



# **International Scientific Symposium on Food & Nutrition Security Information: *From valid measurement to effective decision- making***

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## **EXECUTIVE SUMMARY**

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# INTERNATIONAL SCIENTIFIC SYMPOSIUM ON FOOD AND NUTRITION SECURITY INFORMATION:

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## *FROM VALID MEASUREMENT TO EFFECTIVE DECISION MAKING*

### EXECUTIVE SUMMARY

#### **Background**

This Symposium was held as a follow up to the 2002 International Scientific Symposium on measurement and assessment of food deprivation and undernutrition. The 2002 Symposium reviewed five distinct methods: the FAO methodology for estimating undernourishment; the measurement of food insecurity using household income and expenditure data; dietary intake based on individual intake surveys; child nutritional status based on anthropometric surveys; and qualitative methods for measuring people's perceptions of food security and hunger.

In addition to its coverage of these five established methods, the 2002 Symposium also gave impetus to the development of new methods and indicators of food and nutrition security by FAO and other institutions. It was considered a landmark event that brought together a wealth of expertise, knowledge and experience. Its proceedings continue to be widely quoted in the literature.

However, since 2002, global and country contexts have changed in ways that call for innovations in how food and nutrition security is assessed. These include the effects of various ongoing and emerging crises, as well as the impacts of urbanization and globalization. The latter have influenced the nutrition transition and its ripple effects (e.g. the double burden of malnutrition), while the reference to crises includes protracted local, national and regional conflicts, and persistently high and volatile food prices. In addition to these changes and challenges, international forums on food security are now paying greater attention to partnership and coordination issues, implying increased demand for harmonization of food security measurement methods as well as improved alignment with policy priorities.

The 2012 Symposium was held against this background and had the following objectives:

- 1) Report on progress made in the five methods originally reviewed in 2002, in particular FAO's undernourishment estimates, the use of household income and expenditure data, and questionnaires for measuring people's experience of food security and hunger (referred to as "qualitative methods for measuring people's perception of food security and hunger" in 2002 but now known as experience based food security scales).
- 2) Report on innovations in new metrics, particularly in regard to changes in the global and country contexts cited above.
- 3) Move the discourse past information generation *per se* towards taking a closer look at how to increase the use of that information in decision making for food and nutrition security.

Most of the Symposium's plenary and parallel sessions centered around improving data quality and credibility for both established and new indicators, the question of which indicators to use and

when, and the challenge of linking information to decision making. The Symposium closed with a session dedicated to the way forward, during which key areas for concrete action were proposed.

## **Improving data quality and credibility**

FAO's methodology for estimating undernourishment, currently under revision, was addressed in both plenary and parallel sessions. Progress made in the revision of the coefficient of variation, a key underlying parameter, was highlighted, as were innovations in estimating and accounting for the correlation between food intake and energy requirements.

The issues of quality and credibility were also addressed with respect to the use of household income and expenditure data. Living Standards Measurement Surveys (LSMS) and other integrated household surveys, in addition to more specialized assessments, such as Demographic and Health Surveys and Multiple Indicator Cluster Surveys, are administered regularly in most countries and have the potential to meet at least some of the demand for more frequent and routine collection of food and nutrition security data. Although these surveys remain challenged in regards to capturing intra- and inter-annual variability in food and nutrition security, efforts to increase sensitivity are being made. Incorporation of dietary diversity indicators into LSMS and integration of child growth measurements into permanent agricultural surveys were specific examples presented during the Symposium's parallel sessions.

The use of more than one indicator to capture the multidimensional nature of food insecurity, and thus improve reliability and credibility of its measurement, was a major theme. Population based estimates of calorie consumption were cited as an insufficient measure of food and nutrition security, in and of themselves. In addition, established household food access indicators which are often used interchangeably, such as the Coping Strategies Index, Food Consumption Score, and Household Food Insecurity Access Scale, were found to be capturing different dimensions of food insecurity, with implications for household classification and subsequent targeting. In these cases and others, the importance of triangulation via the collection and analysis of a range of indicators was endorsed.

Reports on the refinement and use of experience based food security scales in different settings also reflected the current emphasis on capturing multiple dimensions of food security. One of the five methods reviewed at the 2002 ISS, these tools are designed to assess how households and individuals experience food insecurity. One in particular, the Latin American and Caribbean Food Security Scale, has been widely used to target vulnerable populations and to evaluate social development and food security policies.

Other innovations presented at the Symposium aimed to improve the context specificity of assessment. Methods for capturing the effect of exogenous shocks, seasonality, and sociocultural norms were introduced, as were justifications for and methods of data disaggregation by age and gender. For example, a presentation that used gender disaggregated data to assess the impact of new agricultural technologies on individual intake revealed that, despite large positive impacts on household assets and consumption, no long-term improvement in individual nutritional status among girls occurred for some types of interventions. Here and elsewhere, the policy implication was two-fold: first that improved household level outcomes are by no means automatically followed by improvements in individual nutritional status, second that consideration of gender disparities and inequitable allocation practices in programme design may improve the connection.

These and other findings presented in panel and parallel sessions were consistent with the call by many participants to move beyond reliance on averages. This argument underscored the importance of exposing the heterogeneity of outcomes that occurs at individual level, as opposed to relying on household level data which can mask critical disparities between individuals with subsequent implications for intervention impact.

The Symposium also covered new developments in information communication technology. Innovations cited during the plenary include use of geographic information systems and remote sensing technologies to provide decision makers with satellite-derived data. Mobile communication devices, which can be used in conjunction with short message services or digital pen and paper technologies in the field, were also discussed.

## **Which indicators to use and when**

Initially identified in 2002, the need was again raised at this Symposium for defining a limited number of commonly used standardized indicators to describe food and nutrition insecurity in all its dimensions. Such a “suite” of indicators would serve to reliably inform the international community and national authorities in designing appropriate responses, and would provide a very high level of comparability across analyses. It would also provide a foundation for use of a set of valid and reliable indicators in the vast majority of assessments. It was proposed that selection of these indicators be supported by both the Committee on World Food Security (CFS) and the United Nations Statistical Commission to guarantee accountability and technical soundness.

However, the concept of a single suite of indicators was not endorsed by all. The counterargument was that, given the multidimensional nature of food security, a single set of indicators would not be able to capture the many different contexts and levels at which food security is assessed, and hence it might not be universally applicable. The proposed alternative was to acknowledge the complexity of the subject and move towards a distillation of best practices, where indicators are mapped according to when and how they should be used. This proposal called for the development of several different suites of indicators, rather than just one, in order to capture the richness and diversity of data in different contexts. This approach is consistent with the output of the Symposium during which a wide range of indicators and ways to conceptualize food security were presented.

The need to distinguish between ‘food security’ and ‘nutrition security’ was a key aspect of the discussion throughout the ISS. It was raised in both the first day’s plenary session and during the panels on Day 3. In both cases, the question was whether to make improved nutrition outcomes a consistent focus in food security analysis. Those arguing in the affirmative noted that better nutrition should be the ultimate objective for food security programming and hence nutrition indicators (e.g. child growth, biomarkers, dietary diversity) should be routinely included in food and nutrition security assessments. Those arguing against cited the importance of distinguishing between food supply, food access, and nutrition, and stated that attempts to routinely capture data for all three concepts would risk oversimplification of one or more. The practicality of collecting some types of nutrition indicators on a regular basis, such as anthropometrics and nutritional biomarkers, was also discussed.

## **Linking information to decision making**

Strengthening the link between information generation and use of that information by decision makers in food and nutrition security policy was a key objective of the Symposium.

Recommendations made during the panels and plenary discussions highlighted the need to make evidence more demand driven to order to improve strategies for information dissemination and to build government capacity for both generation and use of evidence. Specific proposals included moving away from conventional modes of information dissemination (e.g. policy briefs and articles) towards “friendlier” translation techniques as well as increased government involvement in information generation. The Government of Mexico’s National Council of Evaluation of Social Development Policy (CONEVAL) was introduced as a strong example of the latter, having facilitated the formulation of evidence-based policies through institutionalized impact evaluation. Similar evaluation mechanisms have been set up in Brazil within the Ministry of Social Development (SAGI).

The use of impact evaluation findings was mentioned throughout the Symposium; the consensus being that in general this type of information is underutilized but holds great potential to inform policy and programming design and implementation. Not only does evaluation serve to investigate whether the policy or programme has had an impact, but it is instrumental for tracking progress and for creating feedback loops that allow for adjustments mid course.

At the close of the Symposium, the consensus was that not enough examples of successful linkages between food and nutrition security information and decision making had been presented or discussed. A number of issues, listed below, were presented as fundamental constraints to narrowing the gap between information generation and decision making processes:

- The tendency is to identify policy makers as a homogenous group rather than to recognize the range of different actors and situations that contribute to policy making.
- Policy decisions are more often political than technical, and the tendency of analysts is to not fully take political economy into account when seeking government collaboration and commitment.
- Capacity in many countries is so low that policy formulation and consequent implementation are severely constrained, regardless of evidence.
- Currently, not enough evidence is demand driven, nor is the related information presented in a way that is accessible and attractive to policy makers.

## **The way forward**

Key areas for concrete action presented at the Symposium’s close include establishing an Expert Committee on Food and Nutrition Security Measurement to guide data collection techniques and indicator selection, bringing together policy makers, researchers and practitioners, and making evidence and information demand driven. The nascent Food Security Information Network (FSIN)<sup>1</sup> was nominated as a possible host for the Expert Committee on Food and Nutrition Security Measurement. The UN Statistical Commission’s Interagency Working Group on Food Security, Sustainable Agriculture and Rural Development was proposed as an appropriate platform for addressing specific technical issues. The Expert Committee’s primary function would be to reconcile questions regarding the identification of a suite, or suites, of indicators that describe food and nutrition security in all its dimensions. A suitable suite of indicators would provide reliable

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<sup>1</sup> The FSIN was first conceived in 2010 through consultation with the EC and USAID at a Symposium on Information Systems held in Brussels. The FSIN has three main objectives, which are to a) strengthen country and regional food security information; b) help propose and establish food security information standards, harmonize methods, share best practices; and c) advocate and raise awareness about food security information. The FSIN has been formed through joint partnership between FAO, IFPRI, and the WFP with support from a variety of stakeholders including donors (USAID and the EU/EC in particular), regional organizations and representatives from national food security information systems.

information to the international community and national authorities responsible for designing appropriate responses.

To increase the involvement of decision makers in the discussion on using food and nutrition information for policy formulation, a proposal was made to initiate regular (as opposed to one-off) joint gatherings to bring together researchers, practitioners and decision makers from sub-national, national, regional and global levels. Another proposal called for facilitating experience-sharing between countries via South-South collaboration initiatives. The need to include decision makers more directly in future symposiums and other international forums was endorsed repeatedly. The consensus at the Symposium's closing was that these actions would increase the generation of valid, credible, demand driven information and enhance the use of that information to improve the formulation and application of food and nutrition security policies worldwide.