



Concept Note for the FSIN Technical Working Group on Measuring Food and Nutrition Security

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Why Create this Technical Working Group?

Since the world food crisis of 2008-2010, member countries of the UN System, leaders of international organizations, philanthropic donors, Civil Society Organizations and research institutions alike have called for more focused broadly shared indicators of food and nutrition security. The transition to new global development goals after 2015 adds momentum for new measures to monitor progress for specific groups and at the global level, in every UN member country. Food and nutrition security has many dimensions and changes rapidly over time. Indicators which all member countries and stakeholders within them can embrace and adopt would help focus the efforts of diverse decision-makers, and facilitate coordination among development actors.

The purpose of this Technical Working Group is to recommend the most effective possible suite of indicators to help FSIN stakeholders meet their food and nutrition security objectives over the coming decades. The TWG process is intended to maximize the degree to which the proposed dashboard of indicators tracks stakeholders' concerns, and helps them meet their policy goals and program objectives. The TWG's recommendations should be tailored for stakeholder ownership and ready implementation across and within all UN member countries.

The timing of this TWG coincides with the formulation of the post-2015 SDGs. While the earlier MDGs focused on progress in developing countries, the new SDGs aim for improvements in the world as a whole. Having a globally-applicable dashboard for food and nutrition security could be particularly helpful because, while each country's situation is unique, all countries face common challenges and share common features. Virtually every community faces some degree of insecurity in food and nutrition. These problems are closely related to each other, as are their solutions. Every intervention affects other interventions, diminishing their impact if they operate at cross-purposes, and creating synergies if they pull in a common direction. The development and spread of common indicators is a precondition for countries to learn from each other, harmonize policies and achieve rapid gains towards a healthy and secure global food system.

The TWG's recommendations will include advice on implementation and use of the SDGs and their component parts, but this is not its primary or sole focus. It will also include a range of other indicators needed to track change in the many dimensions of food and nutrition security. Slow and uneven progress in achieving the original MDGs, combined with an increasing focus on results-based management, have reinforced the need for food and nutrition security indicators that can be used at every level of decision-making from individual to global. It is particularly important for these indicators to be owned and used by the decision-makers themselves, in local reporting systems within UN member countries.

The TWG's goal is to recommend indicators that can be part of countries' own measurement systems. Widespread use of shared indicators will help local, national and global actors pursue

their diverse goals and coordinate with each other, harmonizing programs and policies within and across national borders. Recent sharp increases in data collection and dissemination have been accompanied by widespread confusion and controversy over what data are collected, how and by whom these data are processed, how the results should be interpreted and whether data collection is sustainable over time. This fragmentation of the information landscape is a major obstacle to country ownership of food and nutrition security programs. The TWG's recommendations will provide a common suite of indicators which, like a vehicle's dashboard, will help local policymakers control their own destiny, while helping them coordinate with others. The process by which the indicators are generated are intended to facilitate country ownership by equipping each type of decision-maker with better indicators to meet their goals.

Currently, the most popular indicators for global targets such as the FAO's undernourishment measure (<http://www.fao.org/publications/sofi>) or the WHO's estimates of stunting, wasting and overweight (<http://www.who.int/nutgrowthdb>), are useful for tracking longer term changes in the most readily measurable outcomes. There are major data gaps in the existing indicators adopted by member countries through past international processes and new questions about what indicators to put in place for other dimensions of food and nutrition security such as dietary diversity, nutrient adequacy, seasonal deficits and shortfalls among specific population groups. The wide range in the stages of development, political commitment for evidence based policy making and country capacity for data collection and analysis pose considerable challenges in developing and applying universal measures unless they are simple and easy to collect and interpret. In each case, indicators must be scientifically validated measures which developing countries can realistically collect on a consistent basis, enabling cross country comparisons to track progress towards each country's food and nutrition policy objectives.

Recommending improved indicators is a tall order. There are related questions of whether there is scope to introduce more sensitive measures for specific aspects of food and nutrition, including malnutrition among vulnerable sub-populations such as adolescent girls and young women or marginalized populations. Echoing previous such reports, the Global Nutrition Report 2014 notes, "1. Much of the Nutrition for Growth (N4G) commitments is vague, and progress updates are often vague as well. 2. N4G data are scattered, and collecting them has a high transactions cost. 3. There are not enough *country-driven and country-owned nutrition data and research, and this gap runs the risk of weakening nutrition accountability.*" (GNR 2014).

To help build scientific and political consensus around which indicators can and should be used by national governments and international agencies, the Food Security Information Network (FSIN) is establishing a Technical Working Group on Measuring Food and Nutrition Security, with Uma Lele as chair and William Masters as co-chair. In brief, the task of this TWG is:

1. to recommend a set of universally applicable indicators of food security and nutrition,

2. based on an objective assessment of the quality and utility of existing indicators, and
3. provide guidance to policymakers in member countries and their development partners regarding which indicators are most useful for what purposes.

The TWG's assessment is expected to explain why each indicator is a preferred measure for each dimension of food security and nutrition, in any given geographic region or population of interest, and for various policy choices and time frames of decision-making. For each recommended measure, the TWG will describe:

- (a) the current status of that indicator, regarding both data collection and utilisation of that type of measure, and
- (b) recommendations for data collection and utilisation of the measure for both development policy and investment priorities (structural factors in food and nutrition security) and also emergency response and early warning (time-sensitive factors), as well as utilisation at the global, national, regional and household levels.

Detailed terms of reference for the TWG chair and co-chair are provided in Annex 1, for work to be carried out in late 2014 and 2015.

How will this TWG Operate?

The Technical Working Group's recommendations regarding a globally-applicable suite of indicators would be derived through systematic review of work carried out using examples from a sample of national governments, such as those which participated in ICN 2, the efforts to date of international organizations to assemble and aggregate data generated by member countries, and by building on stakeholder consultations from numerous previous such efforts. Many stocktaking papers and analyses have been conducted in recent years, offering various perspectives. Our goal is not to replicate this work, but to provide a mechanism, with the help of the concerned international and national organizations, to synthesize and, through stakeholder consultation, produce a recommended set of measures with guidance for their use in pursuit of the SDGs and other policy objectives.

The TWG's operational plan can be summarized as following a three-step procedure:

1. Catalogue all known indicators in current use, producing a detailed inventory of available measures. The inventory will describe the state of data collection for each indicator by member countries, and its current utilisation to guide development policy

and longer-term investments as well as emergency response and humanitarian interventions, recognizing the diverse continuum of uses of each indicator.

2. Consult widely with the agencies and institutions that generate these data, and with stakeholders in governments and other organizations who collect and/or use the resulting indicators, to select a short list of recommended measures needed to meet decision-makers' needs.
3. Obtain feedback and adapt the proposed dashboard of recommended indicators to the needs of specific constituencies.

The WHO and others have termed each subset of all available measures a 'dashboard', to evoke the way in which various indicators of a vehicle's speed, fuel availability, engine temperature etc. are used to drive it safely and effectively.

Box 1: The Dashboard Concept

On a vehicle dashboard, each indicator serves a different purpose in helping the driver reach their targets. Different kinds of vehicles call for slightly different dashboards, and each dashboard must reflect the vehicle's status in a way that is scientifically accurate but also adapted to the driver's needs. For example, drivers typically need more accuracy about their speeds than they do about the engine temperature, so all speedometers show specific numbers whereas many thermometers just show a red zone or indicator light if the engine overheats. Also, some measures are needed only by certain kinds of drivers, so for example many cars are sold without a tachometer to show the engine speed. Newer and more expensive cars may provide more detailed information on the dashboard, such as a rear-view camera or an indicator of the current fuel consumption rate, but a major goal for every dashboard designer is to make the information immediately understandable to any driver.

The TWG's goal is to recommend dashboards for food and nutrition security that fully reflect the needs and concerns of FSIN stakeholders, using our consultative process to capture the most important dimensions of food and nutrition security, their changes over time and differences among people, to help decision makers meet their development policy and humanitarian response goals as quickly and cost-effectively as possible. By using a common set of more accurate metrics, policymakers will be better able to avoid conflict and harmonize their efforts, while operating under their own unique circumstances in pursuit of their own goals.

The TWG's operations aim to facilitate country ownership by meeting local policy-makers' needs. To ensure comprehensive coverage, the TWG will identify the current and potential stakeholders for this exercise, and consult with them regarding the data to which they currently have access, how they use that information and what they need to know to achieve improvements in food and nutrition security. The TWG's assessment will then cover:

- The concepts and measurement tools needed for a consolidated dashboard of indicators applicable around the world, to guide decision-makers in each country's unique situation;
- The data collection methods and sources used to construct each indicator, their strengths and weaknesses in terms of relevance and validity, reliability and timeliness, simplicity, cost and institutional capacity to deliver a sustained flow of data around the world; and
- Opportunities for innovative data collection and reporting methods, such as “big data” computational tools and crowdsourcing of field observations from novel sources.

The proposed outputs are initially intended to consist of two papers meeting immediate needs in 2015:

- First, a “dashboard” design document that clearly describes the recommended suite of indicators to measure the most important dimensions of food and nutrition security, in ways that can readily be adopted by FSIN stakeholders across and within UN member countries; and
- Second, a “utilization” guide for the recommended indicators that explains how, when, where and by whom the dashboard can best be used to guide policies and programs.

The dashboard document will list the main concepts to be measured, and describe the scientific basis for how these concepts can best be measured and compared. The document will begin with a standard conceptual framework linking the diverse elements of food and nutrition security through a variety of causal pathways, and show decision-makers how each element can be measured in a scientifically valid and policy-relevant manner. The result is a dashboard, in the sense that each element to be guided will have an associated metric for use in steering the system towards local and global goals. It is possible however that there may be conceptual, information or knowledge gaps in certain aspects of the dashboard, calling for further research or capacity building. These various will gaps will be identified as a guide to future action on generator of indicators.

The utilization document will describe how the dashboard can be used by various kinds of decision-makers. While the dashboard describes each element of a causal framework, this user's guide focuses on how interventions enter to modify the links between them. For example, indicators regarding dietary diversity can be used to guide interventions in agricultural

production, in food markets, and in nutrition assistance programs. Other indicators can be used in similarly complex ways. The result will be a user's guide for the proposed dashboard, helping those who would use the resulting data to inform policies and programs.

The TWG's recommended dashboard and its associated user's guide are intended for immediate adoption in pursuit of the post-2015 SDGs and other policy objectives. This work will be based on a holistic understanding of the complex causal pathways involved in food and nutrition security, as illustrated in the draft theory of change diagram presented in Box 5. The recommended dashboard will be able to measure only some of the many concepts involved in that larger framework, however, resulting in a simplified conceptual framework highlighting what is feasible for FSIN stakeholders to measure and include in their own reporting systems.

In compiling the recommended dashboard, the TWG is expected to encounter many aspects of food and nutrition security that cannot yet be measured in convincing ways that are also feasible given current capabilities in the field. An example might be seasonal micronutrient deficits, which could be a significant factor in nutrition security but can be observed only through continuous monitoring of hard-to-reach populations. The measurement techniques and institutional arrangements needed to measure progress against seasonal micronutrient deficits are not yet available, but the TWG could help accelerate their development through a third document that would list capacity-building and financing gaps needed to extend the dashboard over time.

To achieve the FSIN's goals we propose to operate through a small Technical Working Group, consulting in person with a larger Technical Advisory Group, and consulting electronically with major agencies, organizations and stakeholder groups or communities of practice a detailed timeline and suggested possible composition of the TWG and the advisory group is appended to this concept note. The working group would start the process by circulating an initial draft inventory of the current indicators to be expanded through electronic consultation, and then via a face to face meeting of the working group to craft an initial draft dashboard from that inventory, which we would then refine through electronic consultation and presentation/discussion at a sequence of in-person meetings with advisory group members. This procedure will use broad consultation to ensure country and stakeholder ownership of our findings, while working quickly alongside the formulation of post-2015 development goals and other efforts to guide food and nutrition improvement.

Historical Background and Context for this TWG

The world food shortages of 2008-10 came after decades of historically low food prices, at a time when more than half of the world's population had moved into towns and cities. Today's rapid change and volatility in the food system, combined with wide variation in underlying socioeconomic circumstances around the world, have made diet-related disease the world's largest single cause of premature death and disability, with the triple burden of hunger, under

nutrition and overconsumption affecting almost every country in the world (Global Nutrition Report 2014). Diet-related disease is increasingly widespread and diverse; arising from multiple causes all leading to insufficient consumption of nutrient-dense foods and lifestyle changes as the dominant risk factors. They especially affect young mothers and children during periods of scarcity, and overconsumption at other times becoming increasingly important even in low-income countries. With scientific advances, knowledge about inter-generational impacts of poor nutrition of current and future mothers and infants the mother give birth to, has been attracting considerable attention.

Since the 2008-10 world food crises, global prices have remained volatile, with recurring shortfalls for some people persisting alongside abundance for others posing a challenge for agricultural policy (Wright 2014). Global agricultural supplies are increasingly threatened by climate change, resource scarcity and man-made policy changes, e.g. biofuels over time. While there has been huge growth in international trade in food and agriculture governments are still pursuing ad hoc market interventions with unintended consequences for trading partners. (Gulati 2014, Jayne 2014). Getting agricultural policies right remains a central challenge for human development at the global and national levels for which agricultural production and trade statistics are of fundamental importance. The stakes are especially high in the regions of the world of greatest environmental stress and susceptibility to climate change, in places with longstanding political conflicts over land, water and other resources, and for women who are often charged with food production, marketing and meeting daily child-care needs within the household with little time for care and feeding (including breast feeding) of infants unless special measures are adopted to release them from arduous labour. What is currently missing is a holistic approach to food and agricultural systems as a whole which links patterns of production, markets, processing and trade to consumption via resource use and their environmental impacts and sustainability, rather than a disjointed focus on food security largely based on measuring food balance sheets and the focus on nutrition largely confined to pregnant mothers and children rather than to all consumers at large.

In recent years, the increasing need for changing the composition of agricultural production from land and water using and emission causing agricultural activities (e.g. livestock and feed, rice, sugar) and consumption causing obesity and non-communicable diseases has led to an explosion of advocacy, research and publications on food and nutrition in both rich and poor countries. Current efforts to end under-nutrition, including the UN Secretary General's Zero Hunger Initiative and the SUN initiative announced in 2010, supported by increased funding from donors, national governments and philanthropic organizations, culminated in a joint FAO-WHO sponsored Second International Conference on Nutrition during November 19-21, 2014 leading to a Rome Declaration and an Action Plan which will require broadly accepted indicators to measure progress. The run up to the 2015 MDG deadline and the search for Post 2015 SDGs have added to this momentum. These efforts are accompanied by powerful calls for more and

better measurement of food and nutrition security, to capture changes that are increasingly complex and time-sensitive. (Box 2)

Against this historical background, the global internet and data revolutions (e.g. Satellite imagery, crowd sourcing) have greatly expanded information, knowledge and advocacy as key tools in helping to eradicate hunger and malnutrition, but changes in food security and nutrition remain extremely difficult to monitor. Conditions vary widely over space and time, and involve several distinct dimensions of deprivation. As a result, the 2014 Global Nutrition Report laments critical data gaps in the areas of food and particularly nutrition.

Data needs often cut across sectors, and the UN has proposed a comprehensive global approach to harnessing the data revolution for better outcomes, involving partnerships among governments, donors, civil society, the private sector and academia¹. To realize better and faster outcomes, high quality, just in time data in the hands of decision makers are needed at all levels, whether female or male heads of poor households or national and global policymakers. However easier access to more data is also fraught with risks of poor quality and reliability, unequal access, invasion of privacy and misuse, all of which call for a carefully orchestrated early response to the new opportunities and challenges. For nutrition in particular, the Global Nutrition Report offers a rich set of findings and recommendations relevant to the TWG's work (Box 2).

¹ <http://www.undatarevolution.org/report/>.

Box 2: Accelerating Progress will Require More and Better Data

1. People with good nutrition are key to sustainable development. Malnutrition affects nearly every country in the world. Dealing with different, overlapping forms of malnutrition is the “new normal.”
2. The world is currently not on course to meet the global nutrition targets set by the World Health Assembly.
3. Nutrition needs a data revolution. Of the many information gaps, the ones that most need to be filled are those that constrain priority action and impede accountability.
4. More ambitious targets and indicators (than the simple extension of 2025 WH Assembly) need to be adopted within the Sustainable Development Goal Targets for 2030.
5. A new consensus about what is possible is needed, including an accountability framework.
6. More high-quality case studies are needed to understand why progress has been made in some countries and not in others.
7. Coverage of nutrition-specific programs needs to be expanded to cover more of the people in need.
8. More attention needs to be given to coverage data—an important way of assessing presence on the ground where it counts.
9. A greater share of investments to improve the underlying determinants of nutrition should be designed to have a larger impact on nutritional outcomes.
10. Better guidance is needed on how to design and implement these approaches to improve their effectiveness and reach.
11. We need to keep tracking the proportion of nutrition resources to these approaches.
12. More must be done to hold donors, countries, and agencies accountable for meeting their commitments to improve nutrition.
13. Stakeholders should work to develop, pilot, and evaluate new accountability mechanisms. Civil society efforts to increase accountability need support.
14. Tracking spending on nutrition is currently challenging, making it difficult to hold responsible parties accountable. Efforts to track financial resources need to be intensified—for all nutrition stakeholders. We need to develop targets or norms for spending on nutrition.

Source: Global Nutrition Report 2014.

Policymakers interested in food and nutrition security however quickly encounter a thicket of competing concepts, a phenomenon which was evident in ICN 2 (Box 3). The topic spans many different scientific fields and realms of policymaking, each using distinct language adapted to their particular situation and different frameworks. Simple explanations and narrow interventions rarely succeed. Greater understanding of the systemic changes can lead to improved targeting, but even the most specific recommendations tend to be relatively broad and demonstrate the shifting scientific priorities as more evidence becomes available. For example, when the Copenhagen Consensus Centre invited a panel of distinguished economists to compare dozens of proposals for how best to spend foreign aid budgets in 2004, 2008 and 2012, their highest priority shifted from a single disease (HIV-AIDS) in 2004, to multiple micronutrient

supplementation in 2008, and mostly recent to “a bundle of interventions including micronutrients, improvements in diet quality and better care behaviours” in 2012.²

The food and nutrition agenda has evolved over time in part due to greater understanding, but also to progress in achieving previous goals and the emergence of new challenges (Box 4).

Often the easier goals are met first, leaving more complex problems involving larger numbers of people, in more diverse areas. For example, by the standard FAO measure 805 million people were undernourished in 2012-14 (Box 4), while WHO estimates that about 2 billion people suffer from micro-nutrient deficiencies and some 1.5 billion people are obese. WHO has noted malnutrition and under-nutrition as the single largest contributors to the global burden of disease, and the cost of treating obesity already exceeds what it would cost to eradicate hunger.

Until recently, the main challenge for global agriculture was to provide enough food, in terms of dietary energy (calories) from macronutrients (carbohydrates, protein and fats). Food security in the sense of assured supplies will still remain important in the face of climate change, resource pressures, population growth and urbanization. And yet it has been joined by additional dimensions of nutrition security. Rather than a smooth transition from hunger to overconsumption, almost every country in the world is concurrently experiencing all three phenomena posing challenges which could be broadly divided into those of:

1. *dietary intake* such as diet diversity, food safety and micronutrient levels,
2. *care practices* which influence nutritional status of children and the quality of life of a pregnant mother, including especially breastfeeding, and
3. *environmental factors* that modify the effects of diet and care, including water, sanitation and disease.

Each of these three dimensions of food and nutrition security can be understood at varying scales from regions to households and individuals, levels of analysis from availability to access and use, and time periods from annual to monthly and day-to-day. The multidimensional, multisectoral nature of food and nutrition security makes it a particularly challenging goal, even more complex than food security to avoid hunger.

In 1996, the world adopted a broadly agreed definition of food security through a consultative political process of the Committee on World Food Security (CFS) consisting of member governments (Box 2). The High Level Panel of Experts (HLPE) adopted a definition with four components (availability, access, stability and utilization), which was slightly modified to

² <http://www.copenhagenconsensus.com/publication/hunger-and-malnutrition>.

incorporate social concerns by the reformed CFS in 2009. The Global Forum on FSN now has much wider stakeholder participation involving NGOs, private sector firms, global and regional organizations. Aggregate measures of global and national food security have remained the hallmark of FAO's service to its member governments, even as the FAO and others have engaged in spirited debates about what and how to measure the many other aspects of nutrition security to which professional focus has recently shifted.

The 2002 International Scientific Symposium on measurement and assessment of food deprivation and under-nutrition reviewed five distinct methods: (1) the FAO methodology for estimating undernourishment; (2) measurement of food insecurity using household income and expenditure data; (3) dietary intake based on individual intake surveys; (4) child nutritional status based on anthropometric surveys; and (5) qualitative methods for measuring people's perceptions of food security and hunger. Ten years later, the 2012 Symposium used the same framework, but with greater focus on improving input of indicators in the policy processes to take into account the radically changed environment for food and nutrition security, including faster changes, risks and uncertainty facing global and local food systems.

Each successive change in measurement can be seen as the result of global consultative processes leading to a sufficient consensus around a particular concept of food and nutrition security, which then becomes operationalized around ambitious but feasible political objectives. For example, the 1996 food security definition became more firmly established once it was adopted in 2000 as part of the first MDG, which modified the CFS's FSN goal from the original of halving the absolute number of hungry people from their 1990-92 level, to halving the proportion of people who are hungry by 2015. The need for high-level political support often drives compromises around conceptual and measurement issues, such as the minimum daily energy requirements and distribution functions used to estimate the number or proportion of undernourished people. These choices are summarized in SOFI 2014 and the many working papers through which various UN and other agencies have contributed to improvement in these measures as described below.

Many observers have had concerns that food security measures embody political preferences. For example, national measures of food security that focus on production are often associated with the pursuit of national food self-sufficiency and restrictions on international trade. Similarly, household measures of food security that focus on access are associated with a rights-based approach and government delivery of food to targeted beneficiaries. Individual measures that focus on dietary diversity may lead to support for local food markets selling diverse products, while a focus on micronutrients can lead to supplementation and fortification programs. These approaches are not mutually exclusive, and every country adopts some mix of measures and associated policies. For example, the US Department of Agriculture's website states "food security--access by all people at all times to enough food for an active, healthy life--

is one requirement for a healthy, well-nourished population”, as part of the rationale for the USDA’s Supplemental Nutritional Assistance Program (SNAP) and the more targeted Women, Infants and Children (WIC) program.³ Since measures are so closely tied to political preferences, the FAO has been criticised from time to time for “cooking” its undernourishment estimates to exaggerate or diminish any given result, but these criticisms mainly serve to underscore the importance of making comparisons across countries and over time.

The value of setting international goals took on increasing political legitimacy over the past decade, thanks in part to the relative success of the MDGs. Even though the MDGs have been criticized for being top down, insufficiently consultative and participatory, they did provide a set of clear, measurable goals which many observers have applauded for their simplicity and results orientation. The 2015 transition from MDGs to SDGs has involved broader participation, but risks a greater proliferation of diverse goals.⁴ For nutrition in particular, the need for improvement has acquired high priority among many stakeholders but there is not yet clear agreement on the concept of nutrition security or the political commitment to eradicate it.

Defining Terms and Reaching Consensus

The CFS (2012) found that “currently there is no consensus among member states about the use of the combined term ‘food and nutrition security’; many strongly support the use of the combined term whereas others question it.” Broadening the definition of food security to include nutrition calls for a broad search among many possible indicators, from which a limited number of standardized and validated indicators can emerge as the most politically helpful and scientifically accurate. To succeed, measures must be relatively easy to collect, reliable, timely and comparable across time and space. Each possible indicator poses its own measurement challenges, and may have been developed by different communities of practice. The vast literature on nutrition measurement is fragmented, and is just one part of the larger complex landscape of household survey data collection and analysis.⁵ The Global Nutrition Report brings the concepts and literature together to help guide next steps.

The second International Conference on Nutrition on November 19 to 21, 2014 highlighted some of the key challenges related to improving nutrition security and its measurement going forward. The importance of using a suite of indicators to reflect these multiple dimensions of food and nutrition security is now broadly accepted, as shown for example by the 2002 and 2012 Scientific Symposia. The symposia concluded that narrowing down the suite of indicators would facilitate comparison across space and time, and having a few specific objectives makes it more likely that policymakers can mobilize resources to achieve them. But as yet there is no agreement

3 <http://www.ers.usda.gov/topics/food-nutrition-assistance.aspx#.VE0MJiKUd5x>.

4 <http://www.nytimes.com/2014/09/11/opinion/how-to-prioritize-un-goals.html>.

5 <http://www.ihsn.org/home/food>.

on how many or which indicators should be included in the global dashboard we need to monitor progress. Since context matters, different indicators will be more or less useful at different times and places.

Nutrition has been an important part of FAO's work since it was established in 1946, when 46 mostly war-torn member countries gathered to decide on its mandate. The founders gave nutrition even more emphasis than food security, perhaps in part because the whole field of nutrition was then in its infancy. Over time, across the growing family of 200+ UN member countries, food and nutrition issues have been influenced by a range of factors: the evolution of agriculture and its environmental footprint, changing demographics and farm structures, urbanization and income growth, industrialization of agricultural processing with food additives of salts and sugars, social preferences in food markets and close links of the changing market structures to the economies of scale in production to the changing gender roles affecting patterns of domestic and purchased foods in consumption. In that context, FAO programs have paid close attention to norms and standards, water and sanitation, soils and other environmental factors, international trade and aid, climate change and many other issues but as yet there has been a very limited conversation with the private sector involved in the manufacturing of processed foods and beverages.

The relative role of nutrition itself has waxed and waned. Spikes in world food prices during the 1970s and again in the late 2000s triggered more focus on the number of hungry and undernourished, despite the prevalence of malnutrition even when world food prices were low. Barring a few exceptions many of the earlier nutrition interventions in the 1970s and 1980s lacked systematic evaluations to learn lessons (WHO, Essential Nutrition Action 2013). Clearly, food and nutrition security is a “wicked” challenge involving many different kinds of actors at different scales. Yet the challenge is urgent, calling for multi-sectorial and multi-disciplinary dialogue to improve food and nutrition measurement, and thereby help guide policies towards improved outcomes.

The Chairs' Vision for this TWG

The measurement of food and nutrition security has involved a seemingly endless sequence of conferences, symposia, consultations and meetings. Observers from McCalla and Mock (2004) to FAO (2013) and the Global Nutrition Report 2014 have noted that progress in developing new measures is slow, and their influence on actual policies is even slower. Sceptics argue that what progress has been made is often patchy and unsustainable, limited by a lack of ownership, capacity and financing from a fragmented community of donors, governments and NGOs with short time horizons. These are precisely the reasons why this Technical Working Group aims to operate differently from past efforts, with greater realism and with wider outreach and inclusiveness.

Realism is central to success. The FSIN’s Technical Working Group faces the same deep constraints that have limited past efforts. Our goal is to take careful account of the existing agendas and limited resources of development actors, and propose measurement approaches that help them accomplish their goals. To do so, we will conduct a review of past measures and use web-based tools in strategic ways for those engaged in food and nutrition programs conducted by governments and donors to tailor new measures around their needs. Our vision for success is not a sudden transformation of the measurement landscape, with immediate impacts on global policy. Instead, we propose an incremental process that will improve the rate and direction of progress, by networking together the diverse efforts that are already under way. Our goal is to work collaboratively and supportively, offering a mechanism through which to facilitate and accelerate the consolidation of diverse measurement instruments into a compact and helpful dashboard.

Informal consultations carried out in preparation for this project often started with a familiar question: what can yet one more inter-agency taskforce achieve? From long and diverse experience, we recognize that progress has been slow but we believe it is possible, and can be supported by careful attention to stakeholders’ needs. As a guide to our work ahead, the co-chairs’ vision for this Technical Working Group is to:

1. Conduct an inventory of indicators/measures of food and nutrition security currently in use and the context in which they are used;
2. Improve the clarity of concepts, measurement techniques and sources of information about food and nutrition security in both developing and developed countries, at every level from long-term global trends to the immediate needs of vulnerable individuals;
3. Synthesize existing knowledge, through background papers and a consultative process aimed at attracting support for specific measurement concepts among the member states and agencies of the UN family, especially in South Asia and Sub-Saharan Africa where food and nutrition insecurity is most widespread; and
4. Recommend a specific “dashboard” and an associated “user’s guide” describing a short list of food and nutrition security indicators suitable for use around the world, based on wide consultation, formally and informally, with policymakers and nongovernmental stakeholders in all concerned sectors—public and private, civil society and donor organizations, and sectorial specialists in agriculture, health, education, gender, water and sanitation—who use food and nutrition data to guide their policies and programs.

TWG will build on the current and past work of the national governments, international organizations and outcome of the International Conference on Nutrition, bring together, and where they exist, build on the existing diverse communities of practice, and recommend steps needed to improve measurement. It will take into account the current and future regional diversity among UN's 200 member countries and find a niche for this effort in the larger UN processes of the post 2015 Agenda. In so doing, we will include decision makers in consultations and other international forums—an idea which was endorsed repeatedly at the 2012 symposium and in ICN2 (FAO 2013). These actions would increase the generation of valid, credible, demand driven information and enhance the use of evidence in the formulation and application of food and nutrition security policies.

Box 3: Definitions of Food and Nutrition Security

1. Food Security

The 1996 World Food Summit (WFS) adopted the following definition: “Food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.” This definition has been identified with the four dimensions of food security: availability, access, stability and utilisation. It embodies the food and care-related aspects of dietary intake.

Following the WFS recommendation to establish national Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS), an Inter-Agency Working Group debated the interpretation of the definition of food security with respect to its adequacy from a nutritional perspective. This led to the development of Guidelines for National FIVIMS: Background and Principles in which the four dimensions of food security were confirmed and endorsed by CFS in 1998.

The 1996 definition of food security is still widely used and quoted today, with the sole addition of the word “social” to the phrase “physical, social and economic access”. That definition was reaffirmed officially in the 2009 Declaration of the World Summit on Food Security. The CFS Reform Document adopted by the FAO Conference at the same time added the following explicit reference to the comprehensive coverage of nutrition in the interpretation of the official definition of food security: “The four pillars of food security are availability, access, utilization and stability. The nutritional dimension is integral to the concept of food security and to the work of CFS.” (CFS: 2009/2 Rev. 2).

2. Nutrition Security

As the term “food security” evolved, the term “nutrition security” emerged in the mid-1990s to capture an increasingly wide range of influences on how food is utilized by the body and influences health outcomes. These influences include variations in the degree to which a given food is sufficient, safe and nutritious, as well as non-dietary factors such as breastfeeding behaviour, sanitation and disease. Each influence can be measured directly, and also in terms of their combined net effect on the body. Building on UNICEF’s Conceptual Framework, IFPRI proposed the following definition in 1995: “Nutrition security can be defined as adequate nutritional status in terms of protein, energy, vitamins, and minerals for all household members at all times.”

In light of wide variation and rapid change in the kinds of deprivation suffered by the poor, “nutrition security” offers a very useful framework for measurement. The concept of nutrition security is clearly measurable and achievable at the level of the individual, providing an evolving record of past deprivations in ways that are closely linked to current and future capabilities. Nutritional status combines the individual’s access and utilization of adequate food with a variety of other factors, including behavioural influences such as breastfeeding and sanitation, with household resources such as housing and public services such as control of infectious disease. As such, nutrition security can provide a summary measure of how well a person’s biological needs are being met, in a way that can be useful to a wide range of development actors.

In 2006, the World Bank published a book on Repositioning Nutrition as Central to Development. Expanding on the role of non-dietary factors, it gives the following more elaborated definition of nutrition security: “Nutrition security exists when food security is combined with a sanitary environment, adequate health services, and proper care and feeding practices to ensure a healthy life for all household members.” This same definition of nutrition security is also used by WHOM in its forthcoming report of the Global Nutrition Policy. The Road Map for Scaling-Up Nutrition (SUN), 2010 edition, adds the need for physical activity in its definition as follows: “Nutrition security is achieved when secure access to an appropriately nutritious diet is coupled with a sanitary environment, adequate health services and care, to ensure a healthy and active life for all household members.”

Most recently, the FAO has developed a draft formulation that combines dietary and other factors: “Nutrition security exists when all people at all times consume food of sufficient quantity and quality in terms of variety, diversity, nutrient content and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education and care.”

3. Food Security and Nutrition

While the broad definition of food security embodies key determinants of good nutrition, the term “food security and nutrition” has been used as a way to combine the two concepts described above. This term is most commonly used in the socio-economic and the food and agricultural communities of practice in recognition of the traditional emphasis on the food availability, access and stability dimensions of food security. In addition, it acknowledges the importance of key nutrition concerns such as care and feeding practices, public health and sanitation issues. This terminology is also used when practitioners want to make it clear that food security is a precondition to adequate nutrition and that different, but complementary action are needed to achieve food security and nutrition objectives. In other words, food security actions should ensure that food systems provide all households with stable access to sufficient, appropriate and safe food, while nutrition-oriented action should ensure that households and individuals have the knowledge and supportive health and environmental conditions necessary to obtain adequate nutritional benefit from the food.

The CFS Reform Document uses the term “food security and nutrition” throughout. Since 2009, this term has been the standard for CFS documentation and is also used by FAO as one of its corporate strategic objectives: “Improved food security and better nutrition”. The Committee’s High Level Panel of Experts (HLPE) advises on “Food Security and Nutrition” and the Committee itself is charged with responsibility for developing a “Global Strategic Framework for Food Security and Nutrition”. Adoption of this term by CFS in 2009 was consistent with the usage of the “Global Partnership for Agriculture, Food Security and Nutrition” that was also emerging at that time, and in many parts of the UN system this usage has become common practice. In line with this, the Secretary General’s Special Representative carries the title “Special Representative for Food Security and Nutrition”.

4. Food and Nutrition Security

“Food and nutrition security” is another way to combine elements of both food security and nutrition security. It is a term that has been used more frequently during the past number of years and has been advocated for in particular by the public health and nutrition communities to emphasise the need for greater integration of nutrition into food security policies and programmes. This term is preferred by those who wish to highlight the integral linkages between food security and nutrition security, not only linguistically but also conceptually, in particular at the household and individual level. The embedding of “nutrition” between “food” and “security” emphasizes that raising levels of nutrition is the ultimate goal.

IFPRI has used the term “Food and Nutrition Security” since the mid-1990s, and UNICEF and FAO have both developed formulations for this term: “Food and nutrition security is achieved when adequate food (quantity, quality, safety, socio-cultural acceptability) is available and accessible for and satisfactorily used and utilized by all individuals at all times to live a healthy and active life.” (UNICEF 2008) and “Food and nutrition security exists when all people at all times have physical, social and economic access to food of sufficient quantity and quality in terms of variety, diversity, nutrient content and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education and care.” [FAO/AGN, November 2011].

The Updated Comprehensive Framework for Action (CFA) released by the UN System High Level Task Force on Global Food Security (HLTF) in September 2010 also uses the term “food and nutrition security”. The CFA opens with the following text, which associates the 1996 World Food Summit definition with the term “food and nutrition security”: “... Food and nutrition security: food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Food insecurity exists when people do not have adequate physical, social or economic access to food as defined above. Food security therefore covers availability, access, utilization and stability issues, and – because of its focus on the attributes of individuals – also embraces their energy, protein and nutrient needs for life, activity, pregnancy, growth and long-term capabilities.”

The 6th Report on the World Nutrition Situation (2010) by SCN with the endorsement of FAO, WFP, WHO and UNICEF, contains a chapter on “Sustainable Food and Nutrition Security” which deliberately uses the term “food and nutrition security” throughout because of the importance attached to achieving nutrition security. WFP uses the term “food and nutrition security” throughout its Nutrition Policy (2012) and Strategic Plan (2008-2013) while the International Conference on Nutrition plus 21 (ICN+21) being organized by FAO and WHO in 2013 will also use this term.

In summary, measurement of food security has focused on availability, stability, access and utilization of food at the global, regional and national level. Doing so has revealed a variety of transient, chronic and seasonal deficits in total energy intake per capita, and guided a range of interventions to fill these gaps. Over time, measurement of nutrition security has focused on food composition and other influences on food utilization that operate at the household and individual levels, often with differential effects on vulnerable subsets of the population, including especially the distinctive needs of young

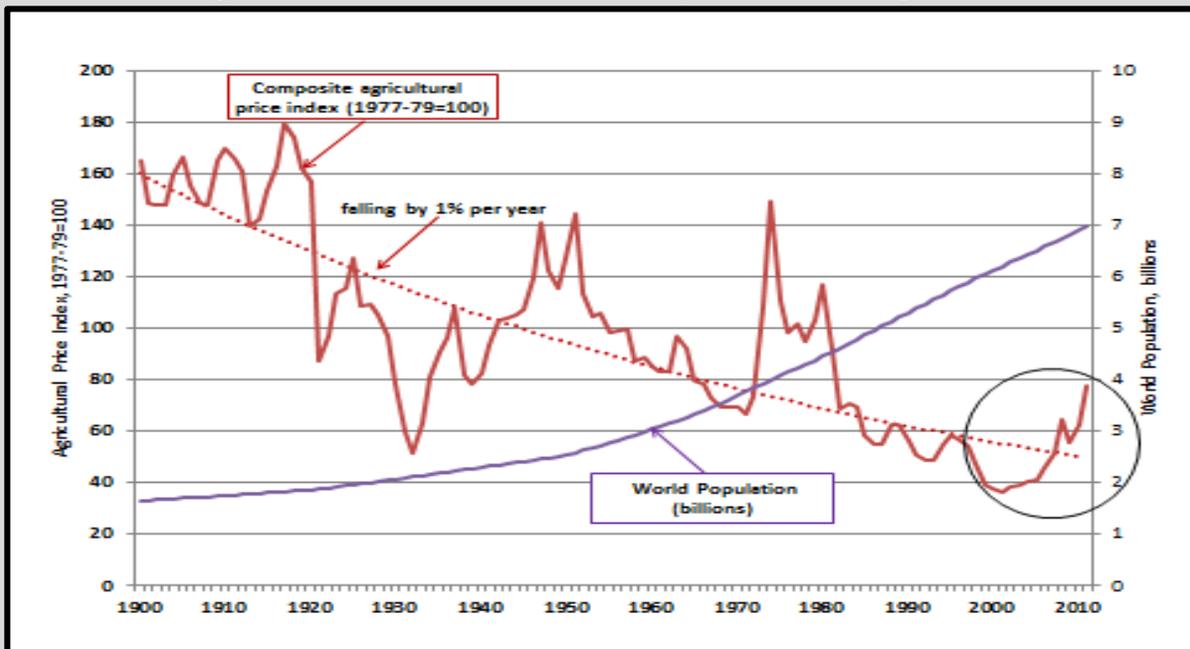
women, infants and children, and the role of nondietary factors such as sanitation and disease. The combined effect of food and nutrition security can be measured by a variety of anthropometric measures (especially heights, weights, and arm circumference), plus various measures of nutrient quality and behaviour (especially dietary diversity, exclusive breastfeeding and disease control) and biomarkers of nutritional status (e.g. for anaemia and micronutrient deficiencies), each of which must be reported at times and places when deficiencies have the greatest impact on lifelong health, learning and human development. No single set of measures can capture all dimensions of food and nutrition security, but increasingly precise and timely data on a short list of variables can help guide policymakers towards more effective interventions.

Source: Adapted from Committee on World Food Security (2012).

Box 4: Trends, Fluctuations and Regional Variation in Food and Nutrition Security

The good news is that global food security, as defined in Box 3, improved markedly over the 20th century. By the turn of the millennium, the prevalence of famine, hunger and undernourishment was lower than at any previous time in human history. Like other storable commodities, food typically has brief price spikes followed by longer valleys of relative abundance around their long-term trends. Three major periods of shortage had been experienced during the 20th century, around each world war and then in 1973-78, after which prices continued their gradual fall. In the three decades after 1978, real prices remained low and stable while global population more than tripled and most peoples' real income rose sharply. This continued a long-term trend decline in the relative cost of food that was driven by agricultural innovation and sustained growth in area planted, crop yields and productivity. With low food prices and rising incomes, total per capita food intake increased steadily around the world, and diet diversity improved as households acquired increasingly desirable foods.

Box Chart: Real Agricultural Prices Have Fallen Since 1900, Even as World Population Growth Accelerated



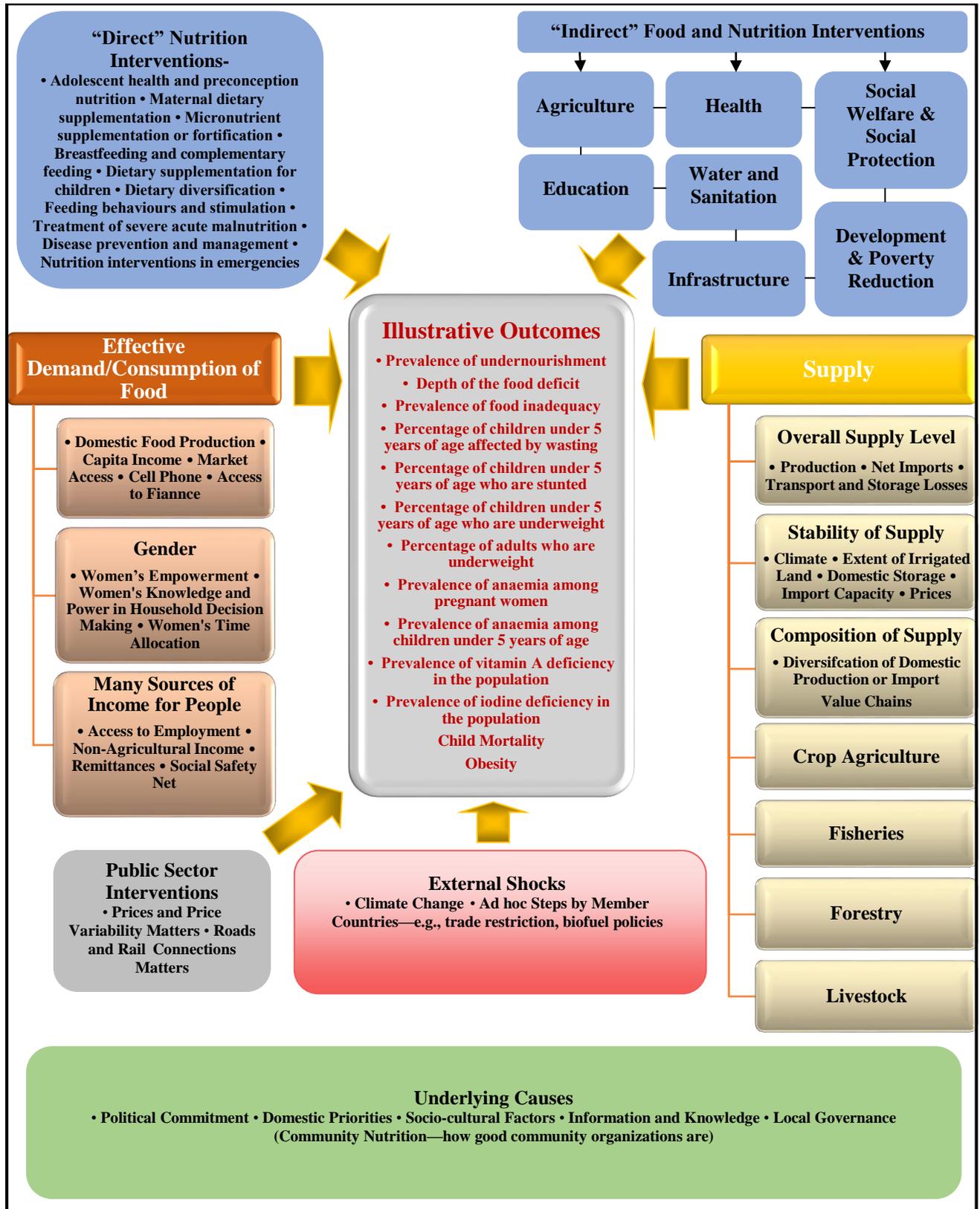
Source: Fuglie and Wang (2012).

As shown above, the 20th century trend towards greater abundance was interrupted in 2008-10 by a sharp rise in world food prices. The price increase was roughly similar in magnitude to earlier food crises, sparking a surge in both private investment and public services to increase production. As of late 2014, world prices appear to have fallen back towards their long-term trend, facilitating improvements in diet quality.

An annex of more detailed charts reveals significant but uneven progress. Diets remain poor in South Asia and Sub-Saharan Africa, and 805 million people remain undernourished by the standard FAO measure. As Lawrence Haddad of IFPRI notes in a recent blog post, at current rates of improvement it would take 80 years to achieve zero hunger. The charts reveals large changes over time in the depth and location of food insecurity, which is closely related to extreme poverty (Figures 1 and 2.1 - 2.3). These

data correspond roughly but not exactly to nutritional status and health outcomes, as measured by underweight and mortality among infants, children and their mothers (Figures 3, 4, 5 and 6). Most notably, South Asia and especially India has relatively poor maternal and child health given its income growth. That “Indian enigma” has attracted widespread attention in recent years, and may be closely linked to a history of gender discrimination, poor sanitation and other factors. Despite these regional differences and time lags, Will Masters and others have shown very widespread improvements in anthropometric and dietary measures of nutrition security as documented by DHS surveys and other sources. There have been significant improvements in child heights and weights, with reductions in maternal under nutrition that are increasingly offset by the health risks associated with overconsumption and obesity. As these data reveal, the difficulty of separating trends from fluctuations, and the need for careful disaggregation by regional and population group, demonstrate the need for continued improvements in data collection and analysis.

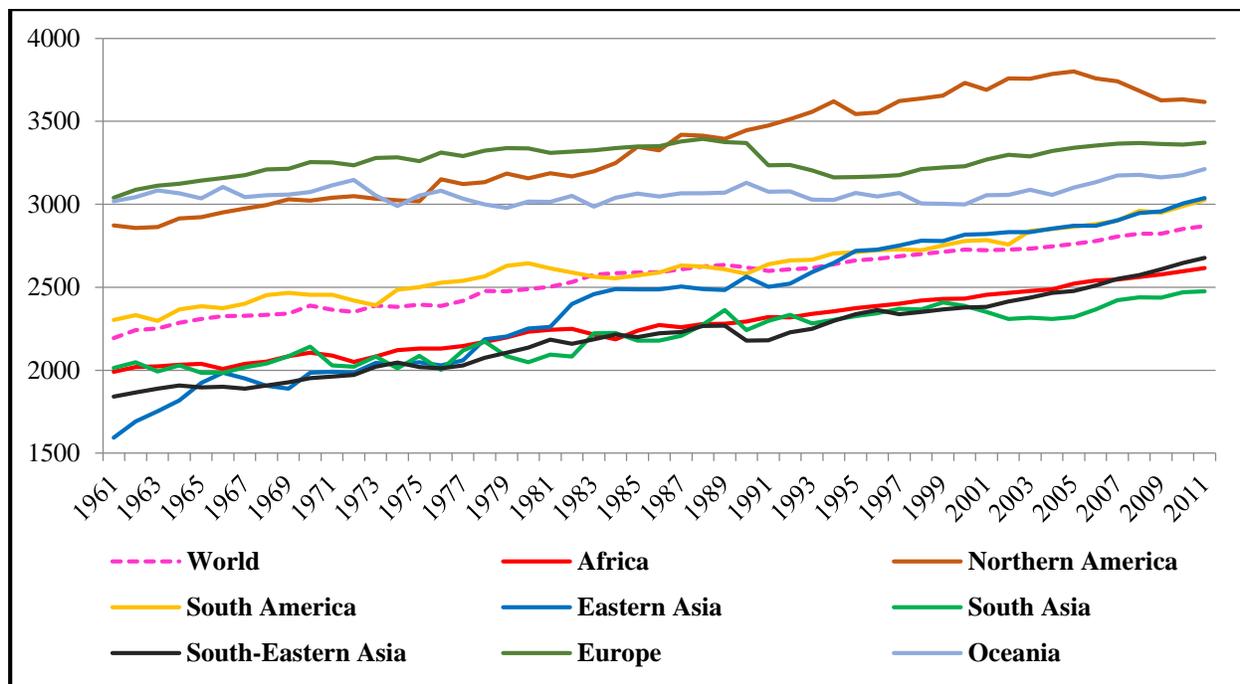
Box 5: Towards A Consolidated Theory of Change for Food and Nutrition Security



Source: Lele and Goswami (forthcoming).

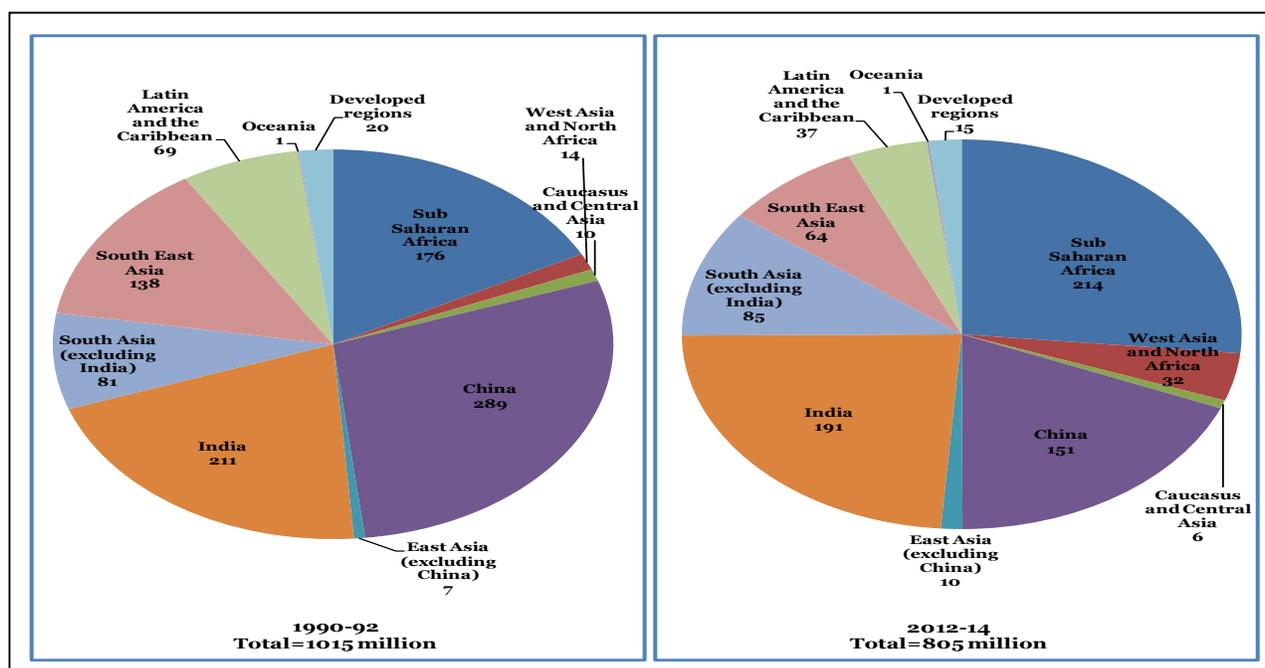
Figures 1-6: Selected Indicators of Food and Nutrition Security

Figure 1: Total Food Supply by Region (Crops Primary Equivalent + Livestock and Fish Primary Equivalent) (kcal/capita/day) (1961-2011)



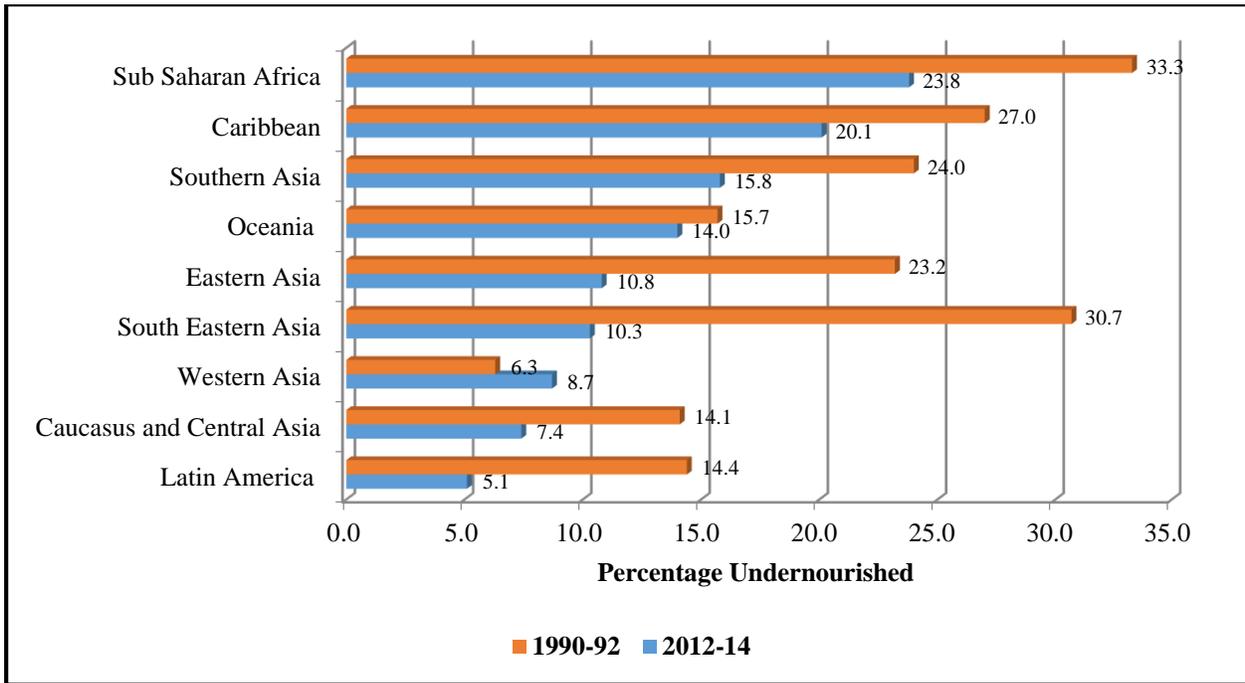
Source: Lele, Agarwal and Goswami; based on FAOSTAT data.

Figure 2.1: Number of Undernourished by Region, 1990-92 and 2012-14



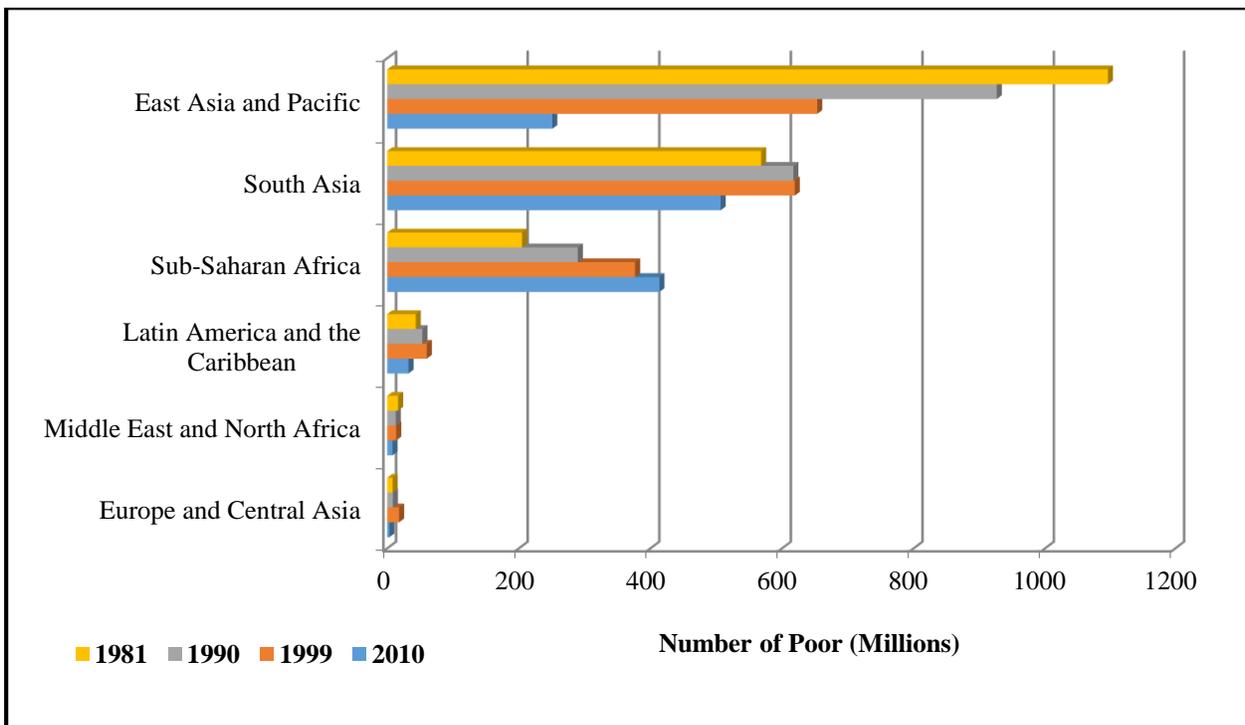
Source: Lele, Agarwal and Goswami, based on FAO Hunger Portal Data.

Figure 2.2: Percentage of Undernourished by Region (1990-92 & 2012-14): Progress towards Meeting the MDG Target across Regions



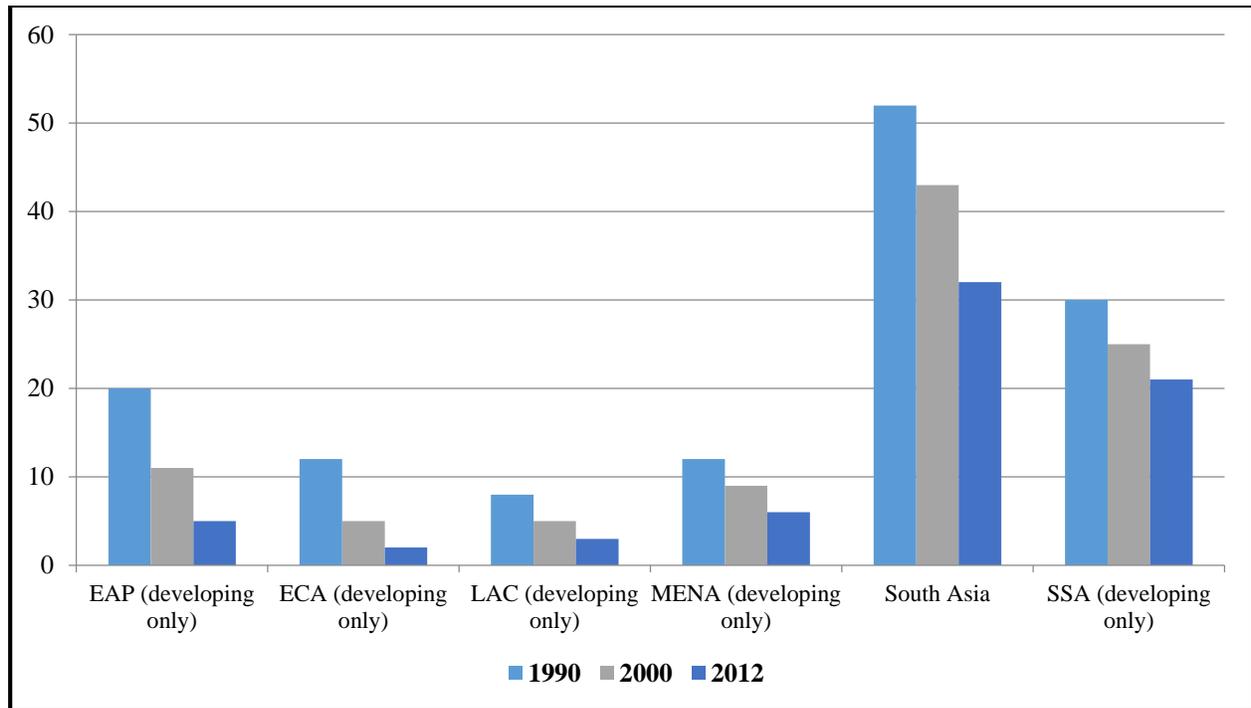
Source: Lele, Agarwal and Goswami, based on FAO Hunger Portal Data.

Figure 2.3: Number of Poor (Millions) by Region (using 2005 PPP and \$1.25/day poverty line) (1981-2010)



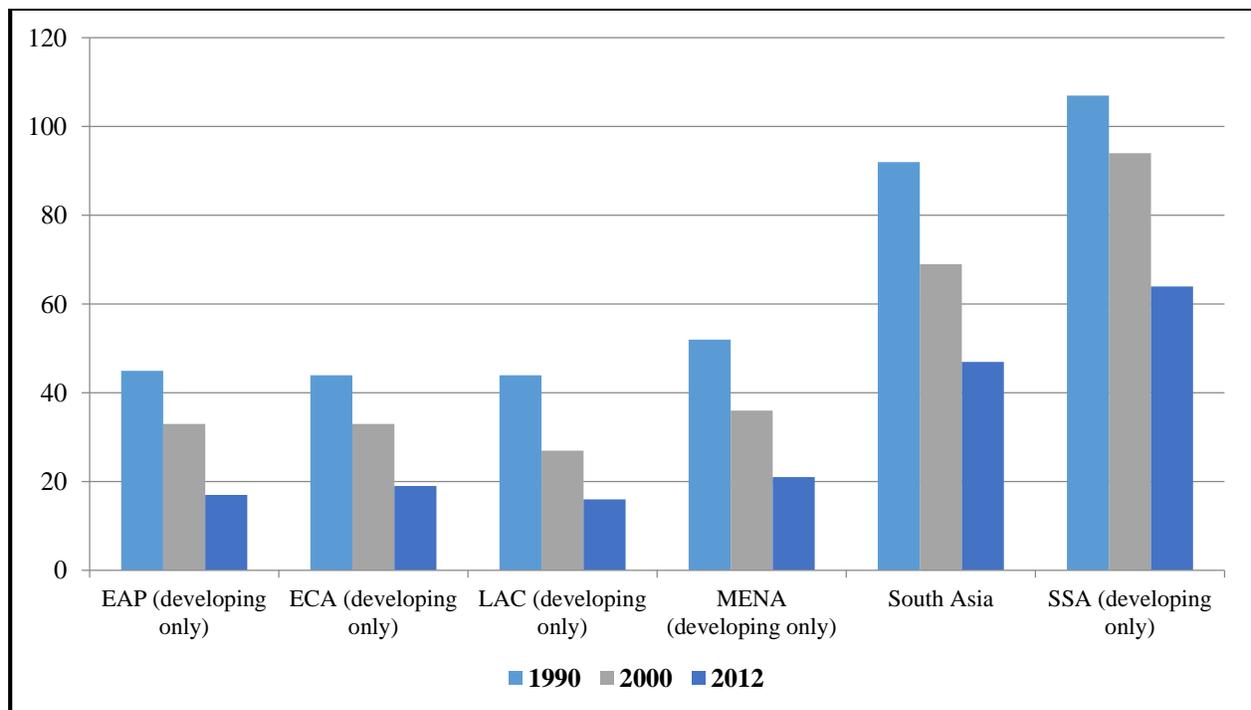
Source: Lele, Agarwal and Goswami, based on PovcalNet, World Bank.

Figure 3: Malnutrition Prevalence, Weight for Age (% of children under 5) by Region (1990-2012)



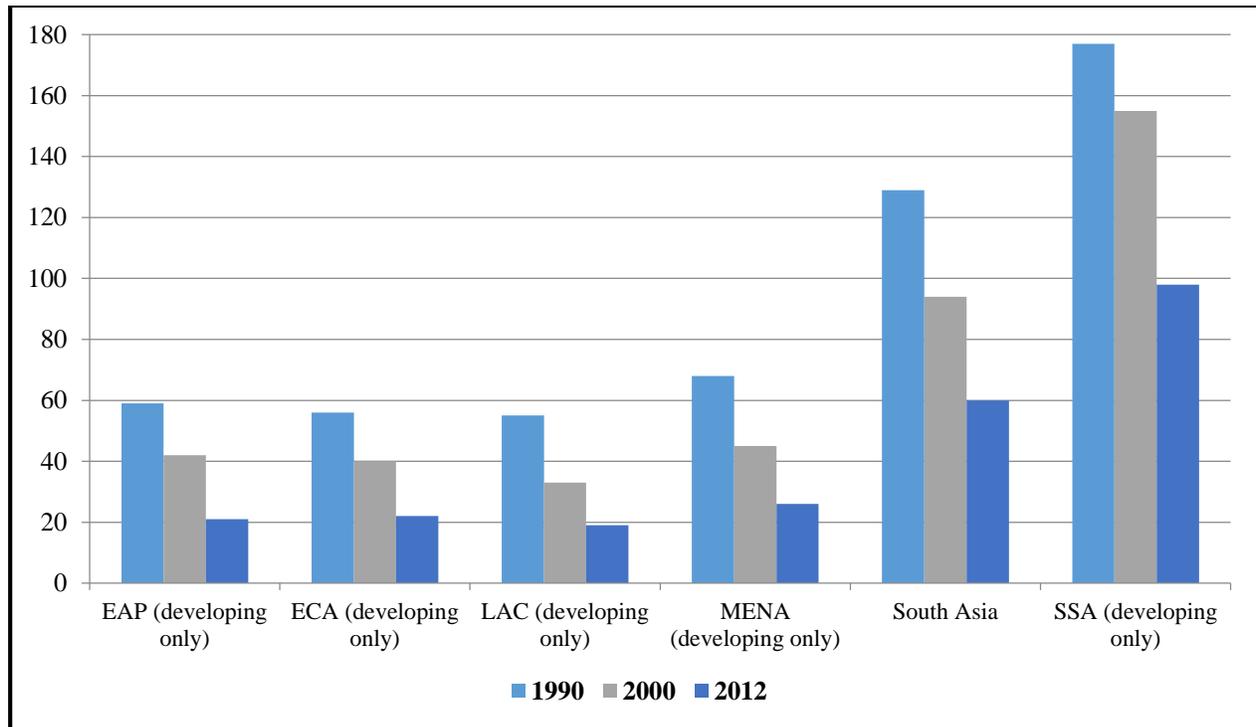
Source: Lele, Agarwal, and Goswami, based on WorldData Bank, World Development Indicators, World Bank.

Figure 4: Mortality Rate, Infant (per 1,000 live births) by Region (1990-2012)



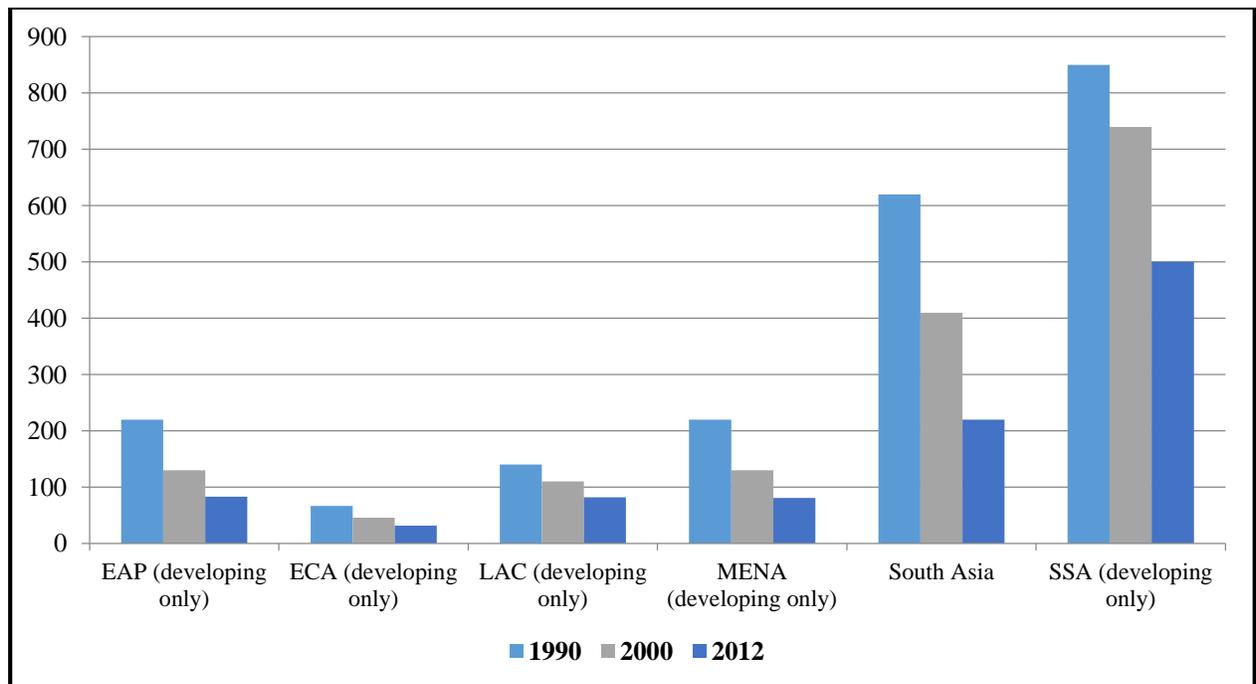
Source: Lele, Agarwal, and Goswami, based on WorldData Bank, World Development Indicators, World Bank.

Figure 5: Mortality Rate, Under-5 (per 1,000 live births) by Region (1990-2012)



Source: Lele, Agarwal, and Goswami, based on WorldData Bank, World Development Indicators, World Bank.

Figure 6: Maternal Mortality Ratio (modelled estimate, per 100,000 live births) by Region (1990-2012)



Source: Lele, Agarwal, and Goswami, based on WorldData Bank, World Development Indicators, World Bank.

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Annex 1: Terms of Reference for the TWG Chair and Co-chair (July 2014)

Terms of Reference

Chair of the Technical Working Group on Measuring Food and Nutrition Security

Background

Food security and nutrition are concepts that have been extensively debated and defined across different professional communities of practice. Consensus exists around the idea that a proper understanding of these concepts requires integration among different dimensions of food security and nutrition. However, a lively and long-standing debate surrounds the concept as well as appropriate measurement methodologies of both food security and nutrition. A technical working group will be constituted to improve clarity and provide methodological guidance in this field to achieve this objective, the Technical Working Group with the support of the Food Security Information Network (FSIN) secretariat will:

- identify the stakeholders for the various measures of food security and nutrition;
- take stock of the recent technical literature on the topic, review work such as that undertaken by several institutions including FAO, IFPRI, WFP, the World Bank, CFS, WHO, UNICEF, and other relevant institutions including civil society's international and domestic counterparts, World Economic Forum, national governments;
- steer and promote a structured technical discussion among experts on the measurement of food and nutrition security and its use in various context and for various purposes;
- assess, validate, and formulate proposals for improving and possibly extending the indicators of food security and nutrition currently employed by the international community including the traditional vs new methods of data collection—role of satellites, cell phones and other local tools;
- organize an expert consultation on the measurement of food and nutrition security, bringing together experts from the Technical Working Group and a wide variety of relevant international regional, national organizations and academic institutions;
- produce, based on the expert consultation and other contributions, a main action-oriented paper, which will:

- take stock, review and organize the literature on the measurement of food and nutrition security along its different dimensions including relationships with poverty, food production and food access;
- take stock and review available data that can be used to measure food and nutrition security along its different dimensions;
- based on the stock taking, identify best practices and provide practical indications on how to measure and monitor food and nutrition security at sub-national, national, regional and global level.
- Address issues of the role of information among all stakeholders—what do they know about food and nutrition security and the sources of insecurity, how to achieve it, and measure it, the roles of different stakeholders in that process.

Tasks

In consultation with the Director of the FAO Statistics Division, the Deputy Director of the same Division, the leader of the Food Security and Social statistics team, and other relevant parties of the FSIN, and in collaboration with the Co-Chair, the incumbent will act as Chair of the Technical Working Group. In particular, the incumbent will:

- Develop a concept note highlighting the conceptual starting points of the Technical Working Group, discuss it and finalize it with the Co-Chair, taking into account the initial note prepared by the FSIN on the Technical Working Group.
- In consultation with the Co-chair, identify a group of high level experts to be invited to join the Technical Working Group; discuss and assign them roles and responsibilities in the group; if appropriate experts and the respective tasks can be clustered around certain specific topics.
- Chair the virtual and physical meetings of the Technical Working Group.
- In consultation with the Co-chair, identify papers to be drafted, presented and discussed at the expert consultation to be held in 2014.
- Contribute to conceive the expert consultation.
- Based on the contributions in the expert consultation and in collaboration with the Co-chair, edit a high level paper that:

- reflects consensus achieved among experts participating in the group, with a view of constituting an international reference in the technical literature;
 - highlights advantages and limitations of existing indicators and proposes new indicators (as appropriate) and/or innovative tools for measuring these indicators to more effectively inform decision making;
 - includes practical recommendations and suggestions for computing indicators, taking into account theoretical perspectives, data availability, limitations, cost considerations, and institutional viability and capacity of developing countries for collecting indicators.
- Present and discuss the results of the work of the Technical Working Group in a high-level event to be organized in 2015.

Terms of Reference

Co-Chair of the Technical Working Group on Measuring Food and Nutrition Security

Background

Food security and nutrition are concepts that have been extensively debated and defined across different professional communities of practice. Consensus exists around the idea that a proper understanding of these concepts requires integration among different dimensions of food security and nutrition. However, a lively and long-standing debate surrounds the concept as well as appropriate measurement methodologies of both food security and nutrition. A technical working group will be constituted to improve clarity and provide methodological guidance in this field. To achieve this objective, the Technical Working Group with the support of the Food Security Information Network (FSIN) secretariat will:

- identify the stakeholders for the various measures of food security and nutrition;
- take stock of the recent technical literature on the topic, review work such as that undertaken by several institutions including FAO, IFPRI, WFP, the World Bank, CFS, WHO, UNICEF, and other relevant institutions including civil society's international and domestic counterparts, World Economic Forum, national governments;
- steer and promote a structured technical discussion among experts on the measurement of food and nutrition security and its use in various context and for various purposes;
- assess, validate, and formulate proposals for improving and possibly extending the indicators of food security and nutrition currently employed by the international community including the traditional vs new methods of data collection—role of satellites, cell phones and other local tools;
- organize an expert consultation on the measurement of food and nutrition security, bringing together experts from the Technical Working Group and a wide variety of relevant international regional, national organizations and academic institutions;
- produce, based on the expert consultation and other contributions, a main action-oriented paper, which will:

- take stock, review and organize the literature on the measurement of food and nutrition security along its different dimensions including relationships with poverty, food production and food access;
- take stock and review available data that can be used to measure food and nutrition security along its different dimensions;
- based on the stock taking, identify best practices and provide practical indications on how to measure and monitor food and nutrition security at sub-national, national, regional and global level.
- Address issues of the role of information among all stakeholders—what do they know about food and nutrition security and the sources of insecurity, how to achieve it, and measure it, the roles of different stakeholders in that process.

Tasks

In consultation with the Director of the FAO Statistics Division, the Deputy Director of the same Division, the leader of the Food Security and Social statistics team and relevant parties in FAO, WFP, IFPRI, and in collaboration with the Chair, the incumbent will act as Co-chair of the Technical Working Group. In particular, the incumbent will:

- Provide feedback on concept note of the Technical Working Group and develop a program of work in consultation with the Chair.
- Collaborate with the Chair in identifying a group of high level experts to be invited to join the group; discuss and jointly with the chair assign them roles and responsibilities in the group; if appropriate experts and the respective tasks can be clustered around certain specific topics.
- In consultation with the Chair, identify papers to be drafted, presented and discussed at the expert consultation to be held in 2014.
- When the preparation of papers for the expert consultation is advanced, facilitate an online discussion, primarily the responsibility of the co-chair, opened to participation of a wide stakeholders group. Existing platforms - such as the Food Security and Nutrition Forum hosted at FAO – could be used to pose questions and invite comments from experts, scholars, professionals, international executives and other interested parties.
- Conceive and organize the expert consultation, in consultation with the Chair.

- Based on the contributions in the expert consultation and in collaboration with the Co-Chair, prepare the first draft of the a high level paper for comments by Chair, and then by others, that:
 - reflects consensus achieved among experts participating in the group, with a view of constituting an international reference in the technical literature;
 - highlights limitations of existing indicators and proposes innovative tools that can effectively inform decision making;
 - includes practical recommendations and suggestions for computing indicators, taking into account theoretical perspectives, data availability, limitations, cost considerations, and institutional viability and capacity of developing countries for and of collecting indicators.
- Jointly with Chair, present and discuss the results of the work of the Technical Working Group in a high-level event to be organized in 2015.

Annex 2: Proposed Draft Timeline of TWG Activities

(Tentative and subject to change)

Activity	Completion Date
Completion of TORs for Chair and Co-Chair	Oct. 15, 2014
Submission of Proposal for ICAE Meetings in Milan	Nov. 5, 2014
Completion of Draft Concept Paper	Dec. 10, 2014
Submission of Proposal for Cornell Global Food Security Conf.	Dec. 31, 2014
Circulation and Discussion with FSIN Stakeholders	Dec.-Jan., '14-15
Completion of TWG and Advisory Group Membership and TORs	Jan. 10, 2015
Completion of Initial Draft Inventory of Measures, Data Sources and Uses	Mar. 1, 2015
Launch of Stakeholder Survey on Inventory of Measures, Sources & Uses	Mar. 15, 2015
Completion of Revised Inventory Based on Stakeholder Survey Results	May 1, 2015
TWG Workshop with FSIN Leadership (Rome)	May 8 or 11, 2015
Completion of First Proposed Dashboard + User's Guide	June 20, 2015
TWG + Advisory Group Workshop with FSIN Stakeholders (Rome)	June 26 or 30, '15
Launch of Stakeholder Survey on Dashboard + User's Guide	July 1, 2015
Completion of Revised Dashboard + User's Guide	Aug 1, 2015
Presentation of Dashboard + User's Guide at IAAE Conference (Milan)	Aug. 8-14, 2015
Presentation of Dashboard + User's Guide at GFS Conference (Cornell)	Oct 10-13, 2015
Submission of Final TWG Report	Dec., 2015

Annex 3: Abstracts of Proposals for ICAE in Milan, 8-14 August 2015

Abstract of Contribution 246

ID: 246

Organized Symposia

Regional Classification: World

Primary Topics: Food & Agricultural Policy Analysis, Food Safety & Nutrition, International Development

JEL Codes: I32 Health, Education and Welfare: Measurement and Analysis of Poverty, Q18 Agricultural Policy; Food Policy, C81 Methodology for Collecting, Estimating, and Organizing Microeconomic Data, Data Access

Measuring Food and Nutrition Security: Results of the FSIN Technical Working Group

Chair(s): **William Alan Masters (Tufts University), Uma Lele (Independent Scholar)**

In this Organized Symposium session, members of the FSIN Technical Working Group (TWG) on Measuring Food and Nutrition Security will present their results to date. A later innovative session at these meetings will allow IAAE members to critique the TWG results in regional and thematic focus groups, and a post-conference workshop will permit participants to gain hands-on practice using the TWG's proposed new nutrition security measures. The TWG was formed in November 2014, to help improve the FAO and WFP ongoing measurement of undernourishment and food insecurity. Key findings include the need for measures focusing on nutritionally vulnerable groups (e.g. a "maternal nutrition index" and a "nutritional variation index") as well as dietary composition (e.g. a "cost of dietary diversity index" and several kinds of diet quality indexes). The symposium will begin with a retrospective description of trends in food security measurement, followed by the TWG's proposals for change.

Presentations of the Symposium

Forty Years of Food Security Measurement: Achievements and Limitations

Uma Lele (Independent Scholar)

This paper describes the origins and limitations of today's global food security measurement system, starting with the series of international conferences that followed the world food crisis of the 1970s. At that time, global scarcity and high prices for staple foods triggered a successful effort to increase global production and reduce world market prices. Only some regions benefited from this green revolution, however, and in the 1990s a new wave of food security measurement focused on national, sub-national and seasonal fluctuations in regions that still experienced food scarcity. Finally, when the 2008-10 food price crisis sparked a third wave of measurement efforts, the focus was on more subtle aspects of diet composition and nutritional status, especially for maternal and child health and prevention of chronic disease.

Measuring Food and Nutrition Security: The Road Ahead

William A. Masters (Tufts University)

This presentation will summarize proposals from the FSIN Technical Working Group (TWG) on Measuring Food and Nutrition Security, calling for a menu of new measures designed to guide and inform agricultural and food policy in the coming decades. These measures build on the regionally-disaggregated measures of malnutrition developed in recent years, and extend them to focus on nutritionally vulnerable groups, particularly women of childbearing age in a proposed maternal nutrition index, as well as groups vulnerable to seasonal fluctuations in a proposed nutritional variation index. The TWG also calls for a focus on dietary composition, by measuring the cost of dietary diversity index and several kinds of diet quality indexes.

Abstract of Contribution 247

ID: 247

Innovative Proposal

Keywords: food security, nutrition security, international development

Measuring Food & Nutrition Security: Brainstorm Critique of the FSIN Technical Working Group Proposals

William Alan Masters

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This innovative session will consist of thematic focus groups by which IAAE members can work closely with FSIN Technical Working Group members to critique and improve their proposals for new measures of food and nutrition security around the world. At the start of the session, participants will self-select by interest area into groups of 4-8 individuals. Each group will be joined by a member of the TWG, prompting the group to identify strengths and weaknesses of existing and proposed new measures, for reporting back to the other participants at the end of this session. The group as a whole will be asked to rank these critiques, for the purpose of identifying key gaps and limitations to be addressed after this meeting.

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Measuring Food & Nutrition Security: Hands-On Trial of the FSIN Technical Working Group Proposals

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This half-day workshop will offer IAAE members the opportunity to work with pilot data to compare existing and new indicators proposed by the FSIN Technical Working Group on Food and Nutrition Security. This group's findings include a dashboard of measurement tools regarding the nutritional status of at-risk groups such as women of child-bearing age and young children, the vulnerability of populations in terms of variation over time and across space, the cost of diet diversity and various measures of diet quality in terms of nutrient density and other risk factors for chronic disease. Participants in the workshop will receive a spreadsheet with pilot data, and be invited to construct their own comparisons of differences among countries and change over time. Participants will be asked to rank the usefulness and applicability of each indicator for various purposes, to inform the Technical Working Group's final report.

Annex 4: Extracts from McCalla and Mock (2004) Report

Report of the External Assessment and Strategic Planning Exercise (EASP)

For the Inter-Agency Working Group,
Food Insecurity and Vulnerability Information and Mapping
Systems

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I. Executive Summary (Report, p. viii – xiv)

The goal of this EASP activity is to assist the Interagency Working Group Steering Committee (IAWG-SC) of Food Insecurity and Vulnerability Information and Mapping System (FIVIMS) to reach conclusions regarding the future of the FIVIMS Initiative; more specifically, to assess its achievements to date, its value-added, and its potential roles in the future.

The desired outcome of the process is an Inter-agency agreement on a revisited and updated vision and mandate in support of strengthening food insecurity and vulnerability information and mapping systems, and on recommended strategies and priority activities. This will be accomplished through a careful and critical analysis of strengths, opportunities, weaknesses and constraints of the FIVIMS Initiative to date.

The Charge

The critical elements of the assessment and planning exercise were:

- To assess the extent to which the FIVIMS Initiative has met its original objectives as derived from the 1996 World Food Summit (WFS) and as stated by its guiding principles (see IAWG Guidelines Series No.1).
- To identify strengths, weaknesses and new opportunities for the development and implementation of information systems that measure food insecurity and vulnerability at global, regional and at country levels, through a careful assessment that focuses on key institutional, political, technical and financial dimensions.
- To contribute to a strategic vision to the year 2015, linking it to the longer term goals of the WFS and the Millennium Project, and to help develop a strategic plan for the next five years, defining verifiable objectives, identifying priority areas of work, as well as appropriate institutional arrangements and responsibilities, and resource needs.

The international development community began to engage in the concept of integrated food and nutrition information systems in the mid-1970s, thus, fivims⁶ are not new. Precursor initiatives included nutritional surveillance, the Food and Agriculture Organization's Global Information and Early Warning System (FAO's GIEWS), United States Agency for International Development's Famine Early Warning System Network (USAID's FEWS), and World Food Programme's Vulnerability Analysis and Mapping (WFP's VAM) among many others. FIVIMS as an initiative of the WFS, embraced the multi-dimensional nature of food security, recognized

⁶ Throughout we use the term "fivims" to represent national food insecurity and vulnerability information and mapping information systems, regardless of their origin. This usage in no way implies a connection to the FIVIMS Initiative, which was the international initiative spawned by the WFS 1996.

the need for integrated food insecurity and vulnerability information and mapping systems (fivims) at the national and global level, and that interagency collaborative action was required to achieve this. Thus, the value-added component of FIVIMS was to be its emphasis on interagency action as a means to achieving global and national fivims.

Framework for Analysis

The development of a conceptual framework and methodology for this ESAP activity presented a challenge for a number of reasons. First, the FIVIMS Initiative was not clearly articulated from the start. It did not have a strategic framework and operational plan at its inception nor did it have a single set of agreed upon, clear objectives. Instead, the objectives varied across the different components of FIVIMS and also changed over time. Thirdly, the FIVIMS Initiative's boundaries compared with other related initiatives were not clearly defined. These IAWG member activities often were planned and executed independently of FIVIMS or in many cases they predated FIVIMS. This created difficulties in enumerating the specific achievements of FIVIMS. The EASP's charge was to be forward looking: to reach a judgment about whether FIVIMS was worth continuing, and to gather information that will assist the Steering Committee in charting the way forward, should this be deemed appropriate.

The FIVIMS Initiative is comprised of the FIVIMS Interagency Program (FIP), the IAWG and its Secretariat, as well as activities undertaken by FAO under the banner of FIVIMS. The objectives of FIVIMS have changed over time, but broadly included:

- Generating and disseminating commonly endorsed/adopted standards of practice, methods and tools relating to food insecurity and vulnerability frameworks;
- Improving interagency coordination of inputs in the field;
- Planning and implementing a system of linked and commonly accessible international databases comprising global FIVIMS;
- Improving information on the number of undernourished;
- Increasing advocacy for food security within member agencies;
- Strengthening/creating country fivims;
- Mainstreaming fivims into United Nations Development Assistance Framework/ Common Country Assessment (UNDAF/CCA) and Poverty Reduction Strategy Paper (PRSP) processes

The evaluation framework that we adopted is consistent with Organization for Economic Cooperation and Development/ Development Assistance Committee (OECD/DAC) framework in that we examine the **relevance** and **effectiveness** of the FIVIMS Initiative by examining its interventions and their outcomes. The assessment attempts to look at the outcome or impact level measures (that is, effects on decision-making to address food security) where possible, though the evidence base for these effects is relatively soft and attribution to FIVIMS is even more challenging. However, EASP believe that the strategic planning exercise must be based on an analysis of the effectiveness of food security information systems initiatives on policies and programs.

In the conceptual framework, national, regional, and global fivims are considered outputs because they are not an endpoint in themselves, but rather a means to achieve improved food security decision-making. Output level analysis focuses on determining if fivims were actually implemented at the global and national level (coverage); whether goods and services produced by fivims were of sufficient quality for their users; and whether there is evidence that these fivims are being institutionalized.

The evaluation used multi-method assessment techniques including document and Website review, semi-structured interviews, e-mail surveys and field visits to nine field sites in Latin America, Asia and Africa.

EASP Evaluation

The EASP evaluation looks at relevance and effectiveness at the national and global level, it then analyses factors that influenced the effectiveness of FIVIMS.

The relevance of national fivims is high. Even though the WFS did not engender significant support as an initiative outside of FAO, a number of new initiatives/trends are driving increasing field demand for integrated geospatial information initiatives. These include the global drive for results-based management, increasing recognition by donors of the serious deficiencies of food security data for decision-making at the macro and micro levels, and the PRSP, UNDAF/CCA and Millennium Development initiatives. These developments make fivims-type activities more relevant now than when FIVIMS was launched in 1997.

Implementation of national fivims has increased since 1997 with fivims more commonly found in food insecure countries than more food secure countries. Using data from FAO's monitoring system, the EASP team determined that 18 new countries created fivims between 1999 and 2002, for example. Growth in fivims was more rapid in Latin America and Asia than in Africa. Vulnerable group analysis was more prevalent and increased with greater frequency than did fivims.

However, fivims effectiveness in terms of impact on decision-making and food security was disappointing. Except in the case of crisis mitigation/response and safety net programming in Cape Verde, the team could not find a discernible effect of fivims activity on specific actions related to PRSPs, UNDAF/CCA or significant food security-oriented policies/programs. Neither was there clear evidence that fivims were being institutionalized in country. Specific case studies and field interviews suggest that institutionalization has been problematic with no cases found to be clearly sustainable in the medium/long term. The lack of institutionalization appears to be due to two types of factors, those related to demand for food security information and the fragmented nature of funding in support of these initiatives. Country projects often were funded at levels at or less than US\$100,000 per year. Initial investments for capacity development were often insufficient or resources poorly coordinated among donors. Where governments had taken charge of strategic planning and coordination of fivims, resource utilization/donor coordination was much more positive.

At the global level, while the fivims concept may even be more relevant than before, the organizational structure of FIVIMS was not relevant as there was not a clear structure and strategic framework for FIVIMS. It drew on traditional UN models of interagency work, which often have not been successful in engaging agencies within and outside the UN/Bretton Woods institutions in collaborative work.

As a result, the effectiveness of FIVIMS in achieving its implicit objectives and making impacts on decision-making was low. FIVIMS has initiated a number of interesting activities related to the development of normative guidance for measuring food insecurity and vulnerability; development of software for a vertically and horizontally integrated fivims data base management and mapping system; development of methodologies for poverty mapping; establishing consensus on indicators and definitions; synthesizing lessons learned for linking data to decisions; synthesizing lessons learned for institutionalizing fivims; developing a framework for fivims strategic planning; developing and disseminating tools for country/regional fivims; undertaking studies of the use of prominence of food security information/analysis in PRSPs and UNDAF/CCA and the institution of the State of Food Insecurity in the World (SOFI) annual report. Aside from the SOFI report and the FIVIMS Guidelines document, most of these activities were not completed nor was their utility to clients ever assessed. FIVIMS is generally viewed by the food security professional community outside FAO as an initiative that did not work, except for some out-posted food security professionals, who appreciated the limited networking aspects of FIVIMS.

The EASP team concluded that a number of factors explain the relative lack of effectiveness of global FIVIMS. Most of these stem from the fact that the initial work required to secure organizational support for FIVIMS was never undertaken. From the start, FIVIMS was

implemented in an ad hoc fashion without a dedicated budget and strategic plan. While FAO invested modest resources in support of a Secretariat, there were few resources allocated to FIVIMS by other organizations. FAO raised significant resources to implement FIVIMS activities but these were planned and implemented by FAO rather than the IAWG. The Secretariat ultimately became an implementing unit in and for FAO. Thus the Interagency component of FIVIMS never really worked and the situation was exacerbated because no other Agencies contributed significant resources, leaving FAO as the dominant source of resources.

The Way Forward

The EASP team recommends that the way forward be guided by a vision of the key outcomes desired as the result of FIVIMS. These include the systematic use of fivims information for policy and program strategy formulation and implementation, especially for key contemporary initiatives such as the PRSP process, the Millennium Development program, and the UNDAF/CCA process; and the institutionalization of food security information and mapping/geospatial analysis in countries and regions. Planning, monitoring and evaluating FIVIMS against achievement of these outcomes is likely to improve the effectiveness of future FIVIMS activity.

A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis suggested the following:

Key strengths relate to:

- normative guidance: initial progress towards building consensus on food security indicators, progress in linking vulnerability assessment and poverty mapping methods; prototype toolkits and training tools for field practitioners;
- interagency collaboration: it has functioned as a useful professional association and provides a potential tool for creating synergies among agencies in the support of country fivims;
- country fivims: development of a strategic planning framework and process for developing fivims; development of models/approaches for capacity building;
- global fivims data base: potential vertical integration of FAO software tools to provide Internet and CD ROM access to fivims information at all levels, including global, regional, national, sub national and local;
- regional fivims: facilitate regional analysis of food security, organization, regional professional networks.

Weaknesses were:

- lack of interagency ownership: FIVIMS is universally seen as an FAO initiative and interagency participation is based on individual rather than institutional commitment;
- lack of resources for interagency initiatives: only FAO has invested in FIVIMS and FAO has unilaterally raised and managed resources from donors for FIVIMS;
- lack of focus of resources at the interagency level and within FAO: the agenda of FIVIMS was never clearly identified and its management was highly fragmented.

Opportunities include:

- increasing profile of inter-sectoral and interagency initiatives such as the PRSP, the Millennium Project, UNDAF/CCA;
- emergent promising models of collaboration such as Global Alliance for Improved Nutrition (GAIN) and other alliances;
- recent evidence that interagency collaboration is beginning to emerge in the field;
- countries where new opportunities exist for collaboration because of multi-agency presence (Kenya, Uganda, Mozambique, Malawi, Zambia, Burkina Faso, Eritrea, Nicaragua, Central America, Thailand) or new interest of countries to multisectoral approaches to poverty reduction and food security (Brazil, Rwanda, Afghanistan).

Threats include:

- FIVIMS's current image as an effort that never really materialized as an effective global activity;
- new competitors such as the Hunger Task Force, the reinvented United Nations Administrative Committee on Coordination/ Standing Committee on Nutrition (ACC/SCN), and the Famine Early Warning Systems Network (FEWS NET) expansion;
- redefinition of food security outside of the traditional sectors of agriculture and health;
- lack of inter-ministerial collaboration in many countries.

Taking account these factors, the EASP team recommends that during a transitional period, FIVIMS complete, to the extent possible, key promising initiatives, including:

- normative guidance on the measurement and analysis of food security indicators;
- normative guidance on vulnerability assessment methods;
- global data management/mapping system;
- capacity building tool kit and strategy.

The team also recommends that three distinct scenarios be considered for FIVIMS longer term future, including:

- dismantling FIVIMS given its very incomplete list of accomplishments and lack of interagency effectiveness;
- disbanding the interagency component of FIVIMS and recognizing FAO as the lead agency;
- recasting of the interagency component around a specific, mutually identified and supported agenda.

The team suggests that there are a number of potential agenda items for the future, but it also recommends that the agenda should be worked out by interested parties who will represent key stakeholders in the next phase of FIVIMS if there is one. Suggested agenda items for consideration include:

- establishing a “community of practice” for food security/poverty assessment/analysis for decision-making;
- research on the impact of globalization on food security;
- continued analysis of the relationship between poverty and food insecurity;
- research leading to the clarification of the use of food security indicators, including: anthropometry, the undernourishment indicator, practical indicators that can be measured at the household level;
- tools for linking food security analysis to action;

- tools for food security measurement/indicators;
- practical guidelines for harmonizing vulnerability assessment and poverty mapping to support food aid and development planning;
- tools for designing demand-driven fivims;
- support to regional/country programs for institutional development/capacity-building using a grant fund with built-in conditionalities that require linkage between fivims and PRSPs/Millennium Development Goals (MDGs) and other key programs; require interagency collaboration;
- develop capacity building strategies that engage the higher education sector in the developing world and take advantage of evolving information and communications technology (ICT) for distance delivery and computer assisted training/education.

FIVIMS could greatly benefit from engagement by key organizations in the UN system, academia, the commercial sector and private voluntary organizations. In fact, if the interagency element could be reinvented, a structure that was driven by problem-oriented tasks rather than a generic structure might be more promising. One approach might be to delegate leadership to appropriate agencies based on their capacity and willingness to commit resources – a coalition of the interested and committed. However without prior institutional commitments, including financial support, trying to reinvent an interagency model is unlikely to work.

II. The Way Forward – Where We Want to Go (Report, p. 50 – 52)

The Way Forward

1. Where We Want to Go

In summary, the FIVIMS Initiative spawned a number of promising activities, but has yet to achieve impact at the outcome level. The Initiative’s relevance remains high, but structural factors have constrained its capacity to achieve progress. The next phase of FIVIMS, should there be one, should be driven by impact rather than process. The conceptual framework should begin in the decision-making process to leverage a country’s interest in improving its food security programming. The focus should be in identifying desired impacts, outcomes and outputs that would constitute as successful FIVIMS outcome. As far as possible, these scenarios should be derived from the expressed preferences of key decision makers responsible for food security.

Here the EASP outlines for “**what a successful FIVIMS should achieve**” are as follows:

A. Outcomes:

- Improved food security decision-making:
 - At the global level, the Millennium Project, the G8 famine initiative and other emergent international programs that address poverty, should target food security and utilize a comprehensive paradigm for food security analysis and decision-making;
 - Food security is explicitly and holistically defined and addressed in PRSP. Key here is integrated, action-oriented analysis that provides clear guidance on policy options and their respective consequences and trade-offs;
 - Poverty mapping and monitoring incorporates food security considerations. Clear guidance for policy/program action-maps and spatial analysis that address specific policy issues in a timely way;
 - Early warning and crisis information systems utilize common frameworks for vulnerability assessment (VA), indicators, and needs assessment methods. Generally common frameworks, with enough flexibility to adapt to national and sub-national diversity in underlying causes, constraints, etc.
- Institutionalization of food security information activities in countries/regions:

- Countries coordinate food insecurity information initiatives in country-countries are in charge;
- Food security and poverty information initiatives are carefully coordinated and even merged;
- Local fivims are defined based on their input to decisions relating to major national/sub national programs;
- Countries fund operating costs of fivims.

B. Outputs:

- Scientifically endorsed methods for poverty mapping, defining food security and its measurement;
- Collaborative in-country and regional programs that support country initiatives that define information initiatives that will directly feed in to the PRSP process, UNDAF/CCA, and other programs that address food insecurity;
- “Community of Practice” established. Mechanisms established to facilitate exchange of information among food security information practitioners in order to advance the state of practice, including:
 - a database of practitioners;
 - South-south exchanges through regional meetings and consultant exchanges (for example: Lusophone network);
 - Annual meetings;
 - Internet collaborator and portal set up.

III. Where We Are Now – A SWOT Analysis (Report, p. 52 – 56)

Where We Are Now – A SWOT Analysis

The following sets out a SWOT analysis to guide the strategic planning discussion.

i. Strengths/potential strengths, (with unfortunately much more emphasis on potential):

a. Impact on food security decision-making

To date, except for food crises, there is no evidence that FIVIMS or fivims has had much impact on decision-making related to food security. FIVIMS was responsive to the evolution of significant new programs that address poverty and hunger such as the PRSP process and the UNDAF/CCA. However, here, too, efforts have been very modest. FIVIMS funded a major study of the food security information content of PRSP and UNDAF/CCA. A much more focused effort will be required to move this agenda forward. FIVIMS FIP has supported some research on poverty analysis and mapping in Kenya and Bangladesh, but it is unclear how this fits in to the larger agenda. Other FAO units and other agencies have supported extensive poverty mapping/analysis elsewhere. The coordination has been rather poor among these many other efforts. Pursuit of this coordination as a key outcome to FIVIMS would greatly enhance the relevance of FIVIMS.

b. Consensus on methods for assessing hunger and vulnerability

- The Scientific Symposium: This laid the groundwork for required analysis and the creation of a legitimate forum for consensus building. It could give birth to a “Scientific Forum”, which could have significant impact on the effective selection and use of food security indicators.
- Vulnerability assessment/poverty mapping: FIVIMS has distinguished between vulnerability assessment and poverty mapping as although highly related, there are some notable differences in activities. Vulnerability assessment has become a process driven activity. In this sense it sets up the decision infrastructure and then utilizes data for the allocation of food aid and related programs. Poverty mapping is where the state- of- the- art research is being conducted to apply GIS techniques to more effective identification of the vulnerable. These two aspects of mapping are critical to the long term effectiveness of identifying the food insecure and also identifying appropriate interventions to address food insecurity locally. The emerging work in GIS also will enable FIVIMS to have greater relevance at the sub-national level.

- Toolkit of those methods/frameworks together with training tools: This is greatly needed by field staff and could be supported by a future FIVIMS.

c. Interagency collaboration

- FIVIMS has created a defacto professional association for information and mapping technicians and analysts concerned with food insecurity and vulnerability. The technical field staff view this to be an important function.
- FIVIMS has made little progress in agency support for programs/projects. It is an area of great need and some promising initiatives have been identified such as Mozambique, and other international public/private alliances. The Mozambique experience shows the importance of establishing collaborative strategies that have strong positive incentives for all partners. Agency leadership appears to be context specific.

d. Country fivims

- To date, fivims activities have been too fragmented to have impact. However, an international alliance (FIVIMS) could have considerable impact on achieving sustainable and effective local information initiatives. FIVIMS could especially address the initial strategic planning of fivims in country and could provide a framework for the development of collaborative proposals that would bring more focus to institutional development activities in food security information.

e. Global FIVIMS database

- FIVIMS has created a software package that is evolving towards vertical integration of data management/mapping on an internet platform. This is promising software, however, like other of the FIVIMS initiatives, the Global FIVIMS database initiative has not proceeded sufficiently rapidly to have had an impact in the field. This software is an FAO contribution. The EASP believe that FIVIMS should either focus on the Global Database software or undertake no further work.
- Internet and CD ROM access to global food security information. This also is judged to be useful at the international and regional levels but this activity has only been partially achieved. This activity has been slowed by the slow development of the software.

f. Regional FIVIMS roles Regional analysis of food security problems by regional international and inter-governmental agencies; for example, in the Latin America and Caribbean region.

- Regional initiatives to support specific fivims information models, such as, vulnerability assessment methods in the Sahel or the Southern African VAC.
- Regional initiatives to promote interagency collaboration, such as VAC.
- Regional professional networks should be key FIVIMS partners, such as SISVAN and the Asia Pacific Food and Nutrition Network.

All of these are potentially relevant targets for FIVIMS and the needs will vary from region to region according to regional capacities and the nature of food security problems being addressed.

The Asia FIVIMS interactive Website is fully operational and reflects state of the art tools. It is less clear how it will be used by countries in their fivims activity. However, as the Southern Africa experience suggests, regional vulnerability analysis has considerable value in conjunction with national and subnational analysis. In the LAC region, there has been a clear interest expressed in strengthening regional information and analysis models as a way to better understand food security in the region. In addition, the LAC region already has a regional network that should be a key FIVIMS partner for future strengthening of country fivims and networking in the region. In Southern Africa, the VAC model should be further developed in terms of:

- More in-depth analysis of the methodology requirements for vulnerability assessment in the region, especially with respect to livelihood assessment methods.
- Ways to strengthen the appropriate regional entity for sustained food security analysis and support to countries.

ii. Weaknesses/limitations:

There are at least three major weaknesses of FIVIMS. First, FIVIMS is not “owned” at the interagency level. It is most strongly supported by FAO and is considered, almost universally, as an FAO program, which has limited its ability to attract collaboration and funds. This apparent ownership also limits its credibility as a neutral interagency body on issues such as the endorsement of the hunger measure. The EASP considers that this lack of interagency ownership can be traced back to the very beginning of FIVIMS when it was initiated as a technical data related working group rather than as a high level policy support initiative. It did not have high level **institutional support**, rather it fostered personal intellectual commitment to the concept by agency representatives.

Unilateral financial support from FAO also has had negative effects on the ability of the Secretariat to serve the IAWG. The Secretariat, to survive financially has become a project implementation arm of FAO and as a consequence, this has limited its role as an interagency secretariat.

The second major weakness of FIVIMS is the lack of resources. The EASP view this problem to be the result of a lack of an inter-agency vision, FIVIMS framework and work plan, which in turn has led to an ad hoc implementation plan. The outputs and outcomes produced under the inter-agency FIVIMS aegis are sketchy and fragmented as a result.

Thirdly, the FIVIMS initiative has been very unfocused, both substantively and geographically, which has resulted in limited tangible impacts. The EASP had demonstrated that, while country fivims activities are more frequent in food insecure countries, there is no clear criteria, other than available donor resources, for selection of countries for support/focus. With limited resources, this has led to even less detectable impact than might have been possible with a more focused agenda.

iii. Opportunities

There has been increased international financial support in recent years for inter sectoral programs that address the problems of poverty and food insecurity as major causes of underdevelopment. These include the Millennium Project, the PRSP Process, and the UNDAF/CCA. Therefore, there is both increased demand for FIVIMS-like programs as well as improved chances for potential impact of FIVIMS on food insecurity situations.

In addition, there is now evidence and support for, real interagency collaboration in the field. The Southern Africa drought management, executed with strong UN and NGO collaboration under the umbrella of a regional organization provides some inspiration. New public/private sector initiatives also have become more prominent in the past five years, for example the Global Alliance for Improved Nutrition (GAIN). These newer initiatives, however, are structurally distinct from the old UN Agency model that FIVIMS initially adopted and grow from demand and commitment of resources from key stakeholders.

Finally, since its inception, there has been considerable movement of senior technical staff among key bodies supporting food insecurity and vulnerability information programs, such as USAID/FEWS NET, WFP/VAM and FAO/FIVIMS. This has resulted in an increased willingness to collaborate at the technical level in the field as well as shared understanding of the mission/roles of the three different organizations. Table 10 lists the countries in which these agencies are operating (including the World Bank poverty mapping program). FIVIMS might

want to initially focus on collaborative activities in Kenya, Uganda, Mozambique, Malawi, Zambia, Burkina Faso, and Eritrea and in Latin America, and Nicaragua.

Other opportunities are likely among the food insecure countries that have had changes in leadership or have consistently demonstrated high-level political commitment to poverty reduction and food security such as Brazil, Rwanda, and Afghanistan. These represent opportunities for FIVIMS type country activities, where there will be particularly good potential for having an impact.

iv. Threats

One of the greatest threats that FIVIMS faces is that of its current image and/or lack of recognition within the food security community (beyond the food security community, FIVIMS is relatively unknown). Should a new phase of FIVIMS be pursued, the program will need to show a dramatic and rapid change in performance in order to garner widespread support and respect in the international community. However, there are examples of this type of turnaround when leadership and requisite resources are available.

Another threat is that there are emergent competitors such as the Millennium Program's Hunger Task Force, the re-invented ACC/SCN, and an expanding FEWS NET. FIVIMS will have to demonstrate clear value-added to ensure that these programs become collaborators rather than competitors.

In addition, another threat is that the food security concept is increasingly being redefined programmatically outside the agencies and sectors (agriculture, health, social safety net and rural development) that have traditionally provided it with leadership. As food security is increasingly being equated with markets and poverty, the historical leadership in nutrition and agriculture may no longer be appropriate or marketable to donors. In an open economy world, food availability is no longer necessarily about national agricultural production but rather is focused on international trade, economic growth and comparative advantage. This especially should be taken in to account when defining the organizational structure of a reinvented FIVIMS. The World Trade Organization may now be as relevant a member of the interagency family as FAO, WHO and UNICEF.

Finally, lack of inter-ministerial collaboration at the country level also has contributed to FIVIMS problems. Where countries have made the commitment to both take leadership and to creating the mandate/venue for inter-ministerial collaboration, FIVIMS have made the most progress. However, in most countries, this issue remains a serious constraint.

IV. Options for the Future and Closing Thoughts (Report, 56 – 61)

Options for the Future

At this stage, the EASP proposes three possible scenarios for consideration by the Steering Committee and key stakeholders of FIVIMS.

A. Discontinue FIVIMS. Based on the findings that progress has been very limited to date and that there has been little indication of interagency commitment to FIVIMS, the best policy may be “to cut our losses and fold our tent.” It could be argued at the same time there are newer initiatives that may be able to replace FIVIMS, such as poverty mapping and monitoring. As one interviewee said, “FIVIMS missed its window of opportunity.”

B. Disband the interagency component of FIVIMS and let FAO lead and fully implement FIVIMS. This option would recognize the present reality of FIVIMS. FAO could create an Advisory Committee from other agencies if it wanted to have the involvement of other agencies.

C. Recast the interagency initiative in one of several ways:

- Maintain an interagency professional association in support of FAO/FIVIMS: this model would entail reconfiguring and developing FIP to be a professional association affiliated with FIVIMS and led by FAO. Membership might be individual and agency level and could require dues. This would require relatively modest changes, but it would probably have limited impact on the effectiveness of global, regional and national fivims.
- Re-cast FIVIMS as a smaller group of collaborating agencies (coalition of the committed organizations), initially in order to enable more rapid progress. It could be largely the agencies that have participated to date (UN/Bretton Woods Centric) with the immediate aim to improve the policy and program making of these agencies. Build collaborative fivims and task responsibilities for technical/task leadership initially with the smaller group and expand it when needed to agencies with relevant comparative advantage. (Given the frequency of comments regarding the pros and cons of the Secretariat being in FAO, the EASP concluded that alternatives should be explored. Table 9 lays out some ideas on FAO relationship.) Explore the evolution of former ACC/SCN as possible secretariat, otherwise consider IFAD (neutral) or OECD/DAC (though maintain secretariat office in Rome) to provide legitimacy, neutrality and linkage to PARIS21.
- Another variant, would be to recast the interagency model as an alliance type model (coalition of involved stakeholders), including the private sector, key NGO’s, and policy bodies. This is a more aggressive approach that would be more difficult initially but which might have greater potential for impact. Again, the EASP consider that the entity’s

“secretariat” might be housed in Rome, close to the key UN bodies working on the food security problem.

Table 9: Pros and Cons of Continuing the FIVIMS Secretariat in FAO

Pros	Cons
<ul style="list-style-type: none"> • strong technical assets and cross sectoral expertise • strong commitment to FIVIMS program • good facility/capacity and flexibility to mobilize special (non-regular) funds • strong expertise/commitment to ICT applications 	<ul style="list-style-type: none"> • rigid administrative structure: limited subcontracting capacity; rigid recruitment/HR policies • fragmented organizational structure/turfism • not perceived as collaborative agency • viewed as having a strong sectoral bias and limited intersectoral experience

The EASP suggests a possible initial agenda for the next phase of FIVIMS, regardless of form, could include some or all of the following (with proposed lead agency):

- Developing a “Community of Practice” in food security/poverty assessment;
- Research on the impact of globalization on food security and implications for fivims;
- Continued research on the relationship between poverty and food insecurity;
- Research leading to the clarification of the use of food security indicators, including:
 - i. Anthropometry;
 - ii. the undernourishment indicator;
 - iii. practical indicators that can easily be measured at the household level
- Tools for translating food security information to action. What have we learned? (**WB** or **IFPRI**);
- Guidelines/tools for food security measurement/indicators (**IFPRI** or **university /think-tank organization** and follow-up to scientific symposium for support);
- Practical guidelines for harmonizing VA and poverty mapping to support food aid and development planning (**WB** lead agency, **WFP** secondary);
- Tools for designing demand-driven fivims (**private sector partner**);
- Support to regional country programs for institutional development, including the establishment of a fund that (**IFAD**):

- i. requires interagency collaboration (Table 10 shows where FAO, WFP and the WB poverty mapping projects are operating. This might be the most feasible to start with FEWS NET, a significant country level partner);
- ii. demonstrates linkages of information to PRSP, MDG monitoring or other key strategy/program initiative that will address food insecurity;
- iii. demonstrates strong local commitment to evidence-based food security decision-making or for countries that have great problems with food security but low recognition/commitment. FIVIMS would invest in advocacy activities to generate demand/commitment.

Table 10: Presence of Key Partner fivims-related activities among Countries that Face Transitory Food Insecurity or Complex Emergencies

Country	WFP	FEWS NET	World Bank Poverty Mapping	FAO/FIVIMS
Angola	X	X		X
Afghanistan				X
Bangladesh	X			X
Benin	X			
Bhutan	X			
Bolivia	X			
Burkina Faso	X	X		X
Burundi	X			X
Cambodia	X			X
Chad		X		
China	X			
Cape Verde	X			X
Columbia	X			
Comoros				X
Congo, D R	X			X
Congo, R	X			
Cote d'Ivoire	X			
Cuba	X			
Djibouti	X			
El Salvador	X			
Eritrea	X	X		X (large)
Ethiopia	X	X		

Country	WFP	FEWS NET	World Bank Poverty Mapping	FAO/FIVIMS
Fiji				X
Georgia	X			
Gambia	X			
Guatemala	X			
Guinea	X			
Haiti	X			X
India	X			X
Indonesia	X			
Iraq	X			
Kenya	X	X	X	X (3 different sources)
Korea	X			
Lesotho	X			
Laos	X			
Liberia	X			
Madagascar	X		X	X
Malawi	X	X	X	
Mali	X	X		
Mauritania	X	X		X (new)
Mozambique	X	X		X
Namibia				X
Nepal	X			
Niger	X	X		
Nicaragua	X			X
Palestine	X			X (new, 300k AusAID)
Papua New Guinea				X
Peru	X			X
Philippines				X
Rwanda	X	X		
Samoa				X
Senegal	X			X (completed)
Serbia/Monteneg ro	X			
Sierra Leone	X			
Somalia	X	X		X
Sri Lanka	X			X

Country	WFP	FEWS NET	World Bank Poverty Mapping	FAO/FIVIMS
Sudan	X	X		
Syria				X (new)
Tanzania	X	X		X
Thailand				X
Uganda	X	X	X	X
Viet Nam				X
Yemen	X			X (TCP 250k)
Zambia	X	X	X	
Zimbabwe	X	X		
South Africa			X	

4. Closing Thoughts

A re-invented FIP will have to ensure that it is more highly focused on needs and pragmatically grounded in funding realities. An emerging consensus among UN and bilateral agencies was the need to link FIP to projects and process with strong interest in food security and vulnerability issues such as the Millennium Project, the PRSP and the emergent UNDAF/CCA. It will have to be operationally independent from FAO in order to have credibility as in interagency entity.

It will require a reorientation in approach from supply-side food security information systems to demand driven information to improve food security.

It will need to build close alliances with other related initiatives that either strengthen the primary data for food security indicators (Global Decision Support System (GDSS), PARIS21, Sectoral Statistics Programs, Monitoring and Evaluation to Assess Results (MEASURE)) or develop analytical techniques tools (poverty mapping, livelihood assessment, vulnerability assessment/analysis) or ICT tools (the United States National Aeronautics and Space Administration (NASA), commercial enterprises).

It will require leadership from both highly credible development decision-makers (donors and developing country leaders) as well as highly credible food security information technical specialists.

It will require a greater emphasis on communications and networking, including sufficient staff and resources for web and other forms of connectivity.

Key open priority technical issues:

- improved and field friendly undernourishment measurement methods/indicators;
- sensitive and specific food security vulnerability and food needs assessment tools;
- case studies in information use for strategy development and implementation monitoring.

Potential funding sources:

- World Bank-led Trust Fund for Statistical Capacity Building (TFSCB);
- UNDP Bureau for Development Policy on Country Level Monitoring and Reporting on MDG's;
- Regional development banks;

- Foundations: Rockefeller, Gates, IBM, and Winrock;
- Bilaterals: DFID, Dutch, USAID Agriculture, Food for Peace.

Annex 5: Biosketches for TWG Chair and Co-chair

Dr. Uma Lele, an independent scholar and development economist, has a Ph.D. from Cornell University and four decades of experience in research, operations, policy analysis, and evaluation in the World Bank, universities and international organizations. Among her notable works are *Food Grain Marketing in India: Private Performance and Public Policy* (1973), *The Design of Rural Development: Lessons from Africa* (1976), *Managing Agricultural Development in Africa* (1991), *Transitions in Development: From Aid to Capital Flows* (1991), *Intellectual Property Rights in Agriculture: The World Bank's Role in Assisting Borrower and Member Countries* (1999), and *Managing a Global Resource: Challenges of Forest Conservation and Development* (2002). She has also written papers on Agricultural Productivity Growth and Structural Transformation, and on the changing roles of forests and water in the course of economic development. As Senior Advisor in the World Bank's Operations Evaluation Department (now called the Independent Evaluation Group), she led evaluations of the World Bank's Forest Strategy (2002), the Consultative Group on International Agricultural Research (CGIAR) (2003), and the World Bank's approach to global programs (2005). She co-chaired an International Taskforce of the China Council on Environment and Development on Forests and Grasslands (2000-2002), served on the panel for the independent external evaluation of the Food and Agriculture Organization (2007), and led a team which co-authored a theme paper for the first Global Conference on Agricultural Research for Development (GCARD 1) leading to the formation of a Roadmap. She has served on numerous advisory, expert and award panels in international organizations including on the Sasakawa 2000 Program (1992-94), the World Food Prize (1987-94) and the MacArthur Foundation (1991-95). She was a Graduate Research Professor (1991-1995) and Director of International Studies (1992-93) at the University of Florida co-chaired an international taskforce on Global Research on the Environmental and Agricultural Nexus (GREAN) (1992-95), and established and directed the Global Development Initiative of the Carter Center and the Carnegie Corporation (1992-93). She was on the founding board of the CGIAR's Centre for International Policy Research (1993) and a member of the CGIAR's Technical Advisory Committee (1994-95). She is a Senior Advisor to the Global Water Partnership and Robert D. Daugherty Institute of Water for Food. She is Fellow of the American Agricultural and Applied Economic Association and of India's National Academy of Agricultural Sciences and in 2014 the Indian Society of Agricultural Economics conferred Fellow of ISAE 2014 for her lifetime contribution to the field of Agricultural Economics and Rural Development. In 2011 she established an award for Best Research on Gender in Agriculture at the International Agricultural Economic Association, and in 2013 she established the Uma Lele Mentorship Program for students from developing countries at the American Agricultural Economic Association.

William A. Masters is a Professor at Tufts University, in the Friedman School of Nutrition with a secondary appointment in the Department of Economics. His research focuses on the

economics of agriculture and nutrition in rural Africa. From 2011 to 2014 he served as chair of the Friedman School's Department of Food and Nutrition Policy, and before coming to Tufts was a faculty member in Agricultural Economics at Purdue University (1991-2010), and also at the University of Zimbabwe (1989-90), Harvard's Kennedy School of Government (2000) and Columbia University (2003-04). Recent journal articles include "[Agriculture, Nutrition, and Health in Global Development](#)", in *Annals of the New York Academy of Sciences*, "[Disease Control, Demographic Change and Institutional Development in Africa](#)" in *Journal of Development Economics*, "[Does Child Undernutrition Persist Despite Poverty Reduction in Developing Countries?](#)" in *Journal of Development Studies*, and "[Effects and Determinants of Mild Underweight among Preschool Children across Countries and Over Time](#)" in *Economics and Human Biology*. He is also the author of numerous book chapters such as "[Child Nutrition in Economic Development](#)" in *Nutrition in Pediatrics*, 5th ed. and "[Transformational Incentives for Innovation and Aid Effectiveness: Pull Mechanisms, Contests, and Prizes](#)" in *USAID Frontiers in Development*, as well as an undergraduate textbook co-authored with George Norton and Jeff Alwang, *Economics of Agricultural Development* (Routledge, 3rd ed. 2014). From 2006 through 2011 he edited *Agricultural Economics*, the journal of the International Association of Agricultural Economists. In 2010 he was named an International Fellow of the African Association of Agricultural Economists, and he has been awarded both the Bruce Gardner Memorial Prize for Applied Policy Analysis (2013) and the Publication of Enduring Quality Award (2014) from the Agricultural and Applied Economics Association (AAEA). Details are available online at: <http://sites.tufts.edu/willmasters>.