A CONCEPTUAL FRAMEWORK FOR PROGRESSING TOWARDS SUSTAINABILITY IN THE AGRICULTURE AND FOOD SECTOR

Elizabeth Guttenstein, Nadia El-Hage Scialabba,
Jonathan Loh, and Sasha Courville

July 2010

Table of Contents

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food
Sectors

2 of 24

Abbreviations

Biz	Business Sector
CO_2-eq	Carbon Dioxide Equivalent
EIU	Economist Intelligence Unit
FAO	Food and Agricultural Organisation
FSC	Forest Stewardship Council
Govt	Government
GRI	Global Reporting Initiative
IDRC	International Research Development Centre
IFOAM	International Federation of Organic Agricultural Movements
IISD	International Institute for Sustainable Development
ILO	International Labour Organisation
ISEAL Alliance	International Social and Environmental Accreditation and. Labelling (ISEAL) Alliance
T4SD	Trade for Sustainable Development
UN	United Nations
UN/ECOSOC	United Nations Economic and Social Council
UNEP	United Nations Environmental Programme
UNPRI	United Nations Principles for Responsible Investment
WBCSD	World Business Council for Sustainable Development

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food
Sectors

3 of 24

Executive Summary

During the latter half of 2009, the ISEAL Alliance and the Natural Resources Management and Environment Department of the FAO undertook a project to develop a practical definition of sustainability. The definition would centre on the issues to monitor in order to show an entity's contribution to sustainability. The intent was that a common understanding of sustainability (in a practical context) will enhance the ability of differing organisations to collaborate in order to achieve common outcomes. Acknowledging that no one organisation attempts to deliver on all aspects of sustainability, a coherent mapping of sustainability will allow organisations to work together to fill in the gaps towards collective progress.

The project 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.

Using research prepared by a contractor and by ISEAL and the FAO, a meeting of experts was convened in November 2009 in order to come to some understanding on the broad issues of sustainability. Though the results of that meeting were not unequivocal agreement (time-frame, number of experts and complexity of the subject matter made agreement on a final text very unlikely), there was strong interest on the part of participants to engage in subsequent discussions to ultimately reach a commonly agreed end product over time. Following the meeting further iterations were developed and more guidance added.

This document is meant to be used by any organisation with an aim to achieve sustainability targets in any aspect of its endeavours (a business, a government or multi-lateral institution, or a civil society organisation). The dimensions of sustainability included here are cogent for all actors in all fields and thus present a useful matrix of sustainability from which an organisation can determine their place in the larger scheme of things; and look to collaborate with other organisations in the achievement of specific outcomes. The shared notion of sustainability allows all actors to measure their progress using the same (or similar) parameters, and perhaps ultimately show a collective illustration of progress in some areas, and need for more effort in others.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

4 of 24

1. Introduction

Over the past decade, 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, supply chains and regions. While a range of tools are certainly necessary to address the scale of sustainability challenges faced globally, there is also the need to understand how these can work together, or where specific tools are most likely to achieve the best outcomes. Furthermore, there is need to grasp how to deploy tools to address sustainability as a coherent whole, in such a way as to build positive synergies and avoid unintended leakage effects.

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. The objective of this project is to define a sustainability framework; providing a common understanding of what the term 'sustainability' means in a practical context. The resultant 'Conceptual Framework for Sustainability' or 'Sustainability Framework' can be used by business, government, and civil society actors to assess their own endeavours and contributions towards sustainability.

The FAO and the ISEAL Alliance embarked on an iterative process to develop this initiative. In November 2009, they convened a small expert meeting with the aim of testing the underlying motivations for the proposed conceptual framework, as well as seeking insights into its potential uses, and ways forward in developing it. Since that meeting, the ideas have further been discussed within the ISEAL Alliance, at the level of the Board and within the committees responsible for the development of ISEAL's Impacts Code[1]. FAO has also discussed within the Secretariat, and intends to take it forward for discussion with its member governments. The potential for further expert meetings will be explored, and events in 2010 will be used as an opportunity to test and take further the ideas presented in this document.

An earlier version of this paper, and a first iteration of a framework, was offered as background for the November 2009 expert meeting, as well as for consultations in FAO and amongst ISEAL members. This discussion paper and the framework have since been modified to take into account the feedback received.

---

[1] Please refer below for more details

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

5 of 24

2. Objectives

With the Conceptual Framework, both FAO and the ISEAL Alliance aim to outreach and dialogue with interested parties. Both partners are keen to promote dialogue and understanding about what might constitute a holistic approach to sustainability. Both are cognizant of the limits of any individual organisation or tool to deliver at the scale needed to address the sustainability challenges we face.

Over time and with continued input and feedback from experiences of its application, it is envisaged that the Conceptual Framework will evolve to serve a global need among governments, sustainability initiatives, business and civil society leaders to understand how different tools and instruments can best fit together to achieve sustainability outcomes.

2.1. ISEAL's Stake

Throughout 2009, the ISEAL Alliance developed a *Code of Good Practice for Assessing the Impacts of Social and Environmental Standards*[2]. The Impacts Code has facilitated a process for the members of its multi-stakeholder committees to develop a draft framework of social, environmental, and economic issues that are relevant to standards systems. Standards systems implementing the Impacts Code will choose to report from amongst these issues.

Whilst the Impacts Code is built from the specific vantage point of trying to identify the priority sustainability issues for the stakeholders of standards systems, the *conceptual framework* definition aims to represent a universally applicable definition of sustainability. It aims to capture the variety of issues that any interested party coming to define sustainability would likely include. In this definition, there are a number of core issues that may not be directly serviced by sustainability standards systems, such as health and sanitation, but which most would expect to see included in a holistic and globally applicable definition of sustainability.

The members of the ISEAL Alliance are committed to scaling-up their collective impacts[3]. The ISEAL Alliance is seeking to formulate targets for scaled-up impacts for the movement to rally around, as well as the indicators needed to assess their progress towards those targets. These will then drive the development of a comprehensive strategy for scaling up the collective impacts of the standards movement.

A core component of the Conceptual Framework includes identifying the most important targets and indicators that exist to monitor the variety of core sustainability issues identified. The aim is to understand how far these can be transposable to monitoring the impacts of the voluntary standards movement, or inform the development of new targets and indicators.

As work continues with the development, implementation, and revision of the first version of the ISEAL Impacts Code, the Sustainability Framework, and the Scaling Up Strategy, it is expected that these tools will converge to drive a cohesive approach to setting targets and indicators and measuring progress towards global sustainability outcomes.

---

[2] www.isealalliance.org/impacts-code

[3] For more information, please see ISEAL Alliance (2009) E058 Scaling-Up Social & Environmental Standards Systems – ISEAL Alliance Strategic Plan 2009-2013 available at www.isealalliance.org/strategicplan

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

6 of 24

3. Overview

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[4] 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[5]). 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.

The indicators and targets proposed in the conceptual framework were designed with the Bellagio STAMP (Sustainability Assessment and Measurement Principles) in mind. Bellagio STAMP is a set of guiding principles, established by a group of international experts convened by the International Institute for Sustainable Development (IISD) to measure and assess progress towards sustainability. The Bellagio STAMP is not itself a framework for carrying out sustainability assessments, but a set of guidelines on how to go about designing and implementing a conceptual framework[6].

Different indicators can be thought of as existing at different points along a spectrum which ranges from, at one end, high-resolution, local-scale, responsive to short-term changes, detailed or fine-grained information, to, at the other end, low-resolution, global-scale, responsive to long-term changes, broad-brush or coarse-grained information.

Indicators are designed typically for one of two different purposes. *Management effectiveness* indicators are designed to measure the progress of a project, programme or institution towards a set of stated objectives; these indicators tend to be (but not exclusively) at the high-resolution end of the spectrum. *Status* indicators are designed to measure the overall state or condition of a system, irrespective of any stated objectives; these indicators tend to be at the low-resolution end of the spectrum.

The indicators proposed in this conceptual framework are management effectiveness indicators, in so far as they are designed to measure progress towards stated sustainability objectives or targets as defined by a variety of tools, organisations or enterprises. However, these indicators are also intended to be scalable. That means that they should not be restricted to measuring changes at the local scale and short-term end of the spectrum, but also be applicable to measuring national or global-scale changes over the longer term. The idea of scalability, generally speaking, implies that information or data used in an indicator

---

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

designed to measure management effectiveness may be aggregated upwards from the local scale to create a broad-scale, status indicator.

3.1. Targets, Core Indicators & Supplementary Indicators

For each of the frameworks pillars of sustainability, there is a set of draft targets and core indicators[7] and a set of supplementary indicators[8] The targets and core indicators are intended to be as widely applicable as possible across different tools, enterprises, and organisations. However, they may not provide a comprehensive measure of progress for each and every sustainable development initiative, and so a set of supplementary indicators has been proposed within each dimension.

3.2. Feedback from the Rome Consultation

The experts consulted in Rome spoke of a variety of ways in which one can move from a definition of sustainability to one which can be put into practice. Examples discussed included indexing, scenario visualisations, and root cause analysis. However, the experts recognised the challenges of complexity and applicability to diverse users inherent to most models.

The ISEAL Alliance and the FAO proposal to seek to identify *scalable indicators* to render operational the core issues met with conceptual interest, but seemed out of reach for many of the experts. The breadth of discussions on the core issues did not provide a sufficient basis, in the limited time available, to begin exploring the potential of focussing on a range of core indicators that, taken together, would provide a satisfactory snapshot of sustainability. All agreed on the need for much more thinking on how to put the conceptual framework to use.

4. Defining Sustainability

The Conceptual Framework is composed of three distinct portions:

> A definition of sustainability, articulated around a vision statement, sustainability pillars and core issues inherent to each pillar: Defining Sustainability Section.

> A set of targets and indicators that pertain to the core sustainability issues: Targets and Indicators Section.

> A series of frames for organising and assessing the different roles and relative contributions of different tools to delivering sustainability outcomes: Tools Information Centre section.

Each of these portions is presented in summary below. An accompanying Excel document provides a "map" of existing indicators for each of the sustainability pillars.

---

[7] Please see "Targets and Core Ind" page of the Conceptual Framework spreadsheet

[8] Please see "Gov Ind, Soc Ind, Env Ind and Eco Ind" pages of the spreadsheet

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

8 of 24

Vision
Sustainability means ensuring human rights, well-being and food security without depleting or diminishing the capacity of the earth's ecosystems to support life or at the expense of others' well-being. It is a multi-dimensional concept encompassing good governance, social development, environmental integrity and economic resilience

Dimensions of Sustainability

| Good Governance | Social Development | Environmental Integrity | Economic Resilience |

Core Sustainability Issues

Participation | Transparency | Ongoing Assessment | Prevention of Corruption | Rule of Law | Rights (to food, resources & labour rights) | Non-Discrimination and Equity | Access to Education & Knowledge | Health & Sanitation | Cultural Identity | Water | Biodiversity & Ecosystems | Land & Soil | Air & Climate | Eco-efficiency | Secure Livelihoods | Social Capital | Resilience to Economic Risk | Inclusive Value Chains

5. Vision

A vision statement helps to think through and verbalise some of the overarching purposes, values, and assumptions that underlie understanding and actions. It does so by painting a picture of what success would look like if achieved. In this case, success is sustainability of development actions.

Proposed vision statement of the framework:

> *Sustainability means ensuring human rights, well-being, and achieving global food security without depleting or diminishing the capacity of the earth's ecosystems to support life or at the expense of others' well-being. It is a multi-dimensional concept encompassing good governance, social development, environmental integrity, and economic resilience.*

Vision statements depend on a shared understanding of the words used, by all those who read them. To this end, we use the following definitions of the key terms and concepts used.

Sustainable	Relating to or designating forms of human activity that enhance economic resilience, equitably promote human and social well-being, and protect and enhance the natural resource base and ecosystem functions.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

9 of 24

Sustainable Development	Development is considered sustainable when all are today able to secure their livelihood, in ways which are compatible with the maintenance of the environment and of natural resources, thus assuring the ability of future generations to secure their needs from the same natural resource base.
	Developmental processes that preserve human, social, economic, and environmental resources are evaluated in relation to values, power relationships, time, and space. Interactions between resources, and their relative substitutability, lead to inevitable trade-offs between them.
Well-being	The state of being or doing well in life; healthy, or prosperous condition; moral or physical welfare (of a person or community).
Food Security	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.
Sustainable Agriculture and Rural Development (SARD)	SARD seeks an appropriate balance between food self-sufficiency and food self-reliance; employment and income generation in rural areas, particularly to eradicate poverty; and natural resource conservation and environmental protection.

6. Sustainability Pillars and Core Issues

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, and on the feedback from the first expert meeting, four pillars have been identified as having an equal role in creating the necessary framework conditions for ensuring sustainable development:

> Good Governance
> Social Development
> Environmental Integrity
> Economic Resilience

Good Governance is understood as an evolved pillar of what the UN document of 2006 and revisited in 2001 on "Indicators of Sustainable Development: Guidelines and Methodologies" had aggregated under the pillar "Institutions".

As regards the core issues, the following ones have been identified and outlined as follows[9]:

Core Issue	Explanation
Good Governance	
Participation	The need for outreach to, and ensuring the potential for involvement of, interested parties, in particular those who are materially affected
Transparency	Public access to information through both disclosure and active reporting

---

[9] Colour coded as in the Excel document

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

10 of 24

On-Going Assessment	Continuous monitoring, evaluation and evolution through adaptive management
Prevention of Corruption	*Corruption is [...] the abuse of entrusted power for private gain*[10]
Rule of Law (Compliance with Legislation)	Adherence to rules-based approaches
Social Development	
Rights (including a) right to food, b) right to resource use[11] and c) labour rights)	The range of rights enshrined in the Declaration of Human Rights, with particular emphasis on the Guidelines for the Right to Food[12] as well as the range of rights enshrined in the ILO Declaration on Fundamental Principles & Rights at Work
Non-discrimination and equity	Equal access to opportunities and empowerment of girls and women, reduction of discrimination and inequalities based on gender, as well as equity within and between societies
Access to Education and knowledge	Access to, engagement in and attainment through education and knowledge sharing
Improved Health & Access to Sanitation	Access to medical treatment and improved sanitation, notably through access to clean water and the availability of sewage treatment, for the benefit of human health
Respect for Cultural Identity	Respect for self-determination, intellectual property, benefit sharing and religious tolerance
Environmental Integrity	
Water	Water conservation and quality, for both fresh- and marine waters
Integrity of Biodiversity and ecosystems	Diversity of life at the level of species, genetic diversity and ecosystems
Land and Soil	Maintenance and enhancement of organic matter, as well as conserving soil from erosion and degradation
Air and Climate	Mitigation of greenhouse gas emissions and strengthening the resilience and adaptation capacity of people, their livelihoods and ecosystems to climatic change

---

[10] Operational definition adopted by Transparency International www.transparency.org/news_room/faq/corruption_faq

[11] The right to resource use refers to equal right of all peoples to access natural resources, such as fisheries, forestry (including non-timber forest products), and minerals.

[12] "To have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of people to which the consumer belongs, and which ensures a physical and mental, individual and collective fulfilling and dignified life free of fear".

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

Eco-efficiency	Delivery of competitively-priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life-cycle (i.e. production, consumption, and waste management) to a level at least in line with the earth's estimated carrying capacity. In short, it is concerned with creating more value with less impact[13].
Economic Resilience	
Secure Livelihoods	Understood as an economic concept incorporating income, wealth, poverty alleviation and employment, whether paid, voluntary, formal or informal
Social Capital	*Social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them*[14]. It includes the concepts of knowledge sharing and social safety nets
Resilience to Economic Risk	The assurance of self-reliance, and the ability to counter risk through economic diversification and access to finance
Inclusive Value Chains	Fairness and responsibility for all those involved in a value chain, so that they operate as one step within a longer chain

Feedback on the core issues at the 2009 expert meeting and subsequent consultations was more substantive than on the four pillars. The feedback centred mostly on how to single-out and/or re-combine issues that are often interlinked (e.g. poverty alleviation and livelihoods) as well as to which pillar they should be allocated -leading often to challenges in thinking through whether clear boundaries can even be defined around each pillar. There was broad agreement that the issues identified were largely indeed the core issues, though all found easy to identify further potential ones.

During the expert consultation in November 2009, **Good Governance** was considered by most of the participants to be an underlying, enabling concept rather than a pillar of sustainability, relating to principles and processes rather than issues in their own right. However, it was also argued that Good Governance, and the core issues identified therein, are key components in the credibility of sustainability interventions, and critical to the legitimacy of non-governmental actions. Accordingly, there remain differing views as to whether to place (figuratively speaking) Good Governance above or alongside the remaining three pillars. Whilst this issue will continue to be explored in the further development of the conceptual framework, FAO and ISEAL consider that the two-dimensional representation of the framework should not mislead from the key point that there is no prioritisation amongst these four pillars and their core issues. Different actors will invariably come to address them with different approaches and different degrees of prioritisation. However, these different approaches and prioritisations must result from a fair balance of, the trade-offs inherent to the relative roles and priorities of each actor, and of the approaches it adopts.

[13] WBCSD (2000) Eco-Efficiency www.wbcsd.org/web/publications/eco_efficiency_creating_more_value.pdf

[14] Social Capital as defined by Robert Putnam www.infed.org/thinkers/putnam.htm#_Social_capital

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

12 of 24

During the workshop discussion, a new approach was proposed for the **Environmental Integrity** dimension of the framework, reflected in the table above. Eco-efficiency was highlighted as an important issue throughout resources life-cycle, from production to post-consumption. The initial set of core issues proposed [including water, integrity of biodiversity, soil fertility, climate change, and natural resource management] did not appear to the experts to provide a systematic approach to environmental integrity: if water is included, why not land or air? Furthermore, resource use efficiency was considered by several experts as a basic aspect of sustainability that should run through the framework rather than appear as a self-standing issue. Whether or how this could be captured would need to be considered for future versions of the framework. Based on this discussion, an alternative set of five core issues was proposed, including three for the physical environment (water, land and soil, air and climate) one for the biotic environment (biodiversity) and one to address the overarching concept of eco-efficiency.

A discussion around the concept of **Economic Resilience** stressed the importance of recognizing that sustainability is a dynamic concept, and that "resilience" may not necessarily capture this as appropriately as "development" or "growth". As alternative, the experts considered whether a particular desired end-state might be described through such terms as "benefit", "efficiency", "well-being", "self-reliance" or "security", resonating more closely, for example, with the FAO's own mission statement.

A number of the issues that were discussed under **Economic Resilience** overlapped with those proposed under **Social Development** and *vice versa*. In part this was due to the relatively greater difficulty of understanding what was intended by a number of the social development core issues. In part it was also due to the relative breadth of the concepts inherent to the social development core issues. For example, what is understood as "Social Capital", and is it an economic or a social issue? Or "Livelihoods", or "Labour Rights"? More than under the other two pillars, the overlap between economic resilience and social development meant the participants began to scope the range of issues that could be considered for inclusion under these pillars, whether converged into a single pillar or kept separated:

> Income/poverty, wealth/debt
> Livelihoods (relating to employment/jobs)
> Access to education/knowledge
> Right or Access to land/sea and other resources (including energy)
> Food security
> Equality/discrimination (as opposed to a narrow focus on gender equality)
> Equity (within and between societies)
> Resilience
> Value chains
> Cultural identity, diversity and self-determination
> Health and sanitation
> Social capital
> Quality of life

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

13 of 24

Due to time constraints, it was not possible to reach consensus in terms of how to handle the overlapping issues under the social and environmental dimensions. However, each of the issues highlighted above, that were not already included in the draft framework were incorporated into either the social or economic resilience pillar. Key changes included adding the concept of the right to food and the right to resource use into a broader umbrella concept of Rights (expanded from Labour Rights) under the Social Development pillar as well as expanding the scope of the original gender equality issue to the broader concept of Non-discrimination and equity.

While expanding key issue concepts in this way allows for broader inclusion of a greater number of key issues into the Conceptual Framework, it is recognised that future versions may re-consider the exact fit between the issues currently clustered together. It was also noted that while the concept of Poverty Alleviation is critical for most stakeholders, the concept of Sustainable Livelihoods is a broader and more positive concept and was maintained in this version of the framework. A distinction between social development and economic resilience pillars was maintained in the framework although the relationship between these two concepts and any overlaps would require further consideration in future versions of the Conceptual Framework.

7. Targets & Indicators

7.1. Good Governance

Governance is the most challenging dimension of sustainability for which to define targets and 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, and so governance remains a largely qualitative concept. However, there are several well-known governance indicators that use scoring systems to convert qualitative judgements into quantitative measures.

The Index of Democracy developed by the Economist Intelligence Unit (EIU), for example, ranks countries by scoring them on a 0-10 scale across five governance categories: electoral process and pluralism, civil liberties, the functioning of government, political participation, and political culture. This is done using a mixture of expert and public opinion to answer a set of 60 questions with simple two-way (yes/no) or three-way (yes/partially/no) responses. The responses are then scored (yes=1, no=0, partially=0.5) and the overall scores converted to a 0-10 scale. In this way the EIU is able to take responses to a long list of (mainly) qualitative questions such as "Are elections for the national legislature and head of government free?" (EIU refers to these questions as indicators) and convert them into a quantitative measure of democracy which can be applied to any country.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

14 of 24

Two core governance indicators have been proposed in this framework and both of these would need to be developed and elaborated using a system of scoring by expert or public opinion, probably but not necessarily along the lines of the EIU's Democracy Index. One key difference is that the proposed indicators would be designed to apply to sub-national or local scales of governance. These two core indicators relate to the themes of participation and transparency.

Good Governance		
Core Issue	Proposed Target	Core Indicators
Participation	Target to be based on achieving a high score in the indicator	Degree of active participation by interested parties in local management and decision-making (outline concept only: needs more development and consensus on what to include)
Transparency (including Assessment, Prevention of Corruption and Compliance)	Target to be based on achieving a high score in the indicator	Availability of social-economic and environmental information relating to the business, enterprise or policy intervention, including monitoring data, management plans, and financial accounts (outline concept only: needs more development and consensus on what to include)

In this two-target/indicator system for measuring good governance, three of the core sustainability issues—ongoing assessment, prevention of corruption and compliance with laws—have been rolled up and subsumed within the core issue of transparency. This is because all of these core issues are essentially qualitative in nature, and it is more feasible to develop and implement just two rather than five separate, survey-based, expert-opinion indicators using scoring systems to make them quantitative. In any case, whether one, two, or five indicators are developed, the survey questions will need to cover the same range of issues. The survey questions have not yet been considered.

7.2. Economic Resilience

The core secure livelihoods target and indicator selected is based on average *per capita* income of the farm, forestry, or fishery enterprise. This can be measured in absolute terms, or compared with the national average and expressed as a ratio. Net income per capita of an enterprise can be calculated as its gross value added (pay plus profits) divided by the number of employees. Of course, the average *per capita* income does not take inequality into account, which can also be calculated if required. Average income is a more useful indicator than absolute poverty, which is only meaningful in the poorest countries and communities.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

15 of 24

Diversity of income is proposed as the core indicator for resilience to economic risk. Diversity in this sense can be calculated in exactly the same way as measuring the species diversity of an ecosystem, or the linguistic diversity of a region. One way that ecologists and linguists do this is to ask "*what is the probability that two organisms/people selected at random in a given area will belong to the same species/speak the same language?*" The more diverse the area, the lower the probability that they will be the same. One could also ask *"what is the probability that two random Euros earned by an enterprise come from the same source?"*

The core indicator for inclusive value chain is the production ratio of certified sustainable products (e.g. organic, Rainforest Alliance, FSC, MSC) versus conventional production. Certification to a sustainability standard is widely seen outside the standard-setting movement as a good indicator of sustainable resource management. It could be interpreted as a self-reflective or self-fulfilling measure if used in this context. Nevertheless, it would seem to be a basic error to omit this indicator from the core set, and not make good use of the data already being collected by standard-setting organisations. One can assume that it is counter to the interests of such organisations to over-report the level of certification simply in order to meet their own targets. It is thought that the share of the final consumer price that is received by the producer is not a reliable indicator of fairness.

Social capital, relationships, and networks are fundamentally difficult to measure, and are qualitative rather than quantitative in nature. In this respect, the core indicator for this issue will resemble the governance and labour rights indicators, and the most successful approach is likely an index based on surveys of public and expert opinion. Surveys should take into consideration issues such as civic and political engagement, membership, and voluntary work in various organisations, relationship with neighbours and family members, and how people get information and news. A scoring system would give the appropriate weight to these aspects of social capital, relationships, and networks.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

16 of 24

Economic Resilience		
Core Issue	Proposed Target	Core Indicators
Secure Livelihoods (including concept of Poverty Alleviation)	Ratio of 1.2 in low-income countries, 1.1 in middle-income countries and 1.0 in high-income countries, by 2020 Target to be based on achieving a high score in the indicator	Ratio of income *per capita* of farm, forest or fishing enterprise or organization to national average for that sector Absence of child or enforced labour, and absence of discrimination, existence of employment contracts and freedom of association (outline concept only: needs more development and consensus on what to include)
Social Capital	Target to be based on achieving a high score in the indicator	Degree of social interaction and connectedness (concept only: needs more development and consensus about what to include).
Resilience to Economic Risk	Positive trend in income diversity between 2010 and 2020	Diversity of farm, forest or fishery products and practices, including off-farm activities; preparedness and response capacity to crisis (safety nets, capital mobility)
Inclusive Value Chains	Positive trend volume growth between 2010 and 2020	Volume of certified goods or services in the value chain

7.3. Social Development

Many social development indicators have been defined and measured by national governments and international or intergovernmental agencies, and some of these are applicable to the *conceptual framework*. All of the indicators that are proposed here can be applied to farming, forestry or fishery enterprises, or organisations at the local scale, but most can also be aggregated to a national or global level, and compared with national or global averages.

Indicators and targets for right to food and right to resource use could be derived from the work of the 'Right to Food Unit' of the FAO[15]. Access to resources is considered an essential facet (even prerequisite) of the right to food, especially for rural populations. For

[15] http://www.fao.org/righttofood/index_en.htm

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

17 of 24

the rural poor, the "right to feed oneself in dignity"[16] requires an individual to have access to means of production i.e. land, water, grazing resources, forest resources, fishing rights, subsoil resources, and genetic resources.

The indicator and target for labour rights will have to be developed along the lines of the governance indicators, because the component issues that make up labour rights are generally more qualitative than quantitative in nature. It is suggested that the indicators and its accompanying target be based on the basic labour rights of absence of child, compulsory or enforced labour, absence of discrimination, freedom of association and a safe working environment. An example from the Global Reporting Initiative is shown below for a safe working environment. Further work would be needed to develop a more comprehensive indicator.

The indicators for non-discrimination and equity, access to education, and improved health and access to sanitation will have to be implemented using local level data that is either already collected by local governmental authorities, or that is collected specifically for this purpose. All three relate to national-level indicators that are already being monitored by governments and UN agencies for the Millennium Development Goals.

The indicator proposed to measure respect for cultural identity is based on a concept of "fate control" developed for indigenous peoples living in the Arctic, and will need data collection specifically for the current purpose. Access and land rights is the issue of utmost concern to indigenous and local communities, and therefore a core indicator has been proposed that relates to control of lands and waters rather than one which measures cultural or religious diversity.

Social Development		
Core Issue	Proposed Target	Core Indicators
Rights A)Right to Food	Complete access to safe and nutrition food in a regular and permanent basis	Prevalence of underweight and stunting children under 5 years of age Nutritional status
Rights B) Right to Resource Use	Ratio commensurate to % of aboriginals represented in the population	Extent of aboriginal participation in resource-based economic opportunities
Rights C) Labour Rights (safe working environment as core indicator)	Positive trend	Example only: Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities (GRI)

---

[16] "The Right to Food and Access to Natural Resources" – FAO 2008.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

Non Discrimination and Equity (focus on gender equality as core indicator)	Gender ratio from 0.95 to 1.05 by 2015, and zero gender bias by 2020	Gender ratio (female to male) for income per capita (livelihoods core indicator), under-5 mortality (health core indicator) and school enrolment ratio (education indicator) for the enterprise area
Access to Education & Knowledge	Doubling from 2010 level, or achieve ratio of at least 0.95, by 2020	Combined gross enrolment ratio in primary or secondary education, and adult literacy rate, within enterprise area, and compared to national average
Improved Health & Access to Sanitation	Halving between 2010 and 2020	Under-5 mortality Healthcare delivery
Respect for Cultural Identity	Complete access rights and control by indigenous and local communities by 2020	Degree of access and control over traditional lands, waters and biodiversity by indigenous and local communities

7.4. Environmental Integrity

The core indicators proposed for water conservation and Air & climate change mitigation are measures of eco-efficiency. That is to say they are measures of environmental pressure (or footprint) per unit of production. Simply measuring total resource use, irrespective of productivity, is less informative as it varies according to the size of the enterprise. A thorough footprint analysis[17] would provide a more robust measure of eco-efficiency.

Carbon dioxide is the main greenhouse gas responsible for global warming, and is emitted by all enterprises whenever fossil fuels are consumed, as well as through land use changes, and chiefly, deforestation. Agriculture emits methane and nitrous oxide from fertilizers 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 and Climate Change core indicator. Accordingly, consumption of ozone depleting substances and concentrations of air pollutants are not included.

Water is an essential input in farming and forestry, and agriculture is the largest user of water worldwide, using 70% of water withdrawals; in some countries, agriculture uses up to 90% of water. Because of the critical importance of water supply, and the water crisis facing many parts of the world, water use efficiency has been chosen for this core indicator.

---

[17] E.g. Global Footprint Network

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

19 of 24

The most appropriate indicator for measuring changes in the state of biodiversity, whether at the level of ecosystem, species or even genes, is to monitor trends in populations of wild and domesticated species in the overall environment of the farming, forestry or fishery enterprise. This is because any changes in the productivity, diversity or resilience of an ecosystem will be reflected in the abundance of wild plants and animals living in it. This indicator is well-developed at the global level, and can be applied to any biome or ecosystem type.

The core indicator for Land and Soil proposed here is the percentage of exposed or eroded soil. This has been selected as it is more readily measured than the organic and inorganic nutrients content of the soil, and reflects the global importance of soil loss and conservation. It is easily measured at the scale of a farm or forest but hard to compare with national, regional, or global scales as the data are insufficient.

Environmental Integrity		
Core Issue	Proposed Target	Core Indicators
Water	Halving of 2010 level by 2020	Ground and surface water consumption, annual and per unit of product
Integrity of Biodiversity and Ecosystems	Positive or neutral trend in species populations between 2010 and 2020	Trends in abundance of selected wild species, applied specifically to areas of productive agriculture, forestry and fisheries
Land and Soil	Halving of 2010 level, or less than 5%, by 2020	Percentage of land with exposed or eroded soil [or land affected by desertification]
Air & Climate Change (climate change addressed as core indicator)	Halving of 2010 level by 2020	Carbon dioxide emissions (and equivalents), annual and per unit of product
Eco-efficiency	Integrated into targets and indicators above	See above for water and Air & Climate Change

8. Tools[18] Information Centre

The ISEAL Alliance is interested in determining the most effective contributions that standards systems can make to achieve sustainability outcomes; and where it is that

---

[18] Tools are here defined as the collective of diverse policies, programmes, initiatives and interventions that any organisation develops and implements.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

20 of 24

they can be more effective in achieving impact when working in combination with other organisations (and other tools). Similarly, the FAO is interested in identifying the variety of public and private initiatives that its member governments may be able to use in combination with their own public policies, to address sustainability outcomes.

At present, there are no frameworks, or information centres, that allow a diversity of users to become aware of the range of tools that are being deployed to achieve sustainability outcomes, nor assessments of the attributes and performance of these tools[19].

8.1. Users

Different users are likely to have different information needs and interests:

User	Interest
Government Procurement Authority	How can I ensure my purchases from paper and furniture to building materials and transport or catering arrangements are sustainable?
Retailer	What initiatives can I use to help me manage and demonstrate sustainable management of our global supply chains across thousands of product categories? How do they fit together?
Manufacturing Brand	What combination of tools can I rely on to ensure the long-term sustainability of my supply of (e.g. cocoa)?
NGOs (Environmental, Human Rights, etc.)	What are the most effective pathways for achieving to reach critical climate change mitigation targets?
Forest Plantation Owner	How can I understand and meet legislative requirements?
Ministries (e.g. Agriculture, Social Affairs, Development & Cooperation), or Independent Human Rights Commissions	Who are the different organisations that share my rural development objectives, and how can my policies and programmes build on theirs?

Identifying potential users, and their specific information needs, is a critical first step to identifying the questions and data that will need to be collected in the tools assessment framework to ensure its usefulness.

8.2. Key Questions

As an exercise in organising the many policies, instruments and initiatives being deployed to address sustainability outcomes, three strata's of information have been identified:

> the key questions that (needing answers) in order to be able to assess tools

> the information variables that needed to answer the key questions

---

[19] Such frameworks are starting to be developed for voluntary standards systems, for example, the International Trade Centre's "Trade for Sustainable Development" information repository.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

> the sources of that information

An outline of these is presented in the table below.

| Key Questions	Examples of Variables Pertaining to the Questions	Sources of Information
What tools exist?	> By sector, function, beneficiary, geography, etc... > ...	> The content of standards and standards systems websites, upcoming T4SD[20] global sustainability database of the ITC, legislation, corporate strategy programmes
What is the accountability of each tool?	> Who owns the tool (e.g. government, NGO, private sector)? > Does the tool have a clear purpose (e.g. forest management)? > Are the tools' beneficiaries solicited to engage in its definition?	> Compliance with accountability standards (e.g. ISEAL Codes, GRI, UNPRI, Equator Principles...) > Existence of a transparency policy for governments / authorities...
What are the impacts of each tool?	> Is the data collected coherent with widely used targets, indicators, and methodologies? > How does the tool deliver on its stated objectives?	> Management programmes > M&E programmes > Application of ISEAL Impacts Code
How effective is each tool?	> What are the strengths of this tool? What are its weaknesses/limitations? > What is the breadth of applicability? How easy is it to apply the tool? > How cost-effective is the tool for its users?	>
What are the criteria that will allow assessment of the potential for convergence of different tools to achieve greatest sustainability effectiveness?	> How does the legislative context within which the tools will apply support or hinder them? > How is the commodity chain structured (e.g. dispersed or concentrated)? Tools-Related > Do the tools have mechanisms in place for mutual recognition, referral or coordination? > ...	>

---

[20] Trade for Sustainable Development Project of the International Trade Centre.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food
Sectors

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. Some of the attributes may be possible to address by means of a binary (yes/no) or check-box answers. Many more are likely to require narrative answers, with qualitative assessments. This suggests that the amount of information that would be collated within such a tools assessment framework is significant.

8.3. Assessment Framework

The Tools Information Framework, 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 (local, national, global), timeline and stakeholder contexts, such a tool can only be flexible and dynamic, such a scenario visualisations.

The figure below is an example of how this could be achieved. It provides a representation of the ways in which three different actors, governments, business (shortened to biz in the legend below) and NGOs, may (as example) relate to a range of core sustainability issues. Accordingly, for example, if an NGO scores relatively low on such issues as "right to food" or "right to resource use", it may wish to consider working with a governmental body to address these issues, if appropriate.
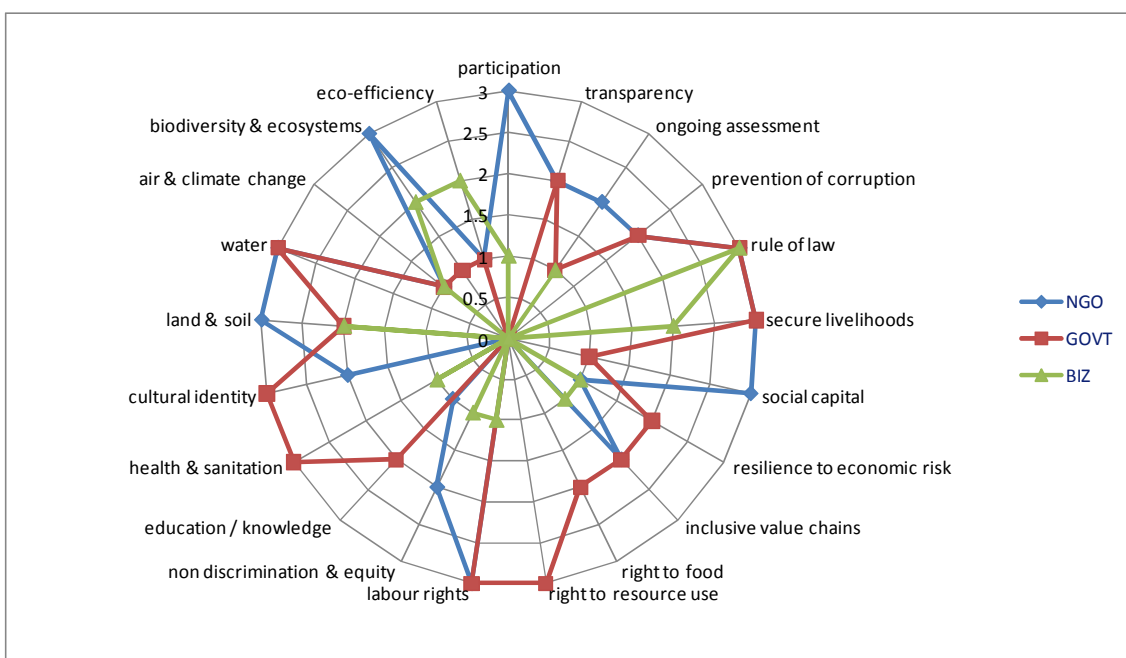
A spider graph overlaying the sustainability pillars and core issues, nesting and linking the different indicators/indices, evidences the trade-offs between the different elements that compose it. It also allows for the use of both qualitative and quantitative indicators/indices and thus, as well as a quick overview of alternative development scenarios where certain issues are preferred among others.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

23 of 24

It is likely that most users will seek answers to questions in relation to specific contexts, rather than in relation to specific tools. Users may be interested, for example, in knowing which tools are available within the coffee sector globally, or on forestry within a specific country, or NGO initiatives on water. For the tools assessment framework to be useful, it must be imagined as a relational database, where data can be recombined in many different ways in order to answer a variety of different questions.

9. Conclusion

Participants from the Rome expert meeting agreed that a Tools Information Centre is needed to collate information on a variety of public, private, and non-governmental interventions; comparing them based on their objective characteristics and assessing them based on a shared Sustainability Framework would be of great interest and use for many types of stakeholders. These could include NGOs, businesses, entities wishing to become certified, and indeed policy-makers.

There was also broad recognition that the main challenge lies in collating the information. One challenge is logistical, in terms of the volume of information needed to populate such a global database. A further challenge is the legitimacy of how the information is collated, compiled, and presented, as it will invariably lead to value assessments between tools.

Participants concurred that this type of project could only work if backed by a strong partnership of diverse and complementary organisations (e.g. governmental, non-governmental), and that it should be "housed" in a non-partisan international organisation (e.g. FAO, ITC, UNEP, IDRC). Whilst the governance of the Centre will be critical to the legitimacy of the initiative and of the information it provides, participants recommended much more thinking is needed to assess how best to collate and compile information, having considered the relative challenges and shortcomings of a variety of models (e.g. wikis, self registration by tool owners).

FAO indicated its potential interest in submitting a proposal to their governing bodies (e.g. Committee on Agriculture) to host such a Centre if a solid partnership proposal can be developed.

FAO - ISEAL Alliance Discussion Paper
Conceptual Framework for Progressing Towards Sustainability in the Agriculture & Food Sectors

24 of 24