Background Document

Sustainability Assessment of Food and Agriculture systems (SAFA)

Introduction

(1) This document is meant to serve as a background information paper for the E-Forum that FAO is launching in February 2011 on the Sustainability Assessment of the Food Chain. It clarifies the objectives of this undertaking and raises some key questions that could be at the heart of the five weeks discussions with stakeholders.

Objectives

(2) Over the past decades, there has been an explosion of policies, instruments and initiatives, from both governmental and market actors, to achieve sustainable development outcomes across a broad range of economic sectors, including supply chains. The ever-growing range of sustainability claims and indicators point to a collective failure in establishing operational and practical ways to understand what sustainability actually means, and to deliver it effectively. Public and private sector policies and interventions often comply with at least one aspect of sustainability, but few address sustainability holistically.

(3) Our vision is to contribute to the sustainable development of agricultural systems and food chains and the entities involved in them; that is, move towards a development that is environmentally benign, socially just and economically viable through models of good governance.

(4) Our goals are threefold. We would like to define a (1) **Sustainability Framework** with an agreed set of core sustainability issues that could be implemented at any level, national, supply chain or operational unit; and thus to provide a common understanding of what the term 'sustainability' means in a practical context. Secondly, we aim at providing (2) International **Guidelines on Sustainability Assessment of Food and Agriculture systems (SAFA)** that would facilitate full sustainability assessments and thus, contribute to making sustainable food chains more transparent, measurable and verifiable. This shall be achieved by translating a universally agreed definition of sustainability, with core issues for each of the sustainability pillars, into a set of core and additional indicators applicable to food chains, and by providing solid guidelines for the application (calculation) of these indicators. Finally, based on the Guidelines, (3) an International **Tool** would be developed **for the Sustainability Assessment of Food and Agriculture systems** (FAO would provide an example of what such a tool could look like) for the use of food businesses to assess and improve their own endeavours and contributions towards sustainability. It is hoped that the Guidelines and Tool for SAFA shall provide a means to assess food chains and companies in a more quantitative and standardized manner as can be done via corporate social responsibility reporting.

Background

(5) FAO and the ISEAL Alliance embarked on an iterative process to develop this initiative. During 2009-10, the ISEAL Alliance and the Natural Resources Management and Environment Department of

the FAO undertook a project to develop a practical definition of sustainability, which at the end went beyond the definition to include potential targets and indicators for all the aspects, and to propose a framework for assessing the ability of different tools and instruments to fit together to achieve sustainability outcomes. Several expert meetings were convened in order to come to some understanding on the broad issues of sustainability.

(6) The first iteration of the framework resulted from a review of a broad range of governmental, private, non-governmental and research institutions materials. The review began by looking at the framework included in the draft ISEAL Impacts Code and established sustainability frameworks, drawing notably from the Brundtland Commission's report of 1987 'Our Common Future'. This was complemented with information from multilateral institutions, notably a range of UN bodies (UN/ECOSOC, FAO, ILO, UNEP, etc.) and other normative references and a number of corporate tools (e.g. WalMart Sustainability Index), NGO tools (e.g. Transparency International, the Bellagio STAMP), research materials (e.g. the Stiglitz-Sen-Fitoussi Report by the Commission on the Measurement of Economic Performance and Social Progress) as well as social and environmental voluntary standards systems (ISEAL members e.g. FLO, MSC, UTZ Certified) and other resources (e.g. the ITC's Trade for Sustainable Development project). The review helped inform our understanding of the evolving thinking on, and expectations of, sustainability from a broad range of vantage points, as well as the ways in which sustainability is being applied by different stakeholders and within different tools.

From a Sustainability Framework to SAFA

(7) More than one hundred countries have established national strategies for sustainable development, which also include sustainability targets and indicators to measure their efforts in achieving them. Similarly at the farm-level, different tools, developed by public as well as private-sector institutions, exist to measure sustainability, one of the most internationally-known and widely tested ones being the Response-Inducing Sustainability Evaluation (RISE) method.

(8) Recent years have seen a growing attention from food companies on the issues of sustainability, in the face of their crucial role in providing employment, economic benefits to millions of farmers and suppliers, safeguarding natural resources and, last but not least, attracting customers searching for more sustainable, ethical or "green" products. Significant efforts have been taken place at business level, including improved reporting, increased board level responsibility and greater realization that the reduction of footprints of value chains equally presents a wider cost and revenue opportunity for companies. Several food companies have taken steps to assess their performance, but with different emphasis on the various dimensions of sustainability (i.e. environmental, economic, and social) and within these, with different criteria needed to substantiate a "sustainability claim".

(9) Yet, to date, there is still no international benchmark defining what "sustainable production" actually entails. There is no universally accepted set of indicators to measure sustainability performance. Most evaluation criteria are purely qualitative and measure supplier awareness and commitment. Turning these criteria into quantitative performance indicators offers a real challenge.

(10) With a view to offer a fair playing field, FAO wishes to build on existing efforts and develop a Sustainability Framework, with universally agreed core issues, as part of its efforts for the United Nations Conference on Sustainable Development (UNCSD) that will take place in 2012. More specifically, the intent is to develop Guidelines for food value chain modelling that are to serve as a template for food

chain sustainability assessment, for the use of food manufacturers and retailers. Ultimately, the SAFA will be developed based on a set of indicators and coefficients for use by companies, according to their prevailing needs.

(11) The Guidelines shall be promoted as the template for any assessment whereby a company or product claims to be "sustainable". However, the technical implementation of the Guidelines, according to exact coefficients and algorithms, would be left to the stakeholders. The outcome of this work will be a prototype International Tool for the Sustainability Assessment of Food and Agriculture systems for the use of food businesses to assess and improve their own endeavours and contributions towards sustainability. SAFA procedures and calculations will be tested using real cases.

(12) This task is expected to be completed by early-2012. For a start, we wish to seek stakeholders' views on our proposed sustainability issues and indicators. We have compiled a list of performance indicators, based on the review of dozens of corporate responsibility and sustainability reports of food chain actors. Proposed indicators will be applicable to farming, forestry or fishery enterprises and their value chains. Whereas most indicators have been developed to target all levels of the food chain (farm –manufacture – distribution – final sales), some exclusively apply to the final sales at retail level, e.g. "policies that reward customers for making green choices"; some only at farm level, e.g. "percentage of farm areas where soil conservation measures are continuously applied". Thus, making clear the level at which the proposed indicator is applicable is crucial for the development of a comprehensive and credible framework.

(13) The subjects of this endeavour are all actors along the food chain, from farm to final sales, including all entities that generate significant sustainability impacts (actual and potential) and/or all entities over which the reporting organization exercises control or significant influence with regard to financial and operating policies and practices (scoping principle adopted from Global Reporting Initiatives (GRI) Guidelines). Sustainability impacts cover economic, environmental, social and governance parameters.

(14) The temporal scope of SAFA shall be the most recent year, for which all core data are available; for some indicators (e.g. greenhouse gas emissions), several years must be considered to reliably identify trends. Finally, the spatial coverage shall extend to all production facilities and their immediate surroundings, insofar as the entities involved in the food chain directly (e.g. own warehouses, fleet, shops) or indirectly (e.g. farms producing for a specific supplier) control the utilization of these areas.

Sustainability Pillars and Core Issues

(15) The main body of the framework is built around a series of pillars, each of which comprises a number of core issues. Based on the initial review, expert meetings, and subsequent review of corporate responsibility reports of dozens of food companies and retailers, four pillars have been identified as having a role in creating the necessary framework conditions for ensuring sustainable development:

- ✓ Environmental Integrity
- ✓ Economic Resilience
- ✓ Social Well-Being
- ✓ Good Governance

(16) As regards the core issues, the following ones have been identified and outlined:

CORE ISSUE	EXPLANATION
Environmental Integrity	
Water	Water quantity and quality
Biodiversity & Ecosystems	Diversity of life at the level of species, genetic diversity and ecosystems
Land & Soil	Maintenance and enhancement of organic matter, as well as conserving soil from erosion and degradation
Air & Climate	Mitigation of greenhouse gas emissions and reducing ozone depleting substances
Economic Resilience	
Secure Livelihoods	Enhancing capabilities, assets, and activities required for a means of living
Resilience to Economic Risk	The assurance of self-reliance, and the ability to counter risk through economic diversification and access to finance
Sustainable Production	The production and use of goods and services that minimize the use of natural resources, toxic materials and emissions over the unit life cycle
Social Well-Being	
Labor Rights	The range of rights enshrined in the ILO Declaration on Fundamental Principles and Rights at Work
Non-discrimination & Equity	Equal access to opportunities and empowerment of women, reduction of discrimination and inequalities
Education	Access to, engagement in and attainment through education, knowledge sharing and awareness raising
Health & Safety	Providing access to medical treatment, nutritional products and safe working conditions
Social Commitment	Acting actively to benefit society at large
Good Governance	
Accountability	Commitment to respond to and balance the needs of stakeholders in decision-making processes and activities, and deliver against this commitment
Rule of Law	Adherence to rules-based approaches

(17) During the expert meetings, there was a broad agreement that many of these issues were largely indeed the core issues, all found easy to identify further potential ones. Furthermore, even though Good Governance was considered by most experts to be an underlying, enabling concept rather than a pillar of sustainability, core issues identified therein, are key components in the credibility of sustainability interventions.

(18) A number of the issues that were discussed under Economic Resilience overlapped with those proposed under Social Well-Being and *vice versa*. In part this was due to the relatively greater difficulty of understanding what was intended by a number of the social core issues, and in part it was also due to the relative breadth of the concepts inherent to these issues. For example, what is understood as "Livelihoods", and is it an economic or a social issue? Also, many can argue that that the core issue "Sustainable Production" under Economic Resilience could similarly be phrased under Ecological Integrity.

(19) Although it may not be possible to reach consensus in terms of how to handle the overlapping issues under different dimensions, the crucial thing is to have these issues included in the draft framework into one of the pillars.

(20) For each of the framework's core issues of sustainability, there is a set of draft headline indicators and indicators (principally addressed to food chains). An accompanying excel document (that will be introduced to the E-Forum participants from Week 2 onwards) provides a "map" of existing indicators for each of the sustainability pillars.

Headline Indicators

Environmental Integrity

(21) Eight headline indicators (water consumption, water quality, genetic diversity, habitat protection, fisheries, soil, agricultural inputs, and emissions) are proposed under the four core issues mentioned above.

(22) Water is an essential input in farming and forestry, and agriculture is the largest user of water worldwide, using 70% of water withdrawals. Some of these indicators in 'Water' and 'Air & Climate' are measures of reduction targets. Even though most companies are measuring the same types of environmental information, such as water usage and carbon emissions, there is hardly any commonality in how these are being measured, both at the level of calculation (total water consumed per year or per unit or the percentage of water use reduction per year?, etc) and at the level of which activities to include in the calculations. Since the total resource use, varies according to the size of the enterprise, we have chosen to measure the percentage of reductions in both water use and GHGs.

(23) Carbon dioxide is the main GHG responsible for global warming, and is emitted by all enterprises wherever fossil fuels are consumed, as well as through land use changes, particularly deforestation. Agriculture emits methane and nitrous oxide from fertilizer application, enteric fermentation, paddy rice, biomass burning, and manure handling. These greenhouse gases are much more harmful than carbon dioxide and are usually converted into CO_2-equivalent units for estimating their impact on climate change. Therefore CO_2-eq emissions have been chosen as the measure for the 'Air & Climate' issue and similarly, as with water use, the whole food chain should to be included in the final measurement.

(24) There are much more differences among companies in how progress is being measured under the issues of 'Biodiversity & Ecosystems' and 'Land & Soil'. Whereas sustainable fisheries have been receiving more and more attention, fostering genetic diversity, and the reduction of synthetic inputs to agricultural lands have remained at the back of sustainability agendas. We believe that some formulation of indicators is necessary in these topics to cover the lacking attention on soil conservation and enhanced biodiversity at farm levels.

Economic Resilience

(25) 'Secure Livelihoods', 'Resilience to Economic Risk' and 'Sustainable Production' have been chosen as main headline indicators for this dimension of sustainability. Whereas the proposed indicators under 'Secure Livelihoods' are only capturing employees in terms of them receiving living wages, contracts, pension and security benefits, the 'Resilience to Economic Risk' focuses on all aspects of the food chain, including farm-level, supplier-level and producer/retail-level resilience. The two indicators, suggested to

measure resilience, are investment and stability. All aspects of financial sustainability from the companies' point of view have been left out on purpose, since those are being monitored carefully at respective departments of all food companies to ensure profit.

(26) Further improvement is needed to cover the different levels in a more balanced way (e.g. not to understate the importance of farm level sustainability) – this is also applicable for the third issue 'Sustainable production', of which energy use, transport and waste headline indicators are without exception key priorities of food companies, and are often mentioned under the environmental chapters of sustainability reports. All these topics very much correspond to economic policies of companies, and offer them great commercial benefits through improved efficiency, risk management and reduced costs; these explain why we have chosen to locate these headline indicators under the economic dimension, knowing that overlaps are unavoidable between ecological and economic spheres.

Social Well-Being

(27) Many social indicators that have been defined and measured by national governments and international agencies are also applicable to SAFA. We have proposed to include the following headline indicators into the Framework: child/forced labour, working conditions, training, awareness raising, safety, health, gender, non-discrimination, community involvement and sourcing integrity.

(28) The indicators under 'Labour Rights' have been developed along the lines of the governance indicators, because the components that make up labour rights are generally more qualitative than quantitative in nature. It is suggested that the indicators be based on the basic labour rights of absence of child, enforced or excessive labour, freedom of association and decent working conditions along the whole chain. The indicators for 'Non-discrimination & Equity', 'Education', and 'Safety & Health' all relate to national-level indicators that are already being monitored by governments and UN agencies for the Millennium Development Goals – for the food chain, most probably data has to be collected specifically for this purpose. The indicators proposed to measure social commitment have been found without exception in every reviewed sustainability report from food companies. Most included targets and measures of community involvement and a code of conduct for ethical/socially responsible sourcing.

Good Governance

(29) Governance is the most challenging dimension of sustainability for which to define indicators because it is the most difficult to measure in quantitative terms. The concept of governance is built around notions such as transparency, participation, accountability and the rule of law. These aspects of governance are not readily quantifiable; nevertheless we tried to convert qualitative judgements into quantitative measure. Two core governance issues have been proposed in this framework, and the indicators chosen on the basis of the reviewed corporate responsibility reports need further development.

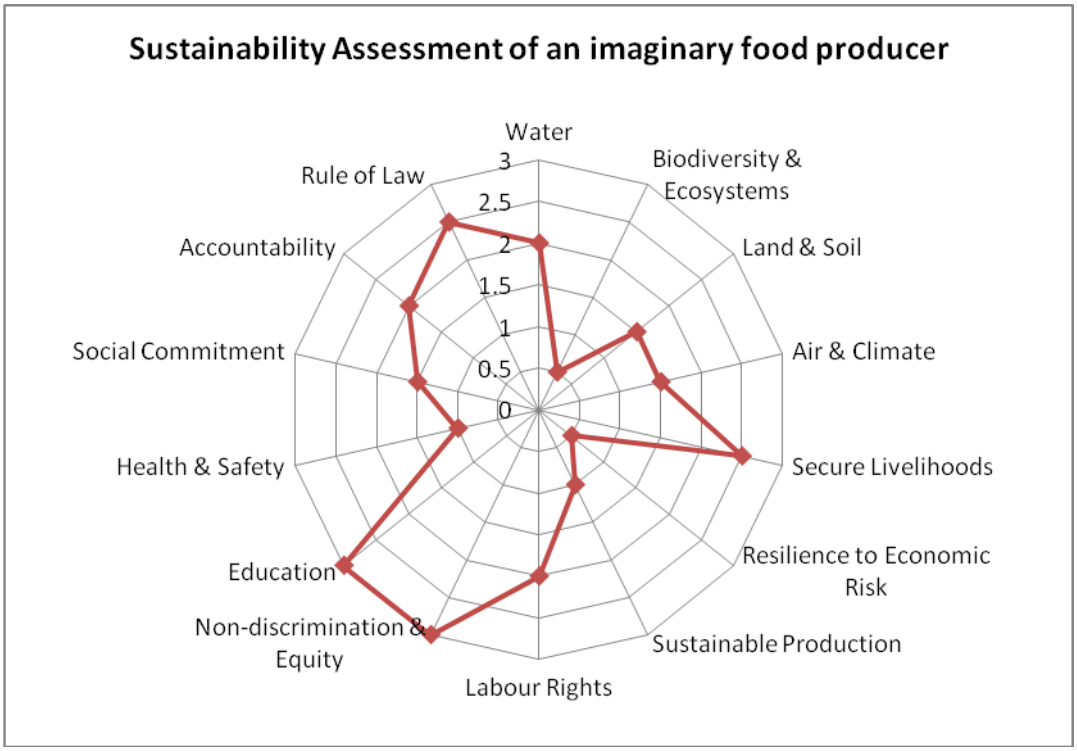
(30) We have used the GAP framework's four dimensions of accountability: transparency, participation, evaluation, and complaint and response mechanisms. To be accountable, a company needs to integrate all these dimensions into its policies, procedures and practice, at all levels of the food chain and stages of decision-making and implementation, in relation to key stakeholders. For more details on the headline indicators, please consult the above-mentioned framework. With regards the indicators themselves, for both accountability and rule of law, we have included indicators either used by food companies, mentioned by them as important aspects in their annual reports, or are listed in global sustainability guidelines, such as those of the GRI.

Assessment Framework

(31) Identifying the key questions is clearly critical, as it determines the type of information that needs to be collected. It is just as important to understand how to break that information into single units of data. The questions themselves are likely to lead to different type of data collected, i.e. data at different scales (nominal, ordinal etc.) and with variable accuracy. Some of the attributes may be possible to address by means of a binary (yes/no) or check-box answers. Some (e.g. "functioning of traceability system and of related sanctions") are likely to require narrative answers, which then need to be converted to a scale.

(32) SAFA, once established and properly populated with a standardized rating of indices, will require a framework to assess the inter-linkages and trade-offs between core sustainability issues and different indicators. As the selection of issues by specific users will differ by scale (e.g. local producer with small supply chain vs. global food retailer involving tens of thousands of suppliers and millions of farmers), timeline and stakeholder contexts, such a tool can only be flexible and dynamic, for such scenario visualizations.

(33) The figure below is a draft example of how this could be achieved. It provides a representation of the ways in which a particular food business relates to a range of core sustainability issues.



(34) The spider-web graph overlaying the sustainability pillars and core issues, nesting and linking the different indicators/indices, evidences the trade-offs between the different elements that compose it. It also allows for the use of both qualitative and quantitative indicators/indices and thus, as well as a quick overview of alternative development scenarios where certain issues are preferred among others.

(35) The above graph clearly indicates the strengths and weaknesses of a company in terms of its sustainability assessment and provides guidance as to which issues need further improvements and which

trade-offs may be necessary in order to achieve them. The overall aim is not to come out with a rating, but to offer a common framework and show different ways of actions to further enhance the sustainability of food chain actors.

End-Note

(36) There is a broad recognition that the main challenge in assessing sustainability lies in agreeing in the types of information that should be collated. A further challenge is the legitimacy of how this information shall be collated, compiled, and presented; and yet another one is logistical, in terms of the volume of information needed to be collected by food companies to populate the assessment. We have looked at some of these questions and intended to offer solutions to at least some – with regards the main challenge, we would like to invite all stakeholders to participate in the E-Forum in order to build up together a set of indicators that would then be a basis for the development of the SAFA.

(37) We are convinced that such a project could only work if backed by a strong partnership of food producers and retailers. We hope that assessing sustainability based on a shared Sustainability Framework could be of great interest and use for many types of stakeholders at different levels, including the food chain. We believe that agreeing on a common framework for sustainability assessment can bring about a positive domino effect in the supply chains that is needed to drastically reduce the ecological footprints of food chains and enhance the socio-economic and governance related aspects of food production at all levels.