

# Sustainable Agriculture: From common principles to common practice

#### **INFASA's progress and potential**

The International Forum on Assessing Sustainability in Agriculture (INFASA) was established by the International Institute for Sustainable Development and the Swiss College of Agriculture in 2006 as a multi-year forum to advance sustainable agriculture through the development and effective use of indicator and assessment systems.

INFASA aims to advance sustainable agricultural production by facilitating an ongoing, strategic dialogue among scientists, policy-makers, producers, food industry leaders and consumers. We expect that this forum will lead to a convergence of ideas, policy positions and practices on what sustainability means in agriculture, how it is measured, and how the knowledge generated can promote sustainable agriculture.

#### **Background: Understanding the challenge**

- Projections of global population growth, inequitable food distribution and increasing environmental pressures—such as water scarcity and climate change—increasingly highlight the need for secure and sustainable agricultural production.
- Sustainable agricultural practices can only be implemented when appropriate information is readily available to decision-makers.
- Thus, information tools in the form of sustainability assessment systems are being developed. Increasingly utilized at farm, corporate and public policy levels, these efforts promise to make agricultural production more sustainable.
- The challenge is no longer limited to developing new indicator and assessment tools. It is also understanding how existing tools and methods work in practice; how the different tools and methods can co-exist; and how once-experimental tools and methods can enter mainstream use.

**INFASA's vision** is sustainable worldwide agriculture where all stakeholders can get timely, accurate insight into the degree of sustainability of agricultural production, products and services.

**INFASA's mission** is to promote the development and broad application of standardized tools for holistic sustainability assessments in agriculture to enable faster and more widespread implementation of sustainable agriculture worldwide.



### INFASA Symposium: A spirit of dialogue

INFASA debuted with a Symposium in Bern, Switzerland, on March 16–17, 2006, hosting a group of actual and potential users of indicator and assessment systems, and evaluation system specialists. A unique aspect of the Symposium was the combination of multiple perspectives, including those held by policy-makers, corporations, farmers, NGOs and researchers. The key topics and conclusions of the Symposium were:

- Coordination and working towards transparent and standardized approaches for sustainability assessment across all stakeholders and scales
  - We need to work towards more transparent and standardized measurement and assessment approaches among the various developer and user groups, from the farm through the policy level to business and consumers.
  - There is a need to tailor additional measures that reflect specific local conditions or user needs.
  - INFASA should consider, in its next phase, a focus on launching an international process to agree on common Criteria and Indicators for sustainable agriculture.

#### Measurement and assessment tools

- We must address trade-offs between complexity and manageability, emphasizing the need for simple, visually clear, robust and transparent systems that users can easily understand.
- We see measurement tool development and use not only as a technical exercise, but one in which stakeholder participation is critical.
- It is important to balance standardization and comparability with specific (local) needs.
- We must address the demand for holistic approaches—including the social domain while accepting the need for simplicity.

#### Linkages to policy

- The policy arenas within which indicators and assessment have a role to play are diverse and increasing in importance, due to the need for a stronger evidence base.
- Important policy areas include the evaluation of sustainability impact along the supply chain and the verification in sustainability certification and standards schemes.
- Strengthening the evidence base will also be critical for any progress on the economic valuation of agriculture-related externalities, including ecosystem goods and services.

#### Farm-level applications

- Producer- and industry-level measures need to have their policy equivalents.
- Commodity-focused approaches need to be complemented by overall farm assessments that take all aspects of a farming operation and the complexity of sustainability into account.
- There is a need for practical, farm-level measurement approaches that produce results at the level of production systems and specific farming practices. To facilitate this, measurement and tools should be embedded in farm planning and management systems to add value, and to enable farmers to turn general sustainability concepts into action.
- The need for farm level monitoring and indicators can arise due to government requirements and expectations by business, but are also driven by the farmers' own interest.



### The future of INFASA

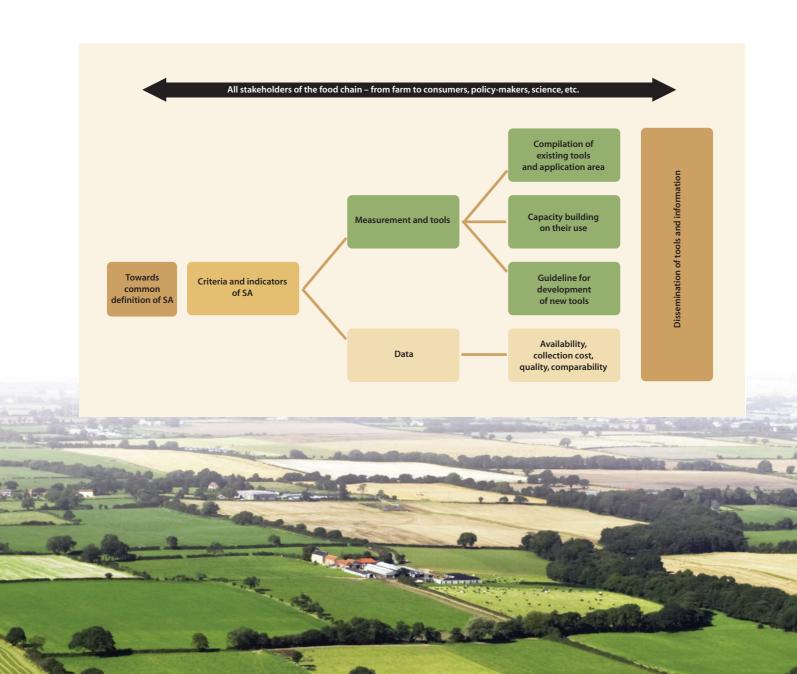
INFASA's future direction builds on the results from the first Symposium, background research on the development and role of common Criteria and Indicator systems, as well as the intention to seek common ground with other major international initiatives designed to address the way societies measure sustainable development progress.

INFASA will act as a catalyst in finding a common language to address sustainability issues in agriculture. It will enable a focus on the various types of measurement tools required to effectively promote sustainable agriculture as well as on the data needed. Possible key areas of action are depicted on the diagram below.

#### Towards a common understanding of sustainable agriculture

As a basis for INFASA's activities, a working definition of sustainable agriculture is used. Introduced at the past Symposium, it is based on the Brundtland definition of sustainable development (WCED 1987) and the SAI Platform's definition of sustainable agriculture, and has been adapted and augmented by further dimensions (Häni *et al.* 2003)<sup>1</sup>:

Sustainable agriculture adopts productive, competitive and efficient practices, while protecting and improving the environment and the global ecosystem, as well as the socio-economic conditions of local communities in line with human dignity.



### The Next Phase of INFASA: Key questions to consider

## What measurement tools and practices are needed by the various stakeholders?

A global survey will be conducted among stakeholders to assess what measurement tools and practices they are already using, how they are using them and what their emerging needs are. This research is intended to better define the purpose of the measurement tools and practices, and provide a preliminary gap assessment. Special attention will be paid to tools needed for ensuring sustainable agricultural products can be clearly recognized.

#### What are the most prominent and promising measurement tools and practices in use?

Building on the results of the first INFASA Symposium, we will create and maintain an information base of the most innovative measurement tools and practices either currently in use or that have significant potential to be used more broadly. This compilation will serve both to monitor best practices and to ensure we can take these into account when formulating INFASA's strategies and activities.

#### How can we improve the use of measurement tools?

Measurement tools should help assess the sustainability of agricultural products and practices. How can we optimize the use of these tools in various contexts? Dialogue among the various stakeholders along the food chain will facilitate the exchange of best practices as well as foster common views on measurement and indicators. In addition, gaps would be identified in the use of available tools and the need for developing new or improved ones. This step could be presented during the next Symposium in order to share concrete preliminary results and gather further inputs.

# What guidance can we offer for developing the next generation of sustainability measurement tools?

As agricultural sustainability issues evolve and information technology advances, new measurement tools are needed and can be created. How can we measure the carbon footprint of agriculture? How can we make use of new geospatial information and capabilities? Building on our understanding of best practices, their use and gaps in knowledge, INFASA aims to develop guidelines for, and coordinate the development of, the next generation of innovative measurement tools that have a higher potential for use and diffusion to a wide range of user communities.

#### How can we strengthen the data underpinning agricultural sustainability measurement?

A regular flow of good quality data is essential for assessing the sustainability of agriculture, regardless of the measurement tool used. Data collection should be done in the most economical way while ensuring good quality and standardization. INFASA could partner with organizations like OECD,<sup>2</sup> FAO or GEOSS<sup>3</sup> to look into the economics of data management and explore how data obtained through field-level monitoring and global observation systems can be combined to meet the practical needs of the agriculture sector. Traceability of food is now often required by legislation as well as by consumers. A special area of work could be opened to tackle the issues surrounding the data requirements linked to traceability.

# How can we use demonstration projects and promote capacity building?

Understanding capacity constraints and effective ways of tackling them is essential for mainstreaming, and will be integrated as a theme into INFASA's activities and events. The effective use of new and/or existing tools and methods could be introduced through demonstration projects, focused either at the farm, commodity or supply chain level, or a combination, complemented with capacity building/learning events to facilitate mainstreaming.

3 http://www.earthobservations.org/index.html



<sup>2</sup> http://www.oecd.org/department/0,3355,en\_2649\_33795\_1\_ 1\_1\_1\_1,00.html; http://www.oecd.org/site/0,3407,en\_21571361 \_31938349\_1\_1\_1\_1\_0.html

Anticipated INFASA Milestones

November 2007:

Book/CD launch (the proceedings of the 2006 Symposium)

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Early 2008:

Conduct survey of stakeholder needs

May 2008:

Co-host a side event at the United Nations Commission on Sustainable Development with partners dealing with related issues

Mid-2008:

Launch database of existing measurement and tools

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Late 2008:

Second INFASA Symposium: How to optimize the use of the tools?

 Häni, F., F. Braga, A. Stämpfli, T. Keller, M. Fischer and H. Porsche, 2003, "*RISE, a Tool for Holistic Sustainability Assessment at the Farm Level*," International Food and Agribusiness Management Review. Vol. 6(4):78–90. László Pintér, Director Measurement and Assessment International Institute for Sustainable Development 161 Portage Avenue East, 6th Floor Winnipeg, Manitoba Canada R3B 0Y4 Tel.: +1 (204) 958-7700 Fax: +1 (204) 958-7710 http://www.iisd.org lpinter@iisd.ca

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We acknowledge the ongoing generous support of Agriculture and Agri-Food Canada (AAFC).

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