.org

A Guide to Monitoring and Evaluation of Nutrition Assessment, Education and Counseling of People Living With HIV

FANTA ([online](#))



This document provides guidance and tools to support programs in monitoring and evaluating nutrition interventions for people living with HIV (PLHIV). It is designed for use by program managers, M&E officers and other program and government health system staff who are responsible for designing and implementing M&E systems. The guide can be used to select indicators, set targets, plan data collection and tabulation processes and interpret and use the information obtained.

www.fantaproject.org

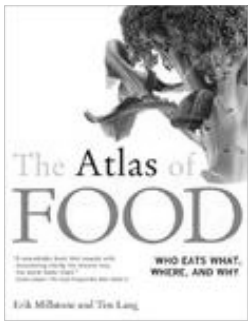


The Least Developed Countries Report 2008

UNCTAD ([online](#))

www.unctad.org

The Atlas Of Food: Who Eats What, Where, And Why



Erik Millstone and Tim Lang

What we eat, where we eat, and how we eat: these questions are explored in this remarkable book. *The Atlas of Food* provides an up-to-date and visually appealing way of understanding the important issues relating to global food and agriculture. In mapping out broad areas of investigation, it offers a concise overview of today's food and farming concerns and gives an easily accessible insight into the way our world food system works.

The complex interaction of the different players in the food chain is reflected in the structure of this book. Part one deals with a set of contemporary challenges that affect the food system, such as unequal distribution, nutritional deficiencies, over-nutrition, water pressure and environmental challenges.

Part two concentrates on various aspects of farming, including use of fertilizers and pesticides, animal diseases, urban farming, organic farming, genetically modified crops, land ownership and working the

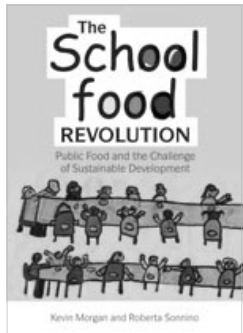
land, in order to find answers to the key question - how to combine adequate supplies, sustainable methods and health-enhancing outputs?

Part three focuses on international trade in food and the existing imbalance between farmers in wealthy countries and those in poorer ones, covering topics such as trade flows, subsidized trade, live animal transport and fair trade. The book concludes with a downstream look at food processing, retailing and consumption and consumers.

With engaging text and vivid graphics, Erik Millstone and Tim Lang convincingly argue that human progress depends on resolving global inequality and creating a more sustainable food production system.

www.earthscan.co.uk www.MyriadEditions.com

The School Food Revolution, Public Food and the Challenge of Sustainable Development



Kevin Morgan and Roberta Sonnino

All around the world it is becoming clear - to experts, parents, educators, practitioners and policy-makers - that the school food service has the potential to deliver multiple dividends that would significantly advance the sustainable development agenda at global, national and local levels. Therefore, school food suddenly finds itself at the forefront of contemporary debates about healthy eating, social inclusion, ecological sustainability and local economic development.

Drawing on new empirical data collected in urban and rural areas of Europe, North America and Africa, this book offers a timely and original contribution to the school food debate by highlighting the potential of creative public procurement - the power of purchase.

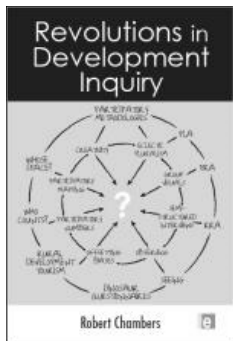
The book takes a critical look at the alleged benefits of school food reform, such as lower food miles, the creation of markets for local producers and new food education initiatives that empower consumers by nurturing their capacity to eat healthily. To assess the potential of these claims, the book compares a variety

of sites involved in the school food revolution - from rural communities committed to the values of 'the local' to global cities such as London, New York and Rome that feed millions of ethnically diverse young people daily. The book also examines the UN's new school feeding programme - the Home Grown Programme - which sees nutritious food as an end in itself as well as a means to meeting the Millennium Development Goals.

Overall, the book examines the theory, policy and practice of public food provisioning, offering a comparative perspective on the design and delivery of sustainable school food systems.

www.earthscan.co.uk

Revolutions in Development Inquiry



Robert Chambers

Robert Chambers returns with a new book that reviews, together for the first time, some of the revolutionary changes in the methodologies and methods of development inquiry that have occurred in the past 40 years, and reflects on their transformative potential for the future.

This book breaks new ground by describing and analysing the evolution of a sequence of approaches. Starting with the 'dinosaurs' of large-scale multi-subject questionnaire surveys, and the biased visits and perceptions of rural development tourism and urban-based professionals, there follows a look at the explosive proliferation of methodologies and methods of recent years. These include rapid rural appraisal (RRA) participatory rural appraisal (PRA) and dramatic developments in the still largely unrecognized fields of participatory numbers and statistics, and of participatory mapping and GIS. Chambers shows how these can empower local people and provide rigorous and valid substitutes for some more traditional methods of inquiry. Also presented is a repertoire for offsetting the biases of the urban trap, which has become so serious

for officials and aid agency staff. Importantly, Chambers points out that we are now in a different space, methodologically, from a few years ago. He makes the case that participatory methodologies, evolved through creative and eclectic pluralism, can be a transformative wave for the future as drivers of personal, professional and institutional change.

This book is for all who are concerned with development, regardless of profession, discipline or organization, who seek to be abreast of the revolutionary breakthroughs in approaches and methods of inquiry of recent years, and what Chambers calls their 'unlimited potentials'.

www.earthscan.co.uk

Bulletin Board

Miscellaneous:

- **Nutrition Society Interim Professional Body for Nutrition has updated its Information Sheets 1 - 4.** These are particularly for nutritionists in low-income countries. Sheet 1 lists low-cost print/hard copy newsletters and journals, Sheet 2 sources of low cost print materials, Sheet 3 sources of CD-ROMs, and Sheet 4 email/ website access to discussion forums, news and publications. Available [online](http://www.nutritionssociety.org) at www.nutritionssociety.org. Please send additions and corrections for these Sheets to professional@nutsoc.org.uk or annpatriciaburgess@yahoo.co.uk
- **Call for papers: Special issue on global food price shocks and poor people: themes and case studies.** Development in Practice publishes practice-based analysis and research concerning the social dimensions of development and humanitarianism, providing a worldwide forum for debate and the exchange of ideas among practitioners, academics, and policy shapers, including activists and NGOs. For more information see www.developmentinpractice.org
- **World Breastfeeding Week 1-7 August 2009**
"Breastfeeding: A Vital Emergency Response. Are you ready?"
For more information see www.worldbreastfeedingweek.org

New websites:

- **New website from USAID's Infant & Young Child Nutrition (IYCN) Project**
Visit the Infant & Young Child Nutrition (IYCN) Project's new website to learn more about global efforts to improve nutrition for mothers and children. The website features Information and resources on maternal nutrition, breastfeeding, complementary feeding, infant feeding within the context of HIV, and infant feeding during and after illness; a unique collection of nutrition training materials, publications, web links, and more; and the latest news and highlights from the IYCN Project. www.iycn.org
- **EpilInfo/ENA software** The International Emergency and Refugee Health Branch, CDC in collaboration with the SMART initiative have developed the EpilInfo/ENA software to facilitate planning, design, data entry, management, analysis, interpretation and quality control of nutrition and mortality surveys in humanitarian emergencies. The software, user manual and training films are now available for free access at www.cdc.gov/nceh/ierh/ResearchandSurvey/enasoftware.htm
- **SMART Methodology** (www.smartmethodology.org) You are encouraged to register and use the forum to communicate any questions or share information that could be valuable to others.
- **United Nations as Special Rapporteur on the right to food** (www.srfood.org) This website informs about the activities linked to the mandate of the Special Rapporteur. It will help keep track of developments in the large number of areas which have an impact on the enjoyment of the right to food, including official reports, documents and the calendar of the SR
- **HarvestPlus** has launched a redesigned website at www.harvestplus.org

Training and Courses:

- **Nutrition in Emergencies** 7-11 September 2009, London, UK
For more information see announcement [p.42](#)
- **Ninth International Graduate Course on Production and Use of Food Composition Data in Nutrition (FoodComp 2009)**
11-24 October 2009, Hof van Wageningen, Wageningen, The Netherlands
For more information see announcement [p.22](#)
- **International Course in Nutritional Epidemiology**
7th -18th September 2009, Imperial College London. More information ([online](#)) at www.imperial.ac.uk
- **Free Food Security E-learning courses from the EC/FAO Food Security Programme**
Register on-line at: www.foodsec.org/DL/dlregistration_en.asp

Meetings and Conferences:

7th International Conference on Diet and Activity Methods - ICDAM7
5-7 June 2009, Washington, DC
www.icdam.org

Over and Undernutrition: Challenges and Approaches
The Nutrition Society Annual Summer Meeting
29 June - 2 July 2009, Surrey, UK
www.nutritionssociety.org

Mitigating Nutritional Impacts of the Global Food Price Crisis
The Institute of Medicine of the U.S National Academy of Sciences
14-16 July 2009, Washington, DC
www.iom.edu/?ID=62976

10th CAPGAN Conference on Diarrhoea and Malnutrition
12-16 August 2009, College of Medicine Blantyre, Malawi
www.capgan.org

World Congress on Oils and Fats & 28th ISF Congress 2009
27-30 September 2009, Sydney, Australia
www.isfsydney2009.com

19th International Congress of Nutrition 2009
Nutrition Security for All
4-9 October 2009, Bangkok, Thailand
www.icn2009.com

SAVE THE DATE: SCN MEETING
Saturday 10 October 2009
Bangkok, Thailand
www.unscn.org

7th Euro Fed Lipid Congress Lipids, Fats and Oils: From Knowledge to Application
18-21 October 2009, Graz, Austria
www.eurofedlipid.org/meetings/graz

International Workshop on Micronutrients and Child Health (MCHWS-2009)
20-23 October 2009, AIIMS, New Delhi
www.mchws2009.com

Vacancies:

WHO Nutrition Roster
For qualified and experienced nutritionists with public health background (see [p.54](#))

IAEA Nutrition Scientist (P-3)
Human Health Department of Nuclear Sciences and Applications
Vienna, Austria (see [p.30](#))

SCN Email Update

Receive news and updates by email on a monthly basis! Ask us to add you to our contact list, at scn@who.int

UNITED NATIONS SYSTEM

STANDING COMMITTEE ON NUTRITION

The Administrative Committee on Coordination (ACC), which was comprised of the heads of the UN Agencies, recommended the establishment of the Sub-Committee on Nutrition in 1976, following the World Food Conference and with particular reference to Resolution V on food and nutrition. This was approved by the Economic and Social Council of the UN (ECOSOC) by resolution in July 1977. Following the reform of the ACC in 2001, the ACC/SCN was renamed the United Nations System Standing Committee on Nutrition or simply “the SCN”. The SCN reports to the Chief Executives Board of the UN, the successor of the ACC. The UN members of the SCN are ECA, FAO, IAEA, IFAD, ILO, UN, UNAIDS, UNDP, UNEP, UNESCO, UNFPA, UNHCHR, UNHCR, UNICEF, UNRISD, UNU, WFP, WHO and the World Bank. Bioversity International, IFPRI and the ADB are also members. From the outset, representatives of bilateral donor agencies have participated actively in SCN activities as do nongovernmental organizations (NGOs). The SCN Secretariat is hosted by WHO in Geneva.

The *mandate of the SCN* is to serve as the UN focal point for promoting harmonized nutrition policies and strategies throughout the UN system, and to strengthen collaboration with other partners for accelerated and more effective action against malnutrition. The *aim of the SCN* is to raise awareness of and concern for nutrition problems at global, regional and national levels; to refine the direction, increase the scale and strengthen the coherence and impact of actions against malnutrition worldwide; and to promote cooperation among UN agencies and partner organizations. The SCN’s annual meetings have representation from UN agencies, donor agencies and NGOs; these meetings begin with symposia on subjects of current importance for policy. The SCN brings such matters to the attention of the UN Secretary General and convenes working groups on specialized areas of nutrition. Initiatives are taken to promote coordinated activities—interagency programmes, meetings, publications—aimed at reducing malnutrition, reflecting the shared views of the agencies concerned. Regular reports on the world nutrition situation are issued. *Nutrition Policy Papers* are produced to summarize current knowledge on selected topics. *SCN News* is published twice a year, and the *NICS* (formerly *RNIS*) is published quarterly. As decided by the SCN, initiatives are taken to promote coordinated activities—interagency programmes, meetings, publications aimed at reducing malnutrition, primarily in developing countries.

ALEXANDER MÜLLER
CHAIR

UN SCN
C/O WORLD HEALTH ORGANIZATION
20 AVENUE APPIA, CH 1211 GENEVA 27
SWITZERLAND
TELEPHONE: +41-22 791 04 56
FAX: +41-22 798 88 91
SCN@WHO.INT
WWW.UNSYSTEM.ORG/SCN

In preparing this issue of the SCN News, we gratefully acknowledge funding assistance from



**World Health
Organization**