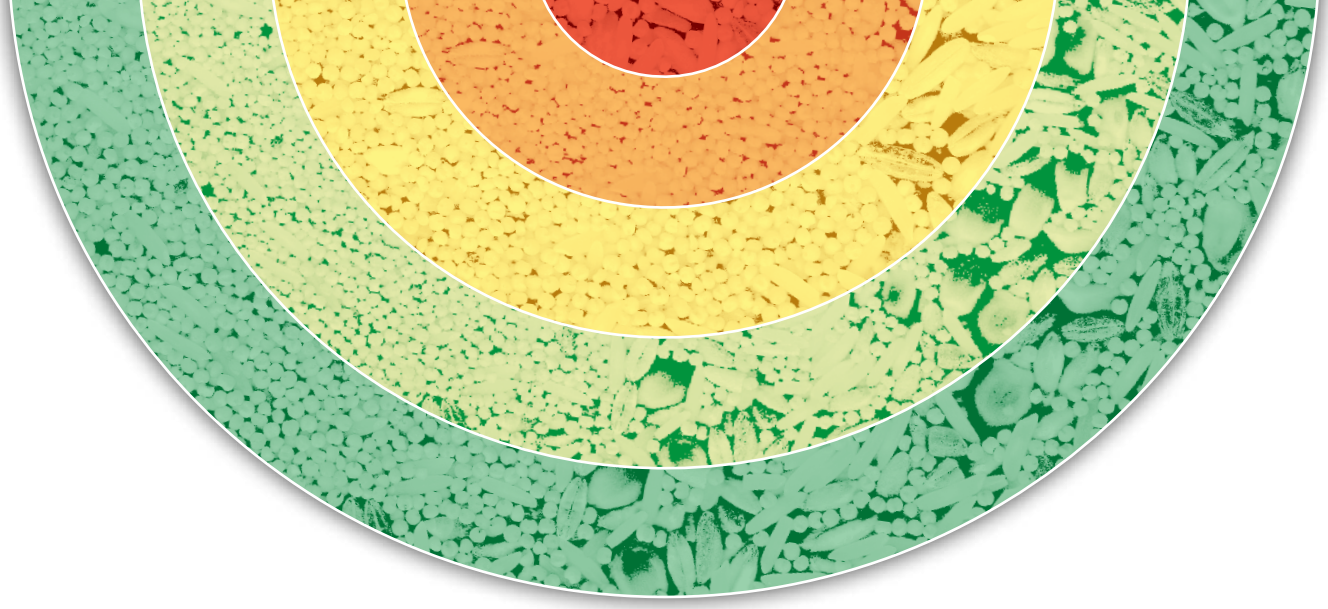


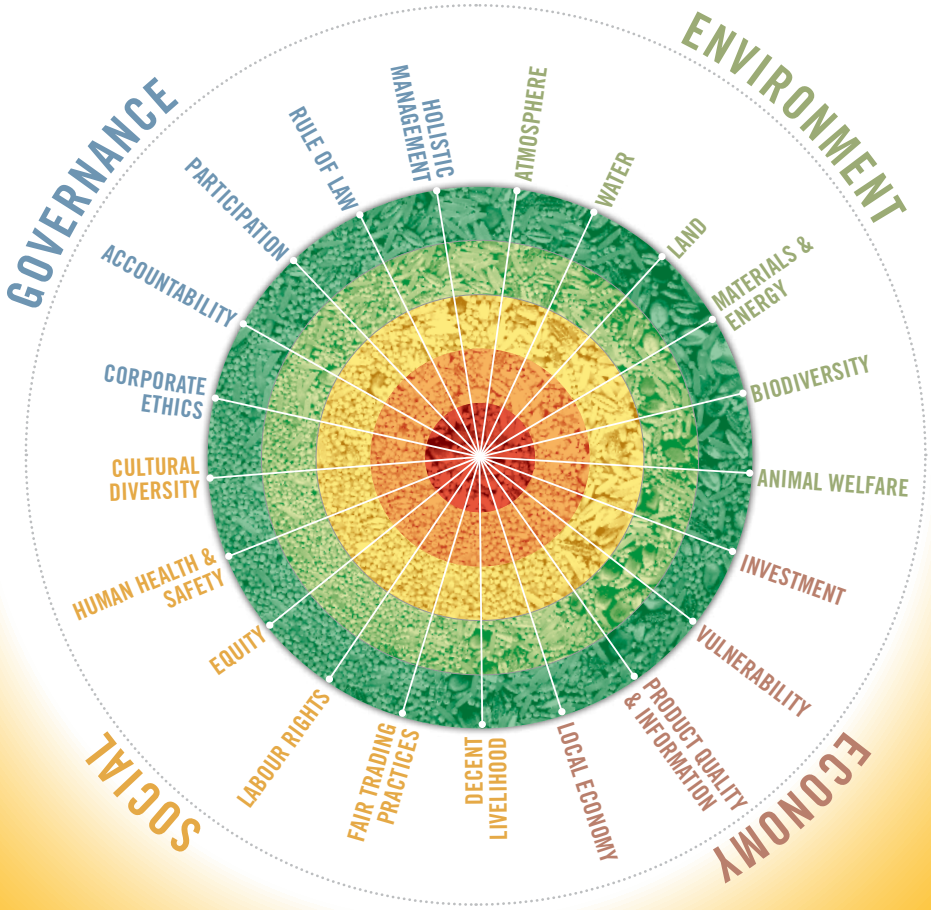
SAFA

SUSTAINABILITY ASSESSMENT OF FOOD AND AGRICULTURE SYSTEMS

GUIDELINES

VERSION 3.0

SAFA


ENVIRONMENT
ATMOSPHERE
WATER
LAND
MATERIALS & ENERGY
BIODIVERSITY
ANIMAL WELFARE
ECONOMY
INVESTMENT
VULNERABILITY
PRODUCT QUALITY & INFORMATION
LOCAL ECONOMY
DECENT LIVELIHOOD
FAIR TRADING PRACTICES
SOCIAL
LABOUR RIGHTS
EQUITY
HUMAN HEALTH & SAFETY
CULTURAL DIVERSITY
CORPORATE ETHICS
GOVERNANCE
ACCOUNTABILITY
PARTICIPATION
RULE OF LAW
HOLISTIC MANAGEMENT

NATURAL RESOURCES MANAGEMENT AND ENVIRONMENT DEPARTMENT

SAFA

SUSTAINABILITY ASSESSMENT OF FOOD AND AGRICULTURE SYSTEMS

GUIDELINES

VERSION 3.0

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS - ROME 2013

ACKNOWLEDGEMENTS

SAFA is an initiative led by Nadia El-Hage Scialabba, Natural Resources Management and Environment Department; thanks go to Alexander Mueller for his continuous support and to the Government of Switzerland for the kind financial assistance.

The draft Sustainability Framework was first defined through a FAO cooperation with the ISEAL Alliance and an expert meeting held in 2009; thanks go to Sasha Courville, Elisabeth Guttenstein and Jonathan Loh for their collaboration during this phase.

The Test Version 1.0 of the SAFA Guidelines was released on the occasion of the United Nations Conference on Sustainable Development in June 2012. It was shaped by stakeholders' surveys, an expert meeting held in 2011 and two electronic public consultations held in 2011 and 2012; thanks go to Jan Grenz and his team for the write-up, including Julia Jawtusch, Madeleine Kaufmann, Christian Schader, Susanne Stalder and Christian Thalmann.

The Test Version 1.1 of the SAFA Guidelines was benchmarked against major sustainability tools and piloted in 30 settings in 2012-13; thanks go Sally Lee and Noémi Nemes for their backstopping and coordination of this process.

The Draft SAFA Guidelines (version 2.0) was prepared following a practitioners and partners meeting held in 2013; thanks go to Elisabeth Henderson, Cristina Larrea, Sally Lee, Noémi Nemes, Aimee Russillo, Michael Sligh and John Stansfield for their contributions.

The SAFA Guidelines (version 3.0) are produced following a peer-review and additional provision of expertise; thanks go to Marta Bentancur, Giulia Bernini, Gabriella Bianchi, Cécile Brugère, Doug Kneeland and Jon Manhire for their inputs.

Last but not least, thanks go to the several hundred individuals who provided their knowledge and insights on the occasion of the different SAFA events, including sustainability concerned partners in academia, associations, food industry, multi-stakeholder organizations, as well as within the UN system and FAO.

PREFACE

More than two decades have passed since the principle of sustainable development received nearly universal agreement at the 1992 Earth Summit. As of today, 106 countries have established national sustainable development strategies and related sustainability reporting, as evidenced by national reports to the Commission on Sustainable Development. Furthermore, over 120 voluntary sustainability standards, eco-labels, codes of conduct and audit protocols are referenced on the Standards Map of the International Trade Centre. World over, there is an increasing user demand for practical tools to support decision-making processes regarding the use of sustainability tools in business operations. However, there is no single framework that integrates all aspects of sustainability and sadly, sustainability objectives are deteriorating in all spheres of development, as witnessed by multiple environmental, social and economic crisis.

The hundreds different sustainability frameworks developed in the last decades by universities, civil society, corporations and national and international institutions, range from environmental and social standards to corporate social responsibility and codes of good practices that apply to operational units or specific supply chains, with or without labelling. This expansion of sustainability tools and various claims place a burden on producers and traders and frustrate consumers in the market place. In addition, the implementation of an integrated approach to analyzing all sustainability dimensions as a coherent whole, and integrating them into business or development strategies, remains a major challenge.

Global trade and the governance of inter-state externalities on public goods (e.g. climate, biodiversity, food safety, financial stability), compounded by the proliferation of sustainability schemes, call for a multi-party cooperation that must be supported by "common rules" in order to reduce fragmentation, prevent conflicts, mitigate uncertainty and build capacities for effective sustainability. More accurate data and sound guiding principles to establish a common basis for assessing sustainability is needed. Tackling these challenges requires, among other things, a common language for sustainability, as well as a holistic approach to assessment and implementation that considers the complexity and relationships of all dimensions of sustainability. While there is now a wide awareness of the sustainability concept, there is also wide interpretation of the definitions

and components of sustainability based on different disciplines and political beliefs and values. There is need to measure what matters; the dilemma is to measure what matters to whom and how?

SAFA is a holistic global framework for the assessment of sustainability along food and agriculture value chains. SAFA establishes an international reference for assessing trade-offs and synergies between all dimensions of sustainability. It has been prepared so that enterprises, whether companies or small-scale producers, involved with the production, processing, distribution and marketing of goods have a clear understanding of the constituent components of sustainability and how strength, weakness and progress could be tackled. By providing a transparent and aggregated framework for assessing sustainability, SAFA seeks to harmonize sustainability approaches within the food value chain, as well as furthering good practices.

These Guidelines are the result of five years of participatory development, together with practitioners from civil society and private sector. The Guidelines are the result of an iterative process, built on the cross-comparisons of codes of practice, corporate reporting, standards, indicators and other technical protocols currently used by private sector, governments, not-for-profits and multi-stakeholder organizations that reference or implement sustainability tools. SAFA builds on, and acknowledges, existing sustainability tools, with the goal of integrating and relating current systems.

The Guidelines are produced in the same spirit of codes of practice, guidelines and other recommended measures to assist in achieving sustainable and fair practices in food and agriculture production and trade. Because existing schemes remain fragmented on what constitutes a sustainable food and agriculture system, SAFA aims to fill the gap between specific sustainability tools, while fostering partnerships for the long-term transformation of food systems.

The target audience of a SAFA assessment is small, medium and large-scale companies, organizations and other stakeholders that participate in crop, livestock, forestry, aquaculture and fishery value chains. However, as a framework and harmonized global assessment approach, SAFA is also relevant to governments' strategies, policy and planning.

The guiding vision of SAFA is that food and agriculture systems worldwide are characterized by four dimensions of sustainability: good governance, environmental integrity, economic resilience and social well-being. For each of these four dimensions of sustainability, SAFA outlines essential elements of sustainability based on international reference documents and conventions. The 21 themes and 58 sub-themes were defined

through expert consultations. Default performance indicators for each sub-theme facilitate measuring progress towards sustainability. SAFA assessment involves adaptation to geographic, sector-specific and individual conditions of the assessed entity and the comprehensive use of existing documentation, standards and tools.

The SAFA Guidelines consist of three sections: Section 1 describes the purpose, linkages, principles and scope of SAFA; Section 2 outlines the procedure of SAFA implementation; Section 3 contains the SAFA protocol for sustainability themes and sub-themes. Default indicators sheets, providing guidance and references can be found in this publication complement entitled SAFA Indicators; these will be subject to periodic reviews, as learning is gained during the Guidelines' implementation.

The SAFA Guidelines are provided by FAO. They are publicly available and no license fees may be charged for their use. The correct application of the Guidelines is the responsibility of the implementing enterprise. FAO is neither liable nor responsible for consequences of using the SAFA Guidelines.

FAO is also making publicly available an electronic SAFA Tool, with a view to assist users in implementation of the Guidelines. The Tool and other SAFA resources are freely downloadable from: http://www.fao.org/nr/sustainability/sustainability-assessments-safa

TABLE OF CONTENTS

ABBREVIATIONS

4Cs	Common Code for the Coffee Community
B2B	Business to Business
B2C	Business to Consumer
CBD	Convention on Biological Diversity
CGD	Center for Global Development
CMP	Conservation Measures Partnership
COSA	Committee on Sustainability Assessment
CSR	Corporate Social Responsibility
EFQM	European Foundation for Quality Management
FAO	Food and Agriculture Organization of the United Nations
FLO	Fairtrade Labelling Organization
FSC	Forest Stewardship Council
GAP	Good Agricultural Practices
GEA	Greening the Economy with Agriculture
GHG	Greenhouse Gas Emissions
GLOBALGAP	Global Partnership for Good Agricultural Practices
GRI	Global Reporting Initiative
GSCP	Global Social Compliance Programme
HACCP	Hazard Analysis Critical Control Points
IDEA	Indicateurs de Durabilité des Exploitations Agricoles
IISD	International Institute for Sustainable Development
ILO	International Labor Organization
IFC	International Finance Corporation
IPCC	Intergovernmental Panel on Climate Change
ISEAL Alliance	International Social and Environmental Accreditation and Labelling Alliance
ISO	International Organization for Standardization
LCA	Life Cycle Analysis
MandE	Monitoring and Evaluation
MSC	Marine Stewardship Council
OECD	Organization for Economic Cooperation and Development
PCR	Product category rules
RA	Rainforest Alliance
RISE	Response-Inducing Sustainability Evaluation
ROL	Rule of Law
RSB	Roundtable on Sustainable Biofuels

RSPO	Roundtable on Sustainable Palm Oil
RTRS	Roundtable on Responsible Soy
SAFA	Sustainability Assessment of Food and Agriculture systems
SAI	Social Accountability International
SAI platform	Sustainable Agriculture Initiative Platform
SAN	Sustainable Agriculture Network
SFL	Sustainable Food Lab
SME	Small and Medium Enterprises
SSI	State of Sustainability Initiative
SSTI	Sustainable Standards Transparency Initiative
TSC	The Sustainability Consortium
UNCTAD	United Nations Conference on Trade and Development
UNCED	United Nations Conference on Environment and Development
UNCSD	United Nations Conference on Sustainable Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGC	United Nations Global Compact
UNITC	United Nations International Trade Centre
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development
WEF	World Economic Forum
WHO	World Health Organization
WTO	World Trade Organization

SECTION ONE

FRAMEWORK

PURPOSE OF SAFA

SAFA Vision

The Sustainability Assessment of Food and Agriculture systems (SAFA) Guidelines were developed for assessing the impact of food and agriculture operations on the environment and people. The guiding vision of SAFA is that food and agriculture systems worldwide are characterized by all four dimensions of sustainability: good governance, environmental integrity, economic resilience and social well-being.

Sustainable development has been defined by FAO as "*the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such sustainable development (in the agriculture, forestry and fisheries sectors) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable*". (FAO Council, 1989).

SAFA offers a holistic framework that encompasses all aspects of sustainable cropping, livestock husbandry, fisheries, aquaculture and forestry production, postharvest, processing, distribution and marketing. It builds mainly on existing sustainability schemes, creating opportunities for enterprises to use existing data and combining efforts with other tools and sustainability initiatives. SAFA allows a fair playing field for all by presenting a framework that is adaptable to all contexts and sizes of operations. In SAFA, what matters is performance, leaving space for the diversity of implementation means possible. SAFA encourages continuous improvement and builds capacity for sustainability. It strives to establish an easy-to-use standardized system, which does not require external experts. This vision can be realized through different pathways, depending on local circumstances.

Based on aggregate global trends and outlooks for the future, sustainable development efforts are not making enough positive difference. More accurate data and sound guiding principles to establish a common basis for assessing sustainability is needed. Tackling these challenges requires, among other things, a common language for sustainability, as

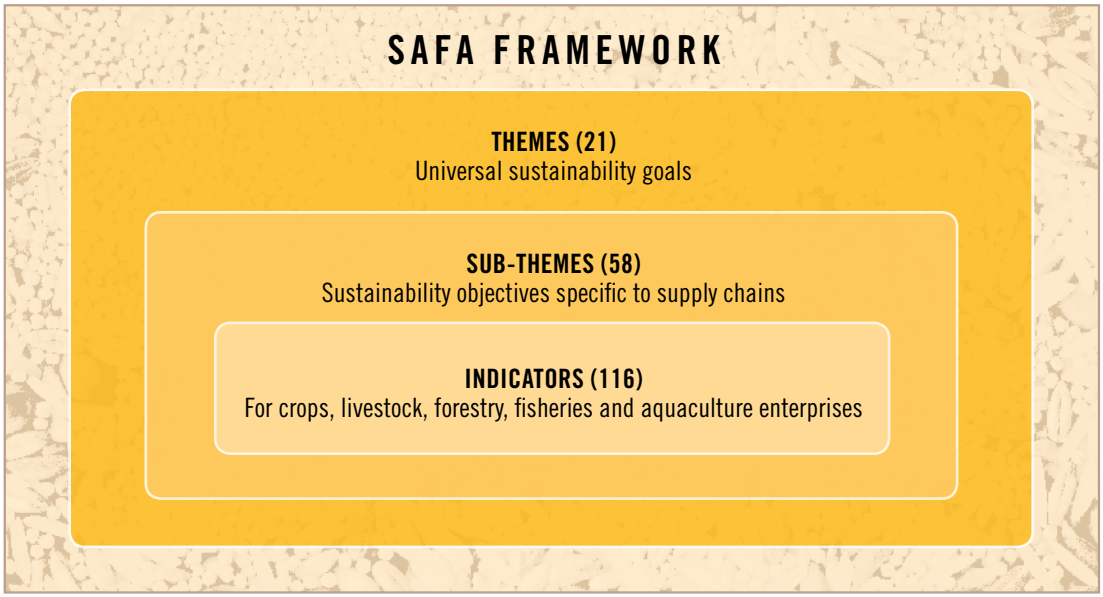
well as a holistic approach to assessment and implementation that considers the complexity and relationships of all dimensions of sustainability. This is the inspiration for SAFA.

By providing a transparent and aggregated framework for assessing sustainability, SAFA seeks to harmonize sustainability approaches within the food value chain, with the long-term objective of sustainable transformation of food systems. Using SAFA, enterprises and actors involved with the production, processing, distribution and marketing of food and agricultural goods, have a clear understanding of the constituent components of sustainability and how strength, weakness and progress could be assessed.

What is SAFA about?

SAFA is a holistic global reference framework for the assessment of sustainability along agriculture, forestry and fisheries value chains. SAFA was developed as an international reference document, a benchmark that defines the elements of sustainability and a framework for assessing trade-offs and synergies between all dimensions of sustainability. There are several levels of SAFA, which are nested to enhance coherence at all levels (see Figure 1).

Figure 1. **SAFA Framework**



Different users with different purposes can enter at different levels of the SAFA Framework.

The SAFA Framework begins with the high level, overarching dimensions of sustainability: good governance, environmental integrity, economic resilience and social well-being. It is recognized that these dimensions are broad and encompass many aspects. These are translated into a universally agreed definition of sustainability, through themes and sub-themes for each of the sustainability pillars. Goals are established for the themes while objectives are defined for the subthemes. These are measurable and verifiable through indicators applicable to food and agriculture supply chains, with example indicators provided. SAFA Guidelines provide the guidance for the application (calculation) of these indicators.

Themes: these are refined in a set of 21 core sustainability issues, or universal "Themes", with associated sustainability goals. These can be implemented at any level, national, supply chain or operational unit and thus, provide a common understanding of what "sustainability" means in a practical context. These themes are thus considered universal. At the Theme level, policy-makers and national governments can work towards alignment and harmonization of a holistic scope of sustainability goals without defining the specific pathways. The use of the SAFA framework and Themes for national assessments and policy-making will require the development of appropriate sub-themes and indicators.

Sub-themes: each of the 21 sustainability themes is detailed into sub-themes, or individual issues within SAFA themes, with associated explicit sustainability objectives. This level, composed of 58 sub-themes, is relevant for supply chain actors doing an analysis which identifies risk (or hot spot areas), as well as gaps in existing sustainability efforts. Other sustainability metric initiatives, standards and benchmarking schemes can identify issues and gaps not covered by their systems and tools for convergence and alignment at the sub-theme level.

Indicators: SAFA has defined default indicators within each sub-theme which identify the measurable criteria for sustainable performance for the sub-theme. These default indicators are examples that can be used if no other more appropriate indicators are available and are applicable at the macro level – meaning to all enterprise sizes and types, and in all contexts. Default indicators serve the purpose of providing standardized metrics to guide future assessments on sustainability. The default indicators' set is provided for a general level

of reporting, as SAFA users do not necessarily have the knowledge to develop indicators themselves, without the risk of lowering the bar of the assessment. Default indicators provide ratings for the highest performance and unacceptable conditions. Customized indicators can also be developed by the assessor for determining performance between best and unacceptable performance, depending on context.

Who are the Guidelines aimed at?

SAFA can be used at multiple levels for multiple purposes and by different actors using a harmonized taxonomy under one framework ensuring consistency, applicability and transparency. Regardless of size, geography or role, all stakeholders have a clear and common language for assessing sustainability. SAFA serves as an effective means for:

- **Food and agriculture enterprises (individual or associations in the crop, livestock, fisheries, aquaculture and forestry sub-sectors):**
  - self-assessment for evaluating sustainability of operations and identifying hot-spots for performance improvement;
  - gap analysis with existing sustainability schemes for improvement of the thematic coverage;
  - managing or benchmarking suppliers to improve sustainable procurement.
- **NGOs and sustainability standards and tools community:**
  - monitoring outcomes of impacts of projects;
  - sharing of, and global learning on, best practices and thresholds;
  - gap analysis with existing checklists on all aspects of sustainability.
- **Governments, investors and policy-makers:**
  - informing the establishment of Sustainable Development Goals;
  - implementation of regional planning, local procurement, investment or the development of legislation;
  - providing a global guidance on sustainable requisites for global supply chains to governments.

The objectives of SAFA Guidelines

The SAFA Guidelines are intended to provide an accessible operational resource to put the SAFA framework into practice at all levels for different purposes. The SAFA Guidelines provide a holistic interpretation of the major themes of sustainability (Framework), of alignment with existing tools and initiatives (Sub-themes) and is a template for agriculture and food sustainability assessment (Sub-themes and default indicators). Key performance (default) indicators for each sub-theme are proposed in order to facilitate measuring progress towards sustainability in a harmonized reporting format.

Acknowledging that there are many definitions of sustainability, depending on values, power relationships, time and space considered, SAFA offers a common framework for measuring performance according to core sustainability themes. SAFA provides an international reference tool for assessing the sustainability performance of food and agriculture enterprises. The purpose of a SAFA is to support the implementation of effective sustainability management and communication in the food and agriculture sector, worldwide. Through voluntary assessments, the goal is to holistically assess an enterprise performance along the four dimensions of sustainability. Using harmonized approaches contributes to making sustainable food chains more transparent, measurable and verifiable.

The Guidelines do not replace existing systems but put them into the perspective of an overarching common sustainability language for the food and agriculture sector. SAFA builds on existing sustainability tools, with the goal of integrating and relating current systems through the common framework. An underlying principle of SAFA is to avoid duplication and not to add complexity to a market already full of regulations and standards serving different purposes. SAFA serves this principle by providing a common understanding of the elements of sustainability and partnering with other initiatives for shared resources, such as methodologies, information and indicators (see the Linkages section below).

SAFA Approach

SAFA is focused on supply chains and the evaluation of enterprise(s) in those supply chains. Other sustainability assessment programmes have a product focus and often use a Life Cycle Analysis (LCA) approach which has an emphasis on the evaluation of the environmental impacts of a product through its lifecycle. SAFA covers many of the same elements of a product based LCA, such as an analysis of the inputs, outputs and environmental impacts; however the focus on an enterprise rather than a product enables a more comprehensive consideration of good governance and social well-being components of sustainability.

Use of SAFA results

With a SAFA, the performance of an enterprise (be it a farm or a company), branch of a company or production site, is assessed in terms of economic, environmental, social and governance sustainability. A SAFA is not a rating of product-specific sustainability, nor does it cover the use and end-of-life phases of products (e.g. at the consumer level). Science-based and generic in nature, SAFA can be implemented at any level, national, supply chain or operational unit.

SAFA results can be used for internal management, as well as for learning and communication purposes. To ensure credibility, it is essential that the SAFA procedures and results have a high degree of transparency. Two levels of critical review of a SAFA assessment are available. Level 1 is for use where a SAFA has a less formal application such as for internal use and self-improvement, while level 2 - which requires an external audit of the assessment - is used where SAFA results have a more formal application, such as when a SAFA is used to provide business-to-business sustainability assurances. The completion of a SAFA assessment does not allow the entity to use the logo of SAFA or FAO in any way that implies endorsement or certification, as no one is verifying the claim.

SAFA is not intended for business-to-consumer communication, as public assurance requires that certain characteristics or attributes of the product (or its production method), as laid down in specifications, be observed. SAFA does not assess products or processes – but enterprises. However, reference can be made to "consistency with the SAFA procedures and principles" provided that the assessment is made fully transparent in all its choices and customization (e.g. with regards to boundaries, data sources, indicator selection, rating).

THE SAFA FRAMEWORK

Landscape of sustainability initiatives

Many tools, metrics and standards exist, covering different components of sustainability, and were developed for different purposes and different users. These tools have different purposes, methodologies, approaches, scope and scoring.

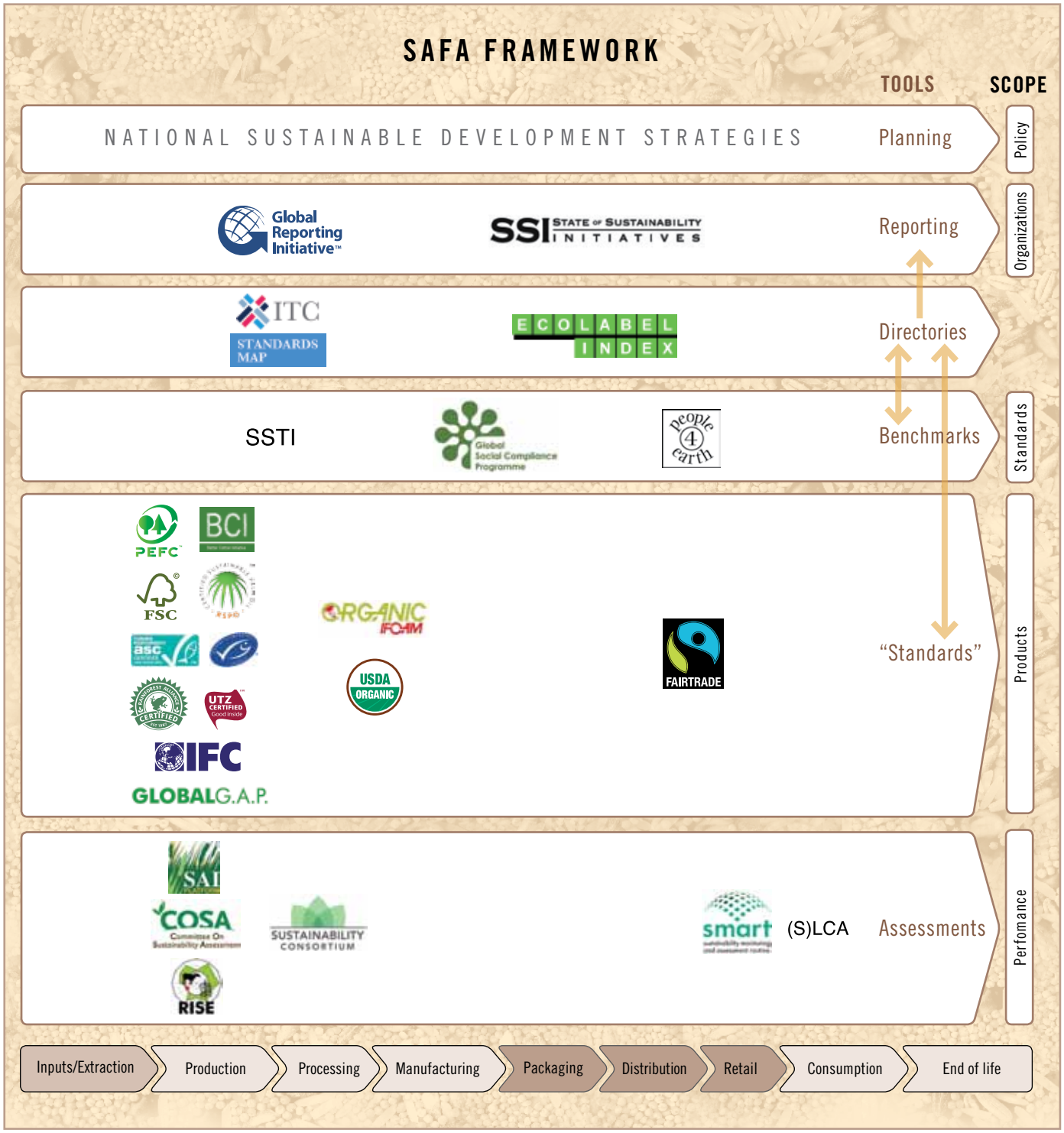
Figure 2 provides an overview of the landscape of different sustainability initiatives. Further details on the different tools for different purposes and scopes are found in Appendix A. Many of these tools are distinguished by different end-use and users, with different coverage, based on the different purposes and scope. For example:

- reporting guidelines for sustainability and CSR reporting by organizations;
- benchmarking frameworks for benchmarking other standards and codes;
- standards that distinguish products based on production and processing processes, and chiefly for business-to-consumer purposes;
- assessment methodologies at the level of the production unit (e.g. farm, boat) or supply chains, or product-based LCAs.

SAFA linkages with other sustainability tools

The goal of a SAFA assessment is improved accuracy of analysis of sustainability for all users. The use of existing rules, norms and standards expedite assessment for users, while avoiding duplication by integrating existing data. Benchmarking sustainability tools, while not useful for equivalency, is useful in mapping best practices, thresholds and sector-specific indicators. SAFA catalyzes improvements for sustainability, in a neutral and participatory mode, through FAO's leadership role in agriculture, forestry and fisheries. SAFA recognizes that there is equivalence in different approaches and collaboration is driven by the recognition that problems and solutions have to be shared. There is a strong interest in aligning with a global reference framework, and collaborating to build trust in global supply chains with coordinated efforts to build convergence.

Figure 2. **Landscape of sustainability initiatives**



There is some merging and overlap of tool purposes found in Table 1. This list is not exhaustive, but outlines some of the main distinctions of what is commonly referred to as "sustainability assessments" and the potential interaction with SAFA.

As an umbrella framework, SAFA acts as a convener, or harmonizing agent of all sustainability tools to coordinate efforts in order to build convergence. Collaboration is driven by the recognition that problems and solutions have to be shared. There is a strong interest in aligning with a global reference framework and collaborating to build trust in global supply chains. SAFA recognizes that there is equivalence in different approaches to measuring sustainability. SAFA also recognizes existing sustainability schemes (e.g. environmental and social certification) and efforts (e.g. life-cycle assessment tools) as key resources for conducting a SAFA. The use of existing rules, norms and standards expedites assessment for users, while avoiding duplication by integrating existing data. This is discussed in Section 2, Step 3.

Table 1. **Overview of different tool purposes and SAFA**

TOOLS	DESCRIPTION	MAIN SCOPE	MAIN USE	EXAMPLES	SAFA INTERACTION
National sustainable development strategies	Build-upon and harmonize the various economic, social and environmental policies and plans that are operating in the country	National policy	Government	• Varies by country, and called for by Agenda 21, World Summit for Sustainable Development and the Commission on Sustainable Development • DEFRA Guidelines GHG	• Harmonized and comprehensive sustainability framework and themes • Harmonized sustainability terms and definitions
Reporting frameworks	Comprehensive guidelines for harmonized reporting on sustainability and organization performance	Organizations' sustainability performance	B2B	• Global Reporting Initiative (GRI) • IISD State of Sustainability Initiative (SSI)	• Harmonized framework of themes and sub-themes including gap analysis • Harmonized sustainability terms and definitions
Directories (meta-level)	Online databases of standards and codes	Standards, codes and frameworks	SMEs, buyers, Government	• Ecolabel Index • Standards Map (ITC)	• Harmonized sustainability terms and definitions • Internal benchmarking

TOOLS	DESCRIPTION	MAIN SCOPE	MAIN USE	EXAMPLES	SAFA INTERACTION
Benchmarks and ratings	Equivalency and comparison assessments across standards and codes	Standards, codes and frameworks	B2B	• GSCP • ISEAL/GIZ/ITC Sustainable Standards Transparency Initiative (SSTI)	• Harmonized sustainability terms and definitions • Internal benchmarking
Voluntary Sustainable Standards (VSS)	Any non-obligatory set of requirements explicitly designed to promote the objectives of sustainable development, relating to environmental, social, ethical and food safety issues in the production and processing phases. Often third party-assessed through certification	Production and some processing and retail	B2C, some B2B.	• Organic • FairTrade • Forest Stewardship Council • Marine Stewardship Council • Aquaculture Stewardship Council • SEDEX-SMETA	• Harmonized sustainability terms and definitions • Gap analysis of missing sustainability themes and subthemes • Performance indicators resource • Source of data for SAFA assessments
Assessments: Life Cycle Tools	Technique to assess impacts associated with all the stages of a product's life	Product, from inputs, production, processing, manufacture, distribution, retail, consumption and disposal or recycling	B2B	• EcoInvent • GABI • Social-LCA (UNEP-SETAC) • The Sustainability Consortium (TSC)	• Harmonized sustainability terms and definitions
Self-assessments and data sharing platforms		Production and some processing and retail	Reporting and data sharing	• People 4 Earth • SAI Platform • Soil and More Sustainability Flower • Keystone Field to Market • LEAF	• Harmonized framework of themes and sub-themes including gap analysis • Harmonized sustainability terms and definitions
Assessments and impact tools	Globally harmonized and scientifically rigorous methodology	Production		• RISE • COSA	• Harmonized framework of themes and sub-themes including gap analysis • Harmonized sustainability terms and definitions

B2B: Business to Business, including for government procurement decisions.

B2C: Business to Consumer communications.

BACKGROUND AND RATIONALE

Sustainable development progress and challenges

The number of chronically undernourished people was estimated to be 870 million in FAO's latest assessment. This figure has increased by 60 million people since 1990-92. Although hunger today represent 16 percent of total population (versus 20 percent in 1990-92 period), there has been no progress at all towards the halving target set by the world leaders for the millennium development goals (FAO, 2012).

Increasing human demands are faced with decreasing resources. The Stockholm Resilience Centre estimates that humanity has transgressed three of the environmental planetary boundaries within which we can operate safely, namely for climate change, biodiversity loss and changes to the global nitrogen cycle (Rockström et al. 2009).

As agricultural land and forests occupy more than 60 percent of terrestrial surface, and fishery activities can be found on virtually any water body, agriculture, forestry and fisheries are major contributors to the ecological footprint of humanity. Thirty one percent of global greenhouse gas emissions have been attributed to agriculture and forestry (IPCC, 2007). Agriculture alone accounts for 70 percent of global freshwater withdrawals (FAO, 2011). On the other hand, besides being necessary for everybody's life and wellbeing, agriculture (including forestry and fisheries) provides livelihoods for 40 percent of today's global population, including many of the world's poor.

One approach to limit the risk of human economy overstraining the capacity of the Earth's ecosystem is to refer to the concept of a "green economy" that respects planetary boundaries and adopts eco-efficiency as a guiding principle, an economy "that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (UNEP, 2011). The translation of the green economy concept for the food and agriculture sector is reflected through the Greening the Economy with Agriculture (GEA) concept developed by FAO: GEA refers to "ensuring the right to adequate food, as well as food and nutrition security – in terms of food availability, access, stability and utilization – and contributing to the quality of rural livelihoods, while efficiently managing natural resources and improving resilience and equity throughout the food supply chain" (FAO, 2012a). Similar advances are being made in the context of marine and coastal systems and seafood production (UNEP et al, 2012). The challenge of delivering sustainability lies in an effective integration of the environmental,

economic and social dimensions of development. This can only be achieved through good governance.

Need for a common language

"Measure what matters" has become the mantra. But, measure "what" matters to "whom" and "how"? While there is a wide awareness of the sustainability concept, there is also wide interpretation of the definitions and components of sustainability, based on different disciplines and political beliefs and values.

Recent years have seen the development of frameworks, initiatives, standards and indicators for defining better management practices, assessing and improving the environmental and social impacts of human activities. One hundred and six countries have established national strategies for sustainable development, as well as sets of sustainability targets and indicators (UN, 2007). Thousands of companies have adopted concepts such as corporate social responsibility, creating shared value, responsible supply chain management and the triple bottom line. These concepts are put into practice through internal management, business-to-business and business-to-consumers communication. Systems for independent, third-party verification, certification and accreditation have been put in place, as well as participatory guarantee systems based on stakeholders' assessments and peer reviews.

Of the many verification systems, tools, databases and other approaches for measuring, communicating and improving sustainability, essentially related to environmental impact or social impact, few cover the whole value chain and all dimensions of sustainability at the same time (Appendix A). In the development and application of sustainability systems and frameworks, small and medium size enterprises and stakeholders from developing and emerging countries are less represented than large companies and stakeholders from industrialised countries, in spite of many systems building on transparent, participative mechanisms.

Despite the valuable efforts for making sustainability assessments in the food and agriculture sector accurate and easy to manage, no internationally accepted benchmark unambiguously defines what sustainable food production entails. There also is no widely accepted definition of the minimum requirements that would allow a company to qualify as "sustainable". The SAFA Guidelines aim to fill this gap by making available a methodology for assessing sustainability performance following defined reference points (i.e. themes, sub-themes and default indicators).

SAFA PRINCIPLES

The SAFA Guidelines are based on certain core methodological principles including the Bellagio Stamp (IISD, 2009; Pinter *et al.*, 2011). Additionally, SAFA draws upon the ISO norms for Life Cycle Assessment (ISO, 2009), the ISEAL Code of Good Practice (version 1.0; ISEAL Alliance, 2010), the ISEAL Credibility Principles (ISEAL Credibility Principles v0.3 - June 2013), the Reference Tools of the GSCP (2010), and the GRI Sustainability Reporting Guidelines (version 3.1 and 4; GRI, 2011 and 2013). Table 2 summarizes the SAFA principles.

Bellagio Stamp

Sustainability Assessment and Measurement Principles emphasize openness (accessibility and transparency), key indicators and standardized measurement methods, communication (meets needs of stakeholders, simple, plain language), broad participation, the assessment process for learning, sufficient institutional capacity and the need for a coherent framework and goals.

Table 2. **SAFA methodological and implementation principles**

METHODOLOGICAL PRINCIPLES	CHARACTERISTICS
Holistic	Undertaking a SAFA addresses all four dimensions of sustainability: good governance, environmental integrity, economic resilience and social well-being and includes all aspects within the sphere and influence of the entity.
Relevance	SAFA goals are aligned with globally agreed principles and international reference documents, including Agenda 21 framework and goals.
Rigor	All SAFA goals should be in line with the current state of scientific knowledge on the economic, environmental, social and governance impacts of human activities. SAFAs are implemented to deliver quality outcomes and an accurate picture of the sustainability.

METHODOLOGICAL PRINCIPLES	CHARACTERISTICS
Efficiency	In order to leave a maximum of resources for improvement measures, the cost of doing a SAFA is minimized by making the best use of existing data from other sustainability, environmental and social management and auditing systems. Companies that participate in systems with sustainability claims can use the SAFA Guidelines to identify areas not yet covered by their sustainability management.
Performance-orientation	SAFA emphasis is on common outcome-oriented objectives enabling different approaches and uses. Undertaking a SAFA serves to assess the sustainable performance of an agricultural or food system entity. Commitments and management plans alone do not suffice to qualify an entity as sustainable.
Transparency	The disclosure of system boundaries, the indicators chosen, data sources and stakeholder relations are an important aspect of the SAFA Performance Report.
Adaptability	The Guidelines are generic in nature in order to be applicable worldwide and across the whole diversity of situations that exist in the agriculture and food sector. This principle supports "Accessibility" through the adaptation to all contexts and sizes of agriculture, livestock, aquaculture, fishery and forestry operations by adapting the generic set of themes and sub-themes indicators to different socio-economic and environmental circumstances, type of entity and data availability.
Continuous improvement	SAFA is not intended as a minimum performance benchmark, but a tool to assess performance and identify areas for improvement. In addition, the SAFA Guidelines will be adjusted over time to continually raise the bar, as knowledge and technology permit.
IMPLEMENTATION PRINCIPLES	**CHARACTERISTICS**
Build on existing tools	SAFA recognizes that there is equivalence in different approaches and collaboration is driven by the recognition that problems and solutions have to be shared. No SAFA goal, objective or indicator should contradict rules and principles that emanate from national law and relevant international agreements. The conduction of a SAFA must comply with all applicable legal provisions, in particular concerning privacy protection.
Take place in an open and learning system	The SAFA Guidelines are developed and hosted by FAO and are freely available to any interested party. They are the result of a continuing, open development process, contributions to which are welcome from all who have a stake in the sustainable development of food and agriculture systems. SAFA participation must always be voluntary. Implementing SAFA is in itself a learning pathway to create change and ultimately, deliver sustainability.
Accessibility	Fair playing field by tailoring requirements to remove barriers to implementation. SAFA is conceived primarily for self-evaluation, without necessarily resorting to experts or third party assistance.

SCOPE OF A SAFA ASSESSMENT

Being science-based and generic in nature, SAFA can be adapted to different contexts and scopes. It is important to look at these different scopes in terms of SAFA coverage: supply chain scope, temporal and sustainability dimensions. Section 2 provides guidance on defining the different scopes outlined below.

Supply chain scope: setting the boundaries

A supply chain starts with the production of input materials for a primary commodity, ends with the consumption of the final product - and it includes all of the economic activities undertaken between these phases, such as: processing, delivery, wholesaling and retailing. Including upstream activities that are critical to production, such as feed for livestock and aquaculture, can be in some cases particularly important to the overall sustainability of the supply chain. SAFA is applicable to all entities in supply chains, from the inputs suppliers, through the site of primary production (agriculture, livestock, fisheries, aquaculture and forestry), to that of final sales to the consumer (see Figure 3). The scope of a SAFA does not however include consumers or end-of-life managers, as a SAFA does not rate product-specific sustainability where inclusion of these stages would be relevant; rather, SAFA provides an assessment of enterprises where these supply chain steps have limited relevance.

As this can be quite extensive in global supply chains, the intended scope of a SAFA assessment includes all processes:

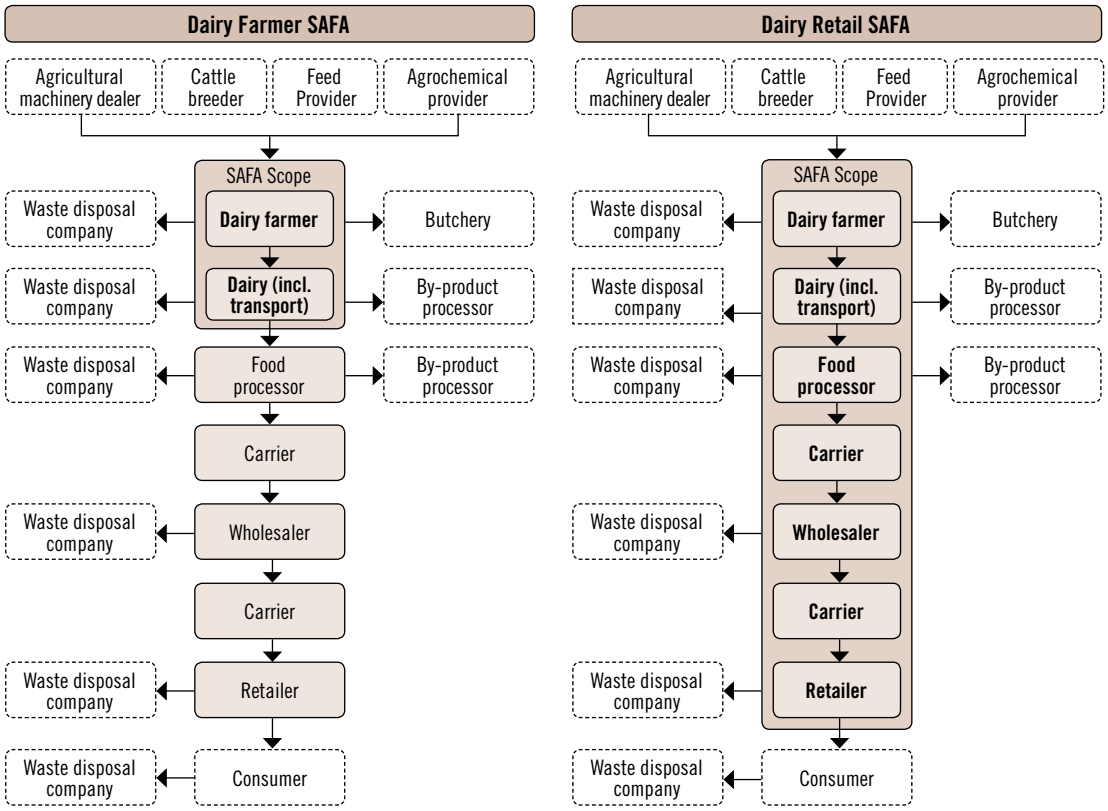
- that are part of production or distribution;
- that generate significant impacts on sustainability in the surrounding environment and community; and
- over which the assessed entity has control or significant influence in terms of financial and operating policies and practices.

Ownership is not required for an entity to have control or significant influence over an area of land or water, or a production/processing facility. A SAFA can be also limited to a single production site or step of the supply chain with clear documented justification. The spatial coverage of SAFA extends to production facilities and their surroundings, insofar as the assessed entities control or have influence over the activities in these areas. Consideration of only specific areas or crops is not recommended.

In situations where a given enterprise is assessing supply from several farms that are organized as a cooperative or producers group, it is recommended that the SAFA be either carried-out for each farm individually, or for the group as a whole. For large groups, coverage of all group members will not be feasible. Generally, a representative sample of the group's membership is a recognized solution to this challenge. Standard practice in group certification, based on ISO 62 criteria, is the square root approach. For group certification, this means the use of the square root of the number of members. However, it is also recommended to do a risk assessment of the group members to ensure that critical issues are not overlooked.

The entity conducting the assessment needs to determine their realm of influence accordingly (see Section 2, Step 1) by clearly defining the scope and setting boundaries of the assessment.

Figure 3. **Examples of different SAFA scope**



Two examples of SAFA scope in dairy supply chains. Shaded rectangles with bold writing symbolise actors whose operations are covered by a SAFA performed by a dairy producer (left) and a retail company (right), respectively. Dashed rectangles represent actors outside the general scope of SAFA.

Example Box 1. **Setting the supply chain scope**

For this Community Supported Fishery operation, the process of setting boundaries and scope of their SAFA included an assessment of their influence over certain aspects of their value chain. This small-scale operation in USA owns less than 1 hectare and 2 small boats operated primarily by family members.

Identifying the scope of their assessment began with mapping their assets, including physical and spatial boundaries of their property; this included the family house with a fish pond on the property, a retail venue which included the cleaning and packing space, and their boats and trucks.

The second step was for the assessors and management to map their sourcing. The majority of their fish was caught by their own operation. In addition, the operation purchased fish and seafood from seven local fishers. This was all noted visually in a diagram directly in the SAFA assessment tool.

The third step was to map-out the various routes of their product. The entity had a diverse range of sales, including wholesale to a large distributor, retail in their own community, sales of shares weekly to Community Supported Fishery members across their state, and specialty orders to regional coops, supermarkets and restaurants. These transactions were added to the diagram.

These steps to this point are the same that any company or entity would take in mapping their value chains. The fourth and final step for this entity, because they were considered a small-scale operation, was to review their mapping for which relationships could be included in the SAFA, based on their level of influence. For example, the entity had control over nearly every aspect of the Community Supported Fishery project, including their own fishing, planning and marketing, staffing and transportation. They owned the necessary materials and equipment. Thus, every aspect of these operations (e.g. fuel used in transportation, the decision-making process for marketing and governance of the business, the environmental impacts of materials used, the wages of staff and workers) were deemed necessary to be included in the SAFA. Temporally, this range extended back to when the company began and its initial investments were made. Spatially, this range extended to everywhere that the farthest reaching vessels (the boats and trucks) went. For example, maps of protected waterways were compared to regular boat routes and the fishing territories of neighbors were reviewed to consider impacts on community stakeholders, even though these impacts took place off the property.

However, though this entity had developed positive, long-term relationships with the seven regional fishers they usually purchased from, they were not the sole buyers from these other businesses, and they did not have significant influence to control decision making of the other enterprises. These relationships were carefully examined – because the entity did have control over the price paid to the fishers and other important SAFA social dimension themes regarding their business relationship. All aspects of the relationship that the entity could influence were deemed relevant and were included in the assessment. Those that were excluded were aspects such as the fuel type and usage of the other fishers, as this information was beyond the control of influence of the entity.

As a rule of thumb, the assessors used a percentage of total purchases to decide. If the entity's purchases exceeded 50 percent of the other entity's annual business then this second entity would be asked to participate voluntarily in the assessment and a higher number of SAFA themes would be included. For this particular entity, their purchases represented less than 50 percent of the second entity's annual sales.

The important lesson from this example is that the assessors were careful to only exclude those aspects that were clearly beyond the control of the entity. Eliminating the entire relationship would have simplified the assessment, but would have also eliminated important SAFA components that the entity could control.

Temporal scope: defining the time frame

SAFA is intended to cover the entity's activities for one year, which becomes the baseline for future assessments and identifying areas for improvement. This is particularly important for establishing thresholds for the ratings, especially in the environmental dimension. In the case of fisheries, activities can be very seasonal and multi-season trends and impacts could be assessed. For some indicators, multi-year trends should be assessed or sustainability impacts be allocated to a longer period; usually in these instances, a period of five years is suggested. Assessing impacts on ecological processes cannot be punctual, as responses extend to periods well beyond the 1 or 5 years proposed for certain indicators. Time frames beyond the annual assessment cycle are specified in specific indicators, based on expert consultation and scientific knowledge where applicable.

Thematic scope: defining the sustainability context

For each of these four dimensions of sustainability, SAFA outlines essential elements of sustainability through 21 high level themes. These are applicable at any level of development, for instance national level or commodity-specific. The themes are further divided into 58 sub-themes. SAFA sub-themes are tailored to food and agriculture supply chains and thus, are not well suited for policy development. Sustainability objectives for each sub-theme are provided, which describe the expected sustainability performance for that sub-theme. Default indicators are proposed in order to facilitate measuring progress towards the objectives. These default indicators are provided as examples and can be replaced where more appropriate indicators are identified. The SAFA default indicators focus on performance rather than management systems; however different types of default indicators (i.e. target-based and practice-based indicators) are proposed, with different weighting to ensure accessibility of SAFA where performance is difficult to measure.

Details on the four sustainability dimensions: themes, sub-themes and default indicators are provided in Section 3. Table 3 gives an overview of the SAFA themes, along the four sustainability dimensions.

Figure 4. **SAFA sustainability dimensions and themes**

Sustainability means ensuring human 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

GOOD GOVERNANCE

- G1. Corporate Ethics
- G2. Accountability
- G3. Participation
- G4. Rule of Law
- G5. Holistic Management

ENVIRONMENTAL INTEGRITY

- E1. Atmosphere
- E2. Water
- E3. Land
- E4. Biodiversity
- E5. Materials and Energy
- E6. Animal Welfare

ECONOMIC RESILIENCE

- C1. Investment
- C2. Vulnerability
- C3. Product Quality and Information
- C4. Local Economy

SOCIAL WELL-BEING

- S1. Decent Livelihoods
- S2. Fair Trading Practices
- S3. Labour Rights
- S4. Equity
- S5. Human Health and Safety
- S6. Cultural Diversity

The Guide: how to use it

The SAFA Guidelines consist of three sections (Figure 5). Section 1 provides the basic information on the purpose, linkages, background and use of the SAFA framework in terms of different users and purposes. Section 2 outlines the step-by-step approach for SAFA implementation, including guidance on setting scope, boundaries, contextualization and reporting. Section 3 contains the SAFA protocol for sustainability themes, sub-themes and default indicators. Guidance on default indicators is provided in the Guidelines complement entitled "SAFA Indicators", with detailed indicators description, relevance, measurement, rating, limitations and sources of information.

For first time users, regardless of purpose, it is recommended to read the entire Guidelines to understand the foundation and rationale of SAFA. This will aid in identifying the roles, purpose and scope of SAFA and maximize the benefits of adopting the framework. Sections 2 and 3 will be most relevant for those responsible for implementing a SAFA assessment.

National governments, other sustainability initiatives and assessment initiatives may adopt or align at different levels, as discussed earlier. Ideally, the sustainability themes serve as the overall framework with sub-themes and default or other indicators used for specific purposes and tools by different users.

Table 3 provides an outline and an example of the relationship between themes, subthemes and indicators, with the progressive focus from major issues at a theme level down to specific sub-theme and their objectives and finally indicators to measure performance against a sub-theme.

Figure 5. **SAFA Guidelines structure**

Figure 6. **Components of the SAFA Framework**

SECTION **TWO**

PROCEDURES

MAPPING > CONTEXTUALIZATION > INDICATORS > REPORTING

SAFA OVERVIEW

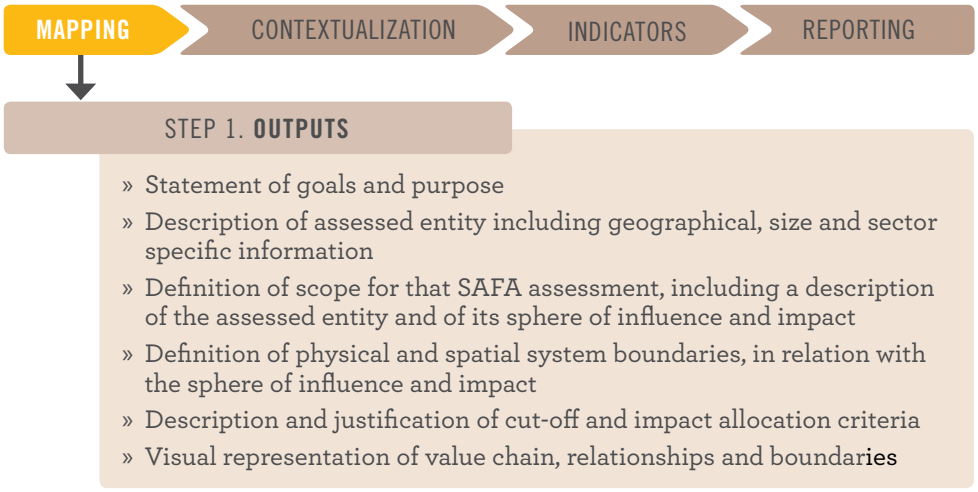
This section details the implementation of SAFA. It is recommended that the user read through the entire Section 2 for an overview of the entire process. This will facilitate the identification of the resources needed and define responsibilities in the assessment team. There are four main phases to a SAFA assessment (see Table 4). It is important to follow the sequence step-by-step because each phase builds the basis for the next. However, it may be necessary to repeat certain phases if during the assessment process it becomes clear that the scope needs to be modified. For example, if another operation is added to the assessment.

The final output of a SAFA assessment is the Performance Report, which contains both a descriptive and an analytical review of the sustainability of the assessed entities, based on all four steps.

Table 4. **SAFA step-by-step**

<table>
<tr><th>STEP 1
MAPPING</th><th>STEP 2
CONTEXTUALIZATION</th><th>STEP 3
INDICATORS</th><th>STEP 4
REPORTING</th></tr>
<tr><td>Description of assessed entities</td><td rowspan="4">Sub-themes: review of sub-themes based on boundaries and sustainability objectives</td><td>Indicator selection</td><td>Polygon at aggregated and broken down level to illustrate sub-theme scores together with contextual issues, including risk areas (hot spot issues), boundaries and data quality, based on Accuracy Score.</td></tr>
<tr><td>Boundaries of assessment (space and time) and visual representation</td><td>Irrelevant sub-themes and indicators are not selected</td><td>Final report, where all relevant issues and scope are treated and rationale, irrelevant sub-themes and indicators are justified, areas for improvements are identified. See Appendix B: Performance Report Checklist.</td></tr>
<tr><td rowspan="2">What is excluded from SAFA? (cut-off criteria)</td><td>Guidance notes for indicators</td><td rowspan="4">Critical Review – two levels are outlined – Level 1 for less formal SAFA assessments which involve documenting the results but this is not subject to external 3rd party audit, while Level 2 for more formal applications of SAFA includes a 3rd party audit.</td></tr>
<tr><td rowspan="3">Indicators: review of default (or replacement) indicators in relevant sub-themes and use of data regarding geographical, environmental, social, political and economic context to determine detailed ratings</td><td>Determine Accuracy Score for each indicator</td></tr>
<tr><td>Relationships of different supply chain members</td><td>Documentation of input data and score</td></tr>
<tr><td>Rating at indicator level, aggregation of results at sub-theme and theme level</td></tr>
</table>

STEP 1. **MAPPING**
Setting goals and scope



RESOURCES needed for Step 1 include organizational documents, value chain map and detailed description of assessed entities (e.g. type, value chain position, geography).

Step 1 consists of two main activities:

» Setting Goals: defining the goals of the assessment and description of the assessed entities.
» Setting Scope: identifying the boundaries of what will be included in the assessment.

Setting Goals

The goals should unambiguously state the reasons for doing the assessment, the intended audience and the intended use of the results (ISO, 2009). The type, comprehensiveness and complexity of the review should be defined and whether it needs to meet a Level 1 or Level 2 critical review.

TOOLS Step 1 questions to be answered:

» Reasons for doing SAFA.
» Intended audience of SAFA.
» Intended use of SAFA results.

Example Box 2. **Setting Goals**

The first step in completing a SAFA assessment is setting the goals, and being clear about what you expect to accomplish in this process. During the 2012-2013 pilot phase, Allos, a German-based organic manufacturer contracted the Research Institute of Organic Agriculture (FiBL) to conduct a SAFA assessment on their behalf.

FiBL first worked with Allos to determine their goals and interests in completing a SAFA assessment. FiBL organized a workshop in the beginning of the project and discussed the potential benefits. It became clear that besides understanding the potential for internal improvements, it was important for Allos to communicate their performance. In fact, the main motivation for Allos was to be able to communicate their sustainability performance in a transparent and credible way. At the same time, Allos was aware of the fact that there may be also negative results arising from the SAFA assessment.

During the workshop, Allos determined the appropriate audience for their assessment results. They determined that the main audience would be Allos themselves, for internal improvement, but that they would also like information to be available to their stakeholders (such as environmental agencies, major, suppliers, buyers, workers) who would be involved in the pilot, as they were to be interviewed to get a comprehensive picture of Allos' sustainability performance.

As an output, a detailed internal report for Allos was created which explained their performance with respect to the SAFA Sub-themes. Furthermore, a short version was developed for the internet.

This example represents a good method available to entities: an initial meeting or workshop to discuss goals. Furthermore, this example demonstrates the importance of determining those goals early on, as these were then able to dictate the format of the reports that would meet their needs.

Basic description of the enterprise

Basic information regarding the enterprise or entity should be documented for the next step. This includes information such as the enterprise's size, sector and location.

Setting scope and boundaries

Mapping the supply chain will enable the entity to understand what is being measured, where the sphere of influence and direct control of the enterprise should stop, what/where the organizational and operational boundaries are, and what interactions take place in the production network.

Setting scope and boundaries is problematic and one of the most difficult steps. In the real world, almost everything is ultimately connected with everything else. There are indefinite and blurring boundaries:

» Spatially: difficult to limit to a geographically defined areas with influence and impacts extending, including indirectly.

Example Box 3. **Setting boundaries within a complex value chain**

Setting boundaries within a complex value chain can be a challenge. During the pilot phase of SAFA, Café Direct, a coffee importer with value chains stretching into multiple countries, chose to set distinct boundaries on their assessment by identifying a small sampling of entities to represent the larger supply chain.

Having had experience with the Life Cycle Assessment process, Café Direct was familiar with how to examine and track their supply chains. They looked at their supply chains from the product-based perspective and developed their supply-chain mapping based on the transactions and processes their products went through all the way to the consumer level. For the SAFA assessment, Café Direct included 5 individual entities in their supply-chain assessment: 3 producers of raw material, two of whom were coffee growers, one processor who roasts and packs the product, and the head office for Café Direct.

To select these entities, Café Direct had to consider their goals for the assessment. Reviewing all the entities in all their supply chains would not be possible because it was beyond their capacity. They chose to narrow their boundaries to two products, rather than all their products. Then, they chose representative entities along the supply chains for each of those products. One producer was in Tanzania, the other in Mexico. They used the same processor. Café Direct included their own headquarters, because they believed sustainability in a system would be incomplete if their own actions were not evaluated.

One important detail Café Direct considered when selecting which entities to include was their knowledge of sustainability and willingness to participate. Café Direct works with six different processors, for example, but knew that the participating processor had sustainability as their mission and thus, would be interested in the SAFA assessment. Collaboration and transparency were critical to completing an accurate assessment.

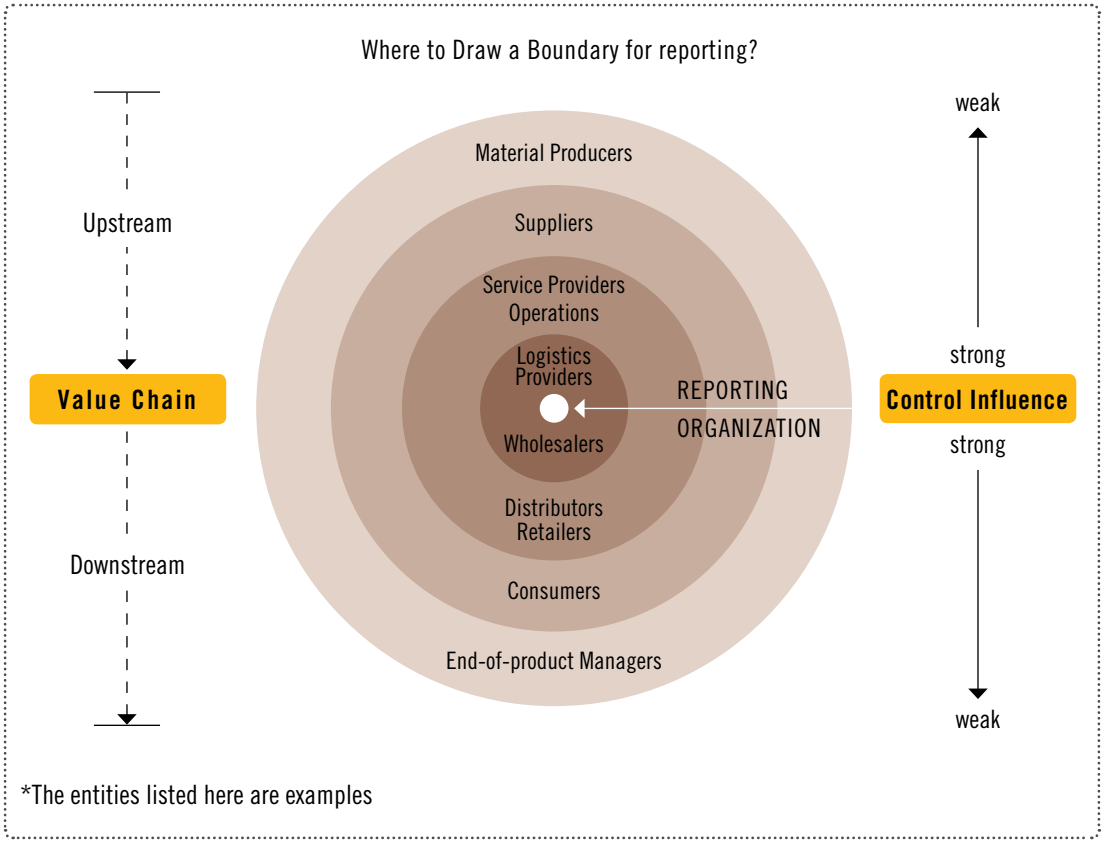
Another important detail they considered was their level of influence over entities in the supply chain, and what impact this might have on the assessment. Café Direct noted that with certain suppliers, they had more influence than others. Influence in part depends on the length of the relationship, and shared overall values and principles, which may contribute to a successful assessment partner. However, influence is also about power relationships. Café Direct ccautioned over of the risk that a supplier or processor who depends on the contract with the leading entity in the assessment may feel pressured to score well on the SAFA self-assessment in order to keep up the good relationship. For this reason, Café Direct selected partners who understood the goals of sustainability and the intention of SAFA for their pilot experience.

» Temporally: causes and effects change over time with indirect impacts.

This often requires expert judgement, particularly considering externalities[2]. The following Figure 5 from the GRI Boundary Protocol highlights the complexity and factors for consideration.

2 An externality is a cost or benefit which results from an activity or transaction and which affects an otherwise uninvolved party who did not choose to incur that cost or benefit.

Figure 7. **GRI Boundary Protocol**



Source: adapted from GRI (2005)

Assessing the sustainability performance of an organization is challenging, as almost everything is ultimately connected with everything else, directly and indirectly. No organization is wholly independent. Activities involving a complex network of value chain actors, sometime around the globe, affect and are affected by an organization's social, environmental and economic performance. Highly global vertical and horizontal integration of enterprises in the postharvest value chain brings additional difficulties when setting the boundaries. The degree of influence and control over these value chain actors and the impacts can range from minimal to significant.

Mapping will facilitate the understanding of what to measure, where the sphere of influence and direct control of the enterprise stops, what the organizational and operational boundaries are, and what interactions take place in the production network.

In order to obtain an accurate assessment of the entity's sustainability performance, a SAFA should ideally encompass the entire realm of influence and impact of the assessed entity. However, this is a complex undertaking in global supply chains. Thus, the scope should focus on what is significant in terms of impact and what has control over what.

The scope of a SAFA assessment should include all processes:

- that are part of **production, processing or distribution, relevant to inputs** (e.g. fertilizers, feed and irrigation water, wages at processing facilities);
- that generate **significant upstream and downstream impacts** on sustainability in the surrounding environment and in the community (e.g. decisions regarding use of freshwater, waste management); and
- over which the assessed entity has **control or significant influence** in terms of financial and operating policies and practices (e.g. the activities of any subsidiaries, other members in a producer group or procurement policy for inputs and suppliers).

For example, the production of procured raw materials and inputs should be included in an entity's SAFA assessment if the production and provision of these materials and inputs cause substantial sustainability impact (e.g. by aggravating regional water scarcity); and/or the extent of these impacts on sustainability could be significantly influenced by the buyer.

If a SAFA is not possible for every operation involved, the entity may choose to focus on one chain of operations as a representative sample. A common challenge is to determine a sample that gives an accurate picture of the entity's performance for reporting and the connected claim on performance. There is no one-size-fits-all scenario, but SAFA recommends using the boundary setting questions as the basis for determining critical issues and hotspots. For large groups, the square root approach (ISO 62) is recommended. This means to use the square root of the number of the members in the group.

The full impacts of this entity should still be considered, including physical and social external impacts. Other important contextual factors for consideration in defining the scope include the sector and branch of the economy to which it belongs, its position in the value chain, its geographical location and organizational size.

TOOLS A series of questions and activities will help the SAFA user to set the scope outlined below. While there is extensive literature on how to set boundaries, with different approaches and methodologies, an inclusion/exclusion approach is proposed for simplification purposes. While simplified, this process is aligned with the GRI Guidelines on Boundary setting.

Inclusion:

First describe the value chain by identifying all enterprises linked with company undertaking the SAFA through a sustainability scan. These are *potential* spheres of influence and/or impact and include:

- all enterprises exchanging products or services (including materials, water, energy, etc) with the company;
- competitors - including through suppliers and customers.

Output: Description of assessed entities and supply chain map (see Figure 6).

Description of the entities

The description of the assessed entities should include the unique qualities of the entity's operation type, location, sector and surroundings, as well as information specific to the context including sector specific risks, geographical issues, socio-political circumstances and legal framework. This information will be used in Step 2: Contextualization.

Characteristics such as small-scale producers should be identified at this stage (see criteria for small-scale producers below).

Supply chain map

Mapping a chain means creating a visual representation of the connections between enterprises from inputs to end consumers. It does not need to be sophisticated using custom software. A simple flow diagram in Word or Excel can help identify the potential scope and relationships to facilitate decision making on the scope. This should begin with entities listing all properties, operations, land and other resources under their ownership or in which they play a decision-making role. From there, the list should be expanded to include activities and other operations involved in production, processing and distribution based on the entire realm of influence and impact of the assessed entity.

International and larger companies will have multiple complex supply chains with potentially hundreds of entities that change constantly due to market forces. Bringing together data is further challenged in delimiting, describing and analyzing supply chains, especially when large, diverse and changing numbers of suppliers are involved.

Once the overall supply chain has been mapped and described, enterprises undertaking a SAFA should focus on those supply chains and aspects where it has significant influence and impacts, excluding others. This step of Exclusion of insignificant

supply chain actors defines the Assessment Boundary, described in detail below. Management will find setting scope useful to identify where sustainability performance needs to be tracked and in what manner.

Materiality

Materiality is a core principle of all kinds of reporting with different approaches and definitions. The materiality focus of sustainability reports is broader than the traditional measures of financial materiality. SAFA adopts the International Integrated Reporting Council (IRRC) definition framework which considers the commonality of materiality definitions from various reporting frameworks. This builds on the concept "that material matters are those that are of such relevance and importance that they could substantively influence the assessments of the intended report users."

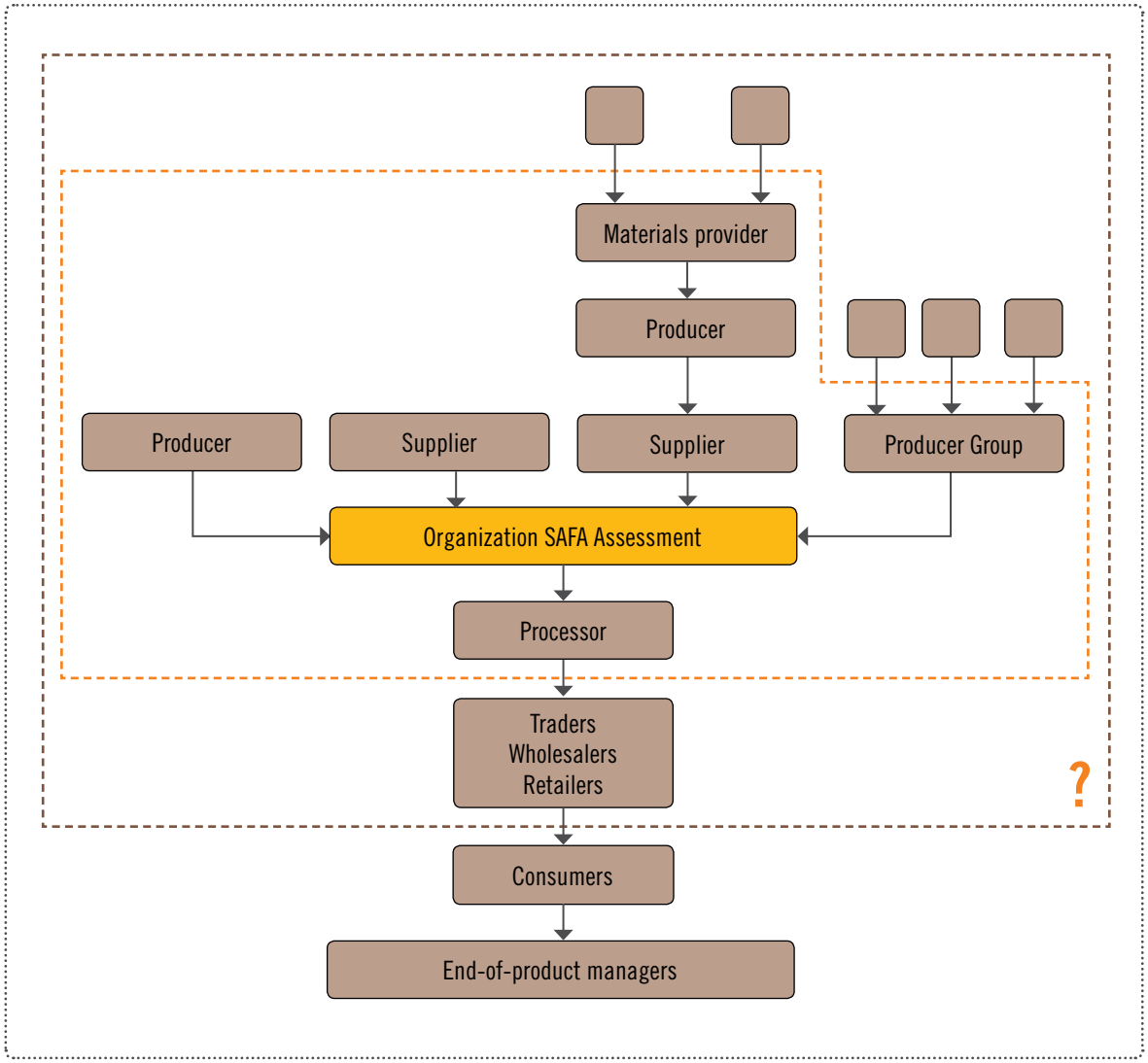
Defining the assessment boundary

Exclusion:

This step is also defined as cut-off criteria under ISO 14044 and in Life Cycle Analysis (LCA). This step is intended to help focus the SAFA assessment. Boundary setting needs to be pragmatic, well defined and specific. See Figure 7.

- Define the Material system boundaries:
  - Which entity is the focus of this SAFA?
  - How many levels of the food chain are you intending to assess?
  - Which is the entity's sphere of influence?
  - Which other entities and processes need to be covered because of impact or risk areas?
  - If the focus of the SAFA is on primary production level, how many enterprises will you include and how will you chose your sample?
  - Which entities and processes are excluded and why?
- Impact allocation criteria:
  - In conducting this SAFA, which of the governance, environmental, economic and social impacts that occur beyond what is directly used by the assessed entity do you intend to take into account?

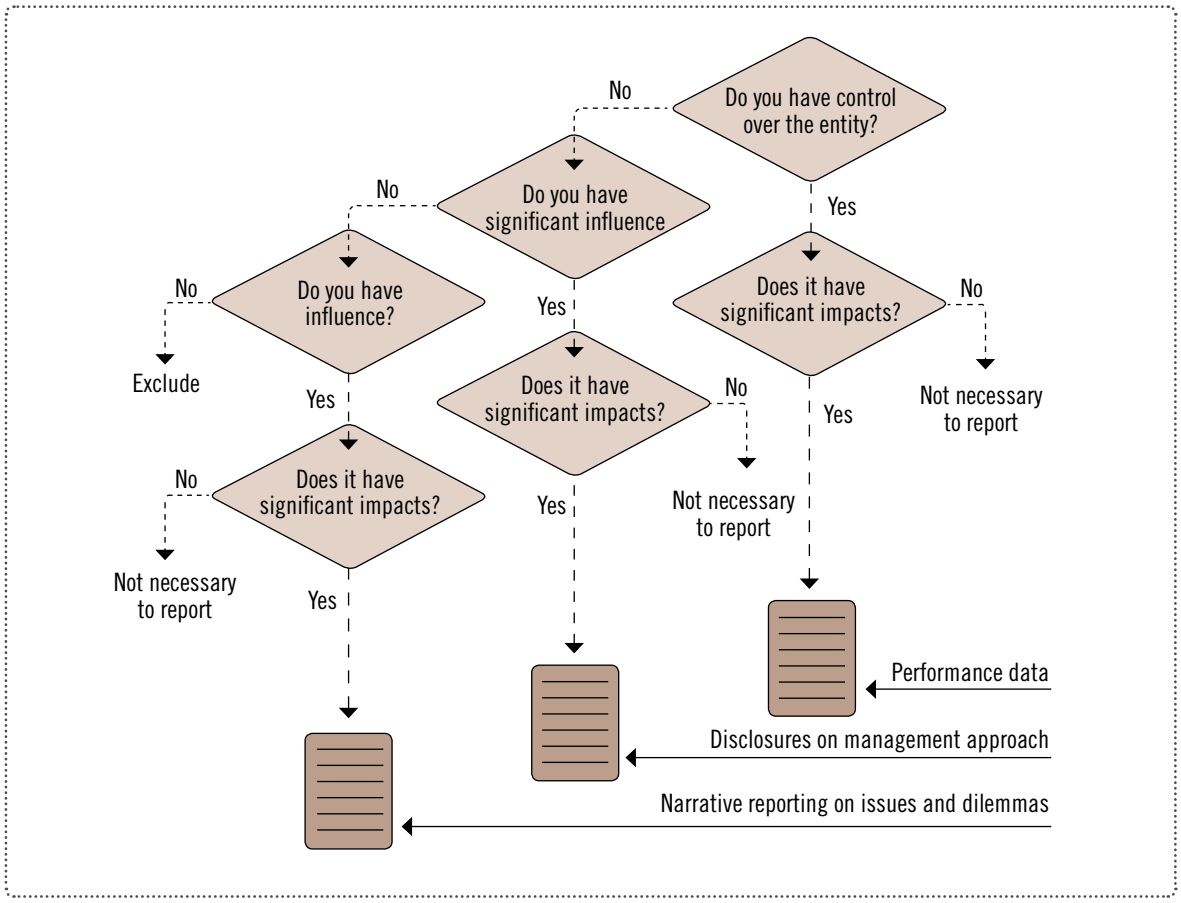
Figure 8. **Example of boundaries in a supply chain**



- How do you intend to allocate sustainability impacts for different levels of the food chain, for assessed and non-assessed processes, entities, and locations so that allocation problems are minimized and the impact boundaries for this SAFA are set clear?

- Visual map boundaries on supply chain map:
  - Where a boundary is narrowed, the SAFA reporting needs to be transparent on what has been left out from the assessment and why (see Step 4: Reporting).

Figure 9. **Decision tree for boundary setting**



Source: GRI G3.1 Guidelines (2011a)

TOOLS Completing these steps will require that the entity make decisions regarding which activities and operations to include. Expert support may be useful. The decision tree of the GRI G3.1 Guidelines is a broadly tested tool for making decisions regarding what is included in the scope (GRI, 2011a).

The entity may nevertheless limit the scope of the assessment for one level of the food chain. In all cases, the boundaries of the assessment should be documented for use in the Performance Report. Larger companies have a potentially larger sphere of influence than a small individual farmer. SAFA acknowledges the growing responsibility for sustainable production with growing enterprise size.

Small-scale producers and SAFA

SAFA aims to be applicable to both large and small-scale enterprises. Small-scale producers face many unique challenges in terms of sustainability assessments, including limited existing data, relevance of global indicators, lack of capacity to complete the assessment independently and lack of resources. Small-scale operators may lack the resources to conduct testing or other expensive means of collecting primary data, or may be located in regions where this kind of data collection is not feasible.

SAFA was tested in smallholder settings to understand these issues and ensure the applicability of SAFA to small-scale producers, among other stakeholders. Creating a fair playing field for all users means among other things ensuring an equal burden in time and investment for all users. Small-scale producers may be achieving the intent outlined in the default performance indicators but may be achieving them through mechanisms that are less easy to measure compared to enterprises in which more formal and documented mechanisms exist. SAFA includes some sub-themes that specifically address some of the concerns specific to small-scale producers, as well as different types of indicators. The indicators and assessment steps have been adjusted in places to allow exceptions for small-scale producers, so that they might still reach high sustainability scores without required use of performance indicators, especially in the environmental dimension of the SAFA assessment.

Small-scale producers are not, *per se,* users of SAFA, it is instead a tool usually used by organizations of producers and governments. One incentive for small-scale producers' use of SAFA could be the compensation (e.g. through a Payment for Ecosystem Services scheme) of growers who adopt sustainable practices. Other uses of SAFA to incentivize small-scale producers include the implementation of regional planning, local procurement, investment or the development of legislation, based on SAFA small-scale producer performance ratings.

Classification of small-scale producers in SAFA

It is important to understand that there are different definitions of small-scale producers dependent on context, commodity, geography and other factors. These can be based on size, assets and/or other factors, such as dependency on family labour. Their characteristics differ by sector, country and production system. For example, not only does smallholder farm or holding size vary, but also their allocation of resources to food, cash crops, livestock and off-farm activities, their use of external inputs and hired labour, the proportion of

food crops which are sold, their access and use of natural resources and their household expenditure pattern (FAO, 2004). Although differing, small-scale producers are often subsumed in initiatives targeting family farmers; for the 2014 International Year of Family Farming, the following definition was adopted: *Family farming (also family agriculture) is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant on family labour, including both women's and men's. The family and the farm are linked, coevolve and combine economic, environmental, social and cultural functions.*

In order to ensure a transparent assessment, SAFA requires that small-scale enterprises meet all three of these criteria for production systems. If small-scale enterprises complete a SAFA assessment, the ways in which the following criteria are met must be detailed in the SAFA Performance Report. For the purposes of implementing a SAFA and determining the applicable rating framework, small-scale producers - including small-scale farmers, pastoralists, forest keepers, fishers, aquaculturists - are defined according to:

- **Size**: manage areas considered small for their production and region;
- **Mechanization**: use no or little mechanization; and
- **Labor**: use mainly family labour for production.

The most common measure of small-scale producers is size although there is no universal definition of "small" as it is sector and context specific. Generally, small-scale producers mostly rely on family labour, as opposed to hired labour. Even though most work is done by the family, depending on crop/region, small-scale producers may employ up to 2 non-family permanent employees and hire up to 5 seasonal employees. In developed countries, the level of mechanization and production intensity of small-scale producers may be higher than in developing countries. Similarly, farms growing certain crops (such as grains) may be generally larger in size than those growing other produce. Community farming, forestry and fisheries may also be considered under the smallholder classification if the general criteria are met for the individual members.

- **Agriculture.** Many sources define small farms as those with less than 2 hectares of crop land[3]. The size of land that small-scale producers manage varies among countries. In favorable areas with high population densities, they often cultivate less than one ha of land, whereas they may cultivate 10 ha or more in semi-arid areas, or manage 10 heads of

3 According to the IAASTD, 2009, there are 1.5 billion men and women farmers working on 404 million small-scale farms of less than 2 hectares.

livestock (FAO, 2004). For the purposes of SAFA, a maximum limit of 10 hectares is adopted, in conjunction with the other two conditions. Agricultural mechanization can be defined as the economic application of engineering technology to enhance the effectiveness and productivity of human labour. Sources of farm power include hand tools, draft animals and mechanically-powered implements. Most smallholder farm operations are accomplished through the use of hand tools and animal power since modern tools - even if rented or shared among users - are too costly. As part of its definition, small-scale producers have no or little mechanization of the planting, growing and harvest processes. The use of car, motorcycle, and small truck still falls within the concept of low mechanization.

- **Forestry.** Small-scale foresters are those who own, manage or use forests which are considered small in size, or who apply low intensity harvesting practices. There are also known as non-industrial or small-scale. Small-scale forestry can also describe those who practice community forestry, where ownership and management are community controlled. In these instances, the land size may be larger than individual land holdings. Therefore, in forestry, two broad types of small-scale producers should be considered: users of small size forest but who apply high intensity harvesting (e.g. 10 ha of eucalyptus plantation); and users of small, medium or large collective enterprises who apply low intensity harvesting practices (e.g. community collectors of nuts in Brazil).
- **Fisheries and aquaculture.** Also known as small-scale or artisanal fisheries, there is no universally agreed definition of scale because of high diversity of small-scale fisheries. Small-scale fisheries are however characterized by household enterprises in pursuit of a livelihood leading to a culturally conditioned way of life; fishers use small craft and simple gear (though not necessarily simple techniques) of considerable diversity, relatively low capital investment and low energy intensity of the operations. Almost half of the world's fishing vessels are non-motorized and 90 percent of those with engines are less than 12 meters long. Fishing also takes place with handheld gear without a boat. There is neither a strict definition of small-scale aquaculture. However, it is often based around family labour, and ponds or farms are relatively small (usually around 2 ha), based on family land. It ranges from what is commonly known as rural aquaculture – that is, systems with limited investment, informal management structures and close integration with other livelihood activities – to commercial undertakings requiring more substantial labour and capital inputs and being more specialized. However, small-scale aquafarmers often have limited access to financial and technical resources, as well as poor links with markets. While no global estimates on small-scale aquaculture are currently available, it

is known that nearly 89 percent of global aquaculture production was produced in Asia in 2008 of which about 90 percent was on farms of less than 1 ha size.

For farming, forestry and fishing operations, if an enterprise does not meet one of the above criteria (i.e. size, mechanization, labor), but does meet the other two, and the assessor believes this enterprise should be considered as small-scale for the purposes of the SAFA assessment, the assessment can go forward with this classification – **but** the exception must be clearly documented and justified in the SAFA Performance Report.

Example Box 4. **Contextualizing the small-scale producers' definition**

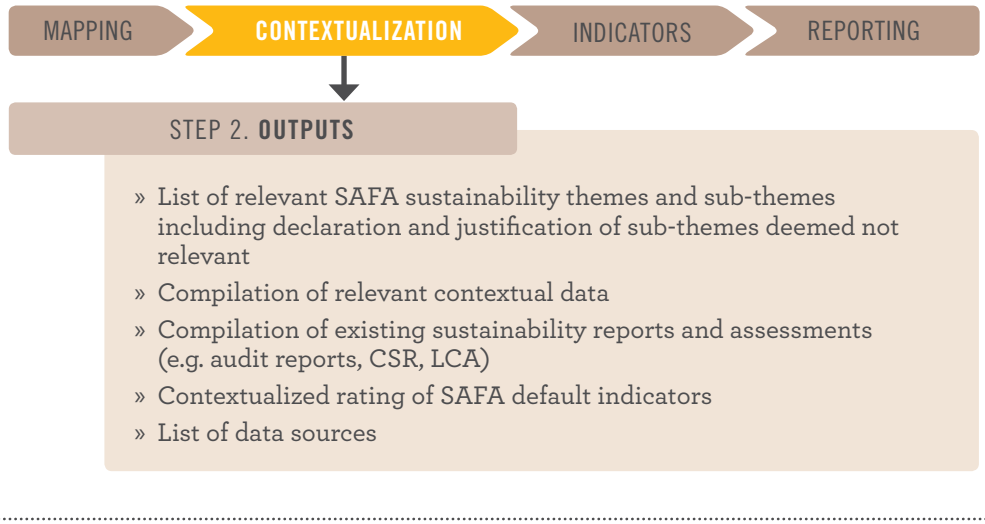
The Rural Advancement Foundation International (RAFI) conducted two assessments on small-scale cotton and grain growers in Southeastern North Carolina, USA, as part of the SAFA pilot testing. The RAFI assessment is an example of contextualizing SAFA's criteria to reflect regional differences.

With regards to size, SAFA's recommendation is 10 hectares or less. In reality, these cotton and grain growers operated on 350 and 525 hectares, respectively. However, given their geographical context and the tendency of grain and cotton farms to be larger than others such as producer farms, RAFI added criteria to contextualize the small-scale producer definition. The size of the farms was considered in relation to others in the same industry and region, and the status of land ownership. Closer examination revealed that both farmers rented the majority of their land. Actual ownership was limited to less than 120 hectares for one farm, and less than 75 hectares for the other. Secondly, and more importantly, an evaluation of the relative size of cotton and grain farms in the country revealed that these farms were amongst the smallest category. Thus, based on their contextual size and the additional ownership criteria, RAFI determined that these two farms did meet the first intention of SAFA's small-scale producer qualification.

With regards to mechanization, grain and cotton growing are highly mechanized crops, especially in a developed country context. SAFA's smallholder qualifications reflect that limited mechanization may include a farm truck or car, but not heavy machinery, such as a combine. However, the SAFA Guidelines allow for one exception to the small-scale producer qualifications. RAFI felt that the two farms in question were small-scale farms despite their use of combines. In USA, almost all cotton and small grains production involves mechanization of this kind, therefore this criteria was not an apt assessment of whether the farms could be considered small. Instead, RAFI added a contextualized criteria: the relative power in the marketplace. Small-scale producers tend to be "price-takers," without the relative power in the marketplace to negotiate a higher price. A consideration of the market power, prices received, and market venue options of the two farms determined that they held the marketplace power typical of small-scale producers.

As for labor, both farms are managed and worked by primarily family members. One farm is run entirely by a father and son team, the other is managed by the owner and one long-term employee. A significant component RAFI found of assessing the personnel of a small farm in this context which may help others in their analysis was that the owners were also the managers and workers. On larger scale farms, the owners often were absentee and hired staff takes care of all aspects of the farm.

STEP 2. **CONTEXTUALIZATION**



Following the step of detailed mapping and boundary-setting, the assessor will have collected a wide range of information about their context – meaning their geographic or regional circumstances, such as climate and resource availability, as well as their socio-political circumstances such as labour trends, legal framework and other such details. This information will also be used in this step to:

» consider all relevant sub-themes; and
» contextualize SAFA's default indicators for assessment purposes.

The purpose of contextualizing the default indicators is to refine the measurements and ratings to be appropriate, based on the circumstances surrounding the entity assessed. The default indicators provide essentially a frame for how to rate the performance of the entity, based on the context of the entity.

RESOURCES needed for Step 2 include outputs from Step 1, complete with the detailed description of the assessed entities and critical impact areas defined in the boundary setting. The list of default indicators is found in this publication's complement "SAFA Indicators".

Step 2 consists of two main activities:

» Review of all sub-themes, based on the defined boundaries and the sustainability objectives of those sub-themes;

» Review default indicators in relevant sub-themes, based on context, in order to determine ratings.

Contextualizing sub-themes

The assessor should begin with a review of SAFA's sub-themes, paying careful attention to the sub-theme objectives which describe the sustainability goal that should be achieved in that area of performance. Based on the boundaries identified in Step 1, the assessor may eliminate certain sub-themes that have objectives that are completely outside of the boundaries of that entity. For example, the assessment of a mariculture operation (i.e. farming of fish or other aquatic species in sea water) could exclude the sub-theme Water Withdrawal which refers exclusively to freshwater. The other sub-theme "Water Quality" would however apply, as mariculture operations can create localized pollution.

A series of questions for the specific sub-themes help the user identify the relevance for the entity to be assessed. Available publications, reports and maps should be consulted in this step to gather information necessary for finding out the relevance of certain sub-themes. For example, information related to physical water scarcity in the region, human rights situation, rule of law, soil degradation risk and land use cover change.

Sources used in this review should be included in the SAFA Performance Report. Sustainability sub-themes which are not included because of lack of relevance in terms of impact and influence should be detailed and justified in the final Performance Report. All themes and sub-themes relevant for the sustainability performance of the assessed entity must be addressed in the subsequent steps in order to generate a Performance Report that is as accurate as possible.

Example Box 5. **Contextualization of sub-themes**

SAFA's framework includes a wide range of themes and sub-themes to ensure that all sustainability issues are covered. However, some entities may find that certain themes or sub-themes are irrelevant to their operation because of their industry or sector. During the SAFA pilot phase, a forest operation, PROMACER, had to contextualize the sub-themes to match their industry in Spain. PROMACER is a group of small operations with 68 members cover 532 ha, which in forestry can still be considered as a small plantation area. There are just two direct employees and 4 to 8 indirect jobs. Their forest operations are located in rural areas, where the primary sector is still an important economic activity.

An example of a sub-theme that PROMACER found irrelevant and did not utilize in their assessment was "Food Quality". In order to ensure that sub-themes such as this one were not eliminated inaccurately, a three-step process was used to check the relevance of each sub-theme, including:

Consideration of the content of the sub-theme and its relevance to their industry.

Q: is food produced within the boundaries of the forest?

A: no

Consideration of the relevance of the sub-theme to their specific operational scope. The scope of the operation is focused exclusively in eucalyptus wood production.

Determination of linkages between this and other such sub-themes in their assessment concluded that the operation had no sub-themes linked with food.

Contextualizing default indicators

Secondly, the assessor should review each of the default indicators (or identify replacements for these) in the remaining sub-themes and use the data about their geographic/environmental, social, political and economic context to determine detailed ratings for each indicator. The default indicators provided by SAFA already identify high and low ratings, which should be maintained. In some cases, few or no intermediate levels exist because the indicator is simply a "yes" or "no" that something exists, for example "Forced Labour". Either it exists or does not. If it does not exist, it will be "best sustainability performance". For most indicators, it will be necessary to contextualize an indicator to determine the intermediate ratings:

» Collect all relevant available data. Example: for the default indicator "Wage Level" information on the regional living wage, average wage in the sector, legal minimum wage and poverty rate should be obtained, as well as information about overtime policies and maximum work week averages.

- Review SAFA's rating frame provided in the complement "SAFA Indicators". The default indicator already provides that: a dark green score is received if (among other things) 100 percent of employees and personnel involved in the organization are paid a living wage; and a red score is received if workers are underpaid according to industry averages, paid at the poverty rate, paid piece-rate that encourages unhealthy practices, or if pay is docked or withheld under any circumstances. Using regional data, the assessor should be able to establish what a living wage is, and what a normal or legal work week is. Based on the living wage needs in their region, the assessor should also be able to establish what amount per hour would qualify as "underpaid," what would constitute the poverty rate of pay, and what would be considered excessive length for work week hours. In this manner, the assessor can contextualize numeric values for the dark green and red scores of SAFA, based on the indicator's frame.
- Determine the green, orange and yellow contextualized rating scale. To contextualize the rest of the rating scale, a user would need to decide what wage rate and working hours in their region and sector earns a "good" score, what earns a "moderate" score, and what earns a "limited" score. This should be based on careful analysis of the regional and industry data, as collected.

Contextualized Indicator: Hypothetical Example

Indicator: Wage Level

Context: South-eastern USA

Unit of Measurement (given in SAFA): this indicator measures the percent of employees paid a living wage.

Unit of Measurement (contextualized version): living wages of at least USD14 per hour are received for a maximum workweek of 48 hours per week.

A hypothetical tool developed for use in South-eastern USA with farmer associations may develop a contextualized indicator such as this one, following the guidance provided in SAFA's default indicator that outlines the requirements for "Living Wage". Additional contextual details, such as exceptions or adjustments to the rating based on local circumstances, would also be added at this point.

Example Box 6. **Contextualization of indicators for a fish processor**

One participant in the pilot phase of SAFA was a fish processor located in Northern Italy, where the economy is driven by high input agriculture and mollusk farming in lagoons. This entity, which had around 20 employees and facilities in a 6 ha area, found that they needed to contextualize some of the SAFA indicators to make them more applicable to their operations. Their experience is a good example of how to use publicly available resources to contextualize indicators, especially when choosing the practice-based indicator option in the environmental dimension.

An example of one indicator that this pilot contextualized is the practice-based indicator for greenhouse gas (GHG) emissions. Because of the scale and resources of the operation, they did not have at hand performance data about actual GHG emissions. Therefore, the assessor needed to develop a contextualized practice-based indicator that would serve as a proxy for performance data.

To do this, the assessor collaborated with FAO to collect current publications and research about GHG emissions of small-scale fishery and processing operations. Such publications are available on FAO's website, and could be researched through an internet search engine. After reviewing the material, the assessor made a chart of activities and their corresponding best practices that were relevant to GHG emissions.

An example of one activity that was listed on this chart was: "direct energy use, including all electricity and/or gas necessary for pumps, equipment use, ice, refrigeration, storage, office or space, heating/cooling, and any on-site processing". This activity was to be measured in Kilowatts/ton output following processing and packaging. This measurement resulted in a ratio. The assessor was able to use her knowledge of the industry to compare this ratio to other similar operations, and determine if the entity was performing above average, or below average. In addition, other components listed on the chart, such as an evaluation of the type of equipment used or transportation fuel used, provided additional information about the overall performance of the entity.

The assessor was able to base a rating for the GHG emissions practice-based indicator on this variety of contextualized data.

TOOLS Examples of context considerations for rating:

- **Size of the enterprise:** for example, small enterprises can hardly be required to quantitatively analyze biodiversity (e.g. species abundance), while this may be feasible for large enterprises.
- **Step of the value chain**: are issues more relevant to a specific step in the supply chain based on influence, control and potential impact?
- **Type of value chain:** are some issues more relevant to agriculture, livestock, forestry, aquaculture and fisheries based on potential impact? For example, operations in agriculture and forestry have more potential to sequester carbon than those in fisheries, aquaculture, processing and retail.

- **Region:** are some issues specific to the region? For example: the relevance of water withdrawal is much higher in water-scarce than in water-rich areas; soil properties and thus soil fertility, as well as the potential to enhance soil organic matter content, *inter alia*, depend on the local climate and bedrock.
- Use of the SAFA results: different types of indicators and integrity of supporting data may be required to address either Level 1 or Level 2 critical review requirements.

SAFA has not developed contextualized indicators. In order for a detailed SAFA assessment (the level of detail will depend on the purpose of the assessment) to be done on an enterprise, contextualized indicators must be developed by the assessor. Other organizations may also develop contextualized indicators using the SAFA framework (themes, sub-themes and default indicators) as a guide, in order to assess their particular operations, supply chains or projects.

This step of contextualization provides the basis for customizing the metrics in order to determine performance in the intermediate ranges between "Best" (dark green) and "Unacceptable" (red) practices.

Generally, it will require expert knowledge and/or technical expertise. Industry associations, NGOs, universities and other groups working in sustainable agriculture, forestry and fisheries will be key resources for identifying factors affecting performance. Some organizations already have identified a continuum of performance for specific products and geographies in databases of "better" and "best" practices. These levels of performance may be reflected in percentages (RISE), icons (petals of a flower in the Sustainability Flower) or something else like metals - bronze, silver, gold and platinum levels of performance. Generally, these different levels of performance are defined by experts based on research and knowledge developed over time (see Appendix A). Potential resources of information for contextualization of indicators can be found in the complement SAFA Indicators.

While a SAFA has a default set of indicators to ensure a holistic approach, it is also important for the assessor to identify critical areas, based on materiality principles for the context of that entity. Where issues are deemed material in the contextualization phase, the SAFA Performance Report should acknowledge the relevance and disclose on those issues or admit limitations in data availability in the reporting (see Step 4 Reporting).

Example Box 7. **Contextualization of indicators for an urban farm**

During the SAFA pilot phase, one participating urban farm had to adjust indicators to meet their unique operation type. Their experience is a good example of how to use contextualization as an opportunity to get a very accurate and much customized SAFA assessment. This farm went above and beyond basic contextualization, by creating customized questionnaires for each indicator, based on their region and industry.

While located in a Canadian metropolitan center that is supportive of sustainability in the city policies, the four farms were located in neighborhoods with relatively a high percentage of vulnerable populations and poverty. They grow food in large, mobile containers that can be moved when the site is no longer available for urban farming. This mobility means that some sustainability issues, such as community and stakeholder involvement, are different than for other more traditional agricultural operations.

One indicator from the SAFA Governance dimension that the assessor contextualized to make their assessment more accurate was "Stakeholder Engagement."

To begin with, the assessor took steps to identify who the stakeholders for an urban farm would be. She started by talking to the farmers in an interview and reviewed existing sustainability papers on urban farming. She identified stakeholders as funders, donors, local community and neighbourhood, as well as those that eat produce from the garden, their clients and consumers, and their staff. She did not need to change the language of the indicator itself. However, she did need to contextualize the indicator. Based on reading about other sustainability initiatives in urban areas, and using terminology she learned from that research, she compiled a list of farm activities that the enterprise could be doing to earn a high rating for this indicator. Among others, these included:

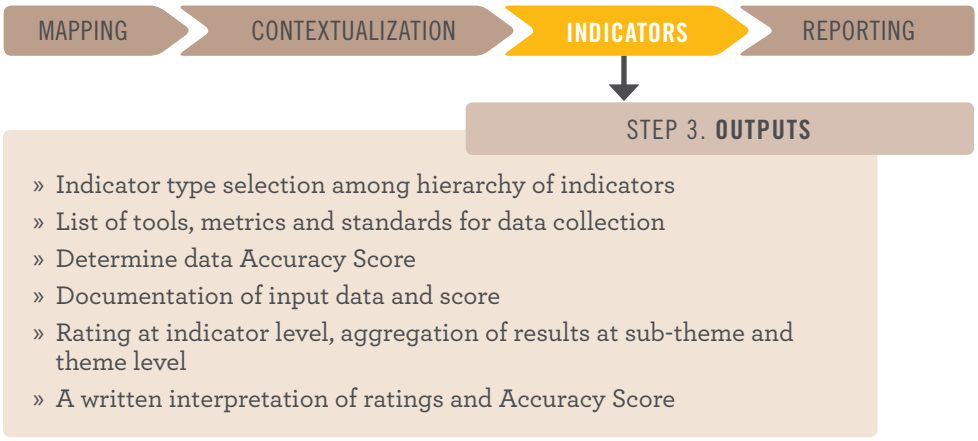
» Does your farm have a website, with complete and transparent information on it? How much consumer or community traffic to the website do you have?
» Does your farm have signage about its operations that is clear and visible to the community and neighbours?

How much product is lost to theft or vandalism? This is a means of measuring if the community is engaged and committed to the farm, and therefore feel pride and ownership in it, or if it is viewed as an outside effort.

» What is the number of local community members involved in the farm, and how many volunteer hours are logged?

The assessor was then able to begin the data collection phase, knowing that she would gather answers to these questions and ensure that the stakeholder groups she had identified were included in those answers.

STEP 3. **SELECTING TOOLS AND INDICATORS**



RESOURCES needed for Step 3 include the contextualized indicator list from Step 2, reports from existing schemes and tools used by the enterprise, including certifications, assessments, LCAs, CSR reporting, etc.

Step 3 further refines the relevant contextualization of sub-themes through indicator selection and rating. Step 3 consists of four main activities:

» Selecting appropriate tools and data collection.
» Calculation of the Accuracy Score.
» Selection and rating of indicators.
» Aggregation of results.

Selecting appropriate tools and data collection

TOOLS For the purposes of the SAFA assessment, "tools" refer to the variety of commonly used measurement systems or assessment techniques for different sustainability topics. For example, there are many tools for assessing an enterprise's greenhouse gas emissions, such as the GHG Protocol Corporate Accounting and Reporting Standard, the CoolFarm and the ExAct tools. Ideally, the entity would be able to collect necessary data using existing tools, metrics and standards.

The sustainability tools and initiatives identified in Appendix A can provide some additional guidance in identifying appropriate standards and tools. The selection of tools should be based on:

- Default indicators (or their replacement).
- Availability of information on the entity's performance.
- Budgetary constraints of the assessment.
- The use of the SAFA results and the associated compliance review level (i.e. Level 1 or 2).

The tools, metrics and standards used for data collection and measurement should be listed in the SAFA Performance Report, along with the Accuracy Score.

Data collection

Data collection is the process of gathering and measuring information on the default/replacement indicators, in an established systematic fashion in order to evaluate outcomes. Within a SAFA, primary and secondary data can be used.

Using existing tools and data

Secondary data is derived from other sources such as literature or databases (ISO14044:2006). Secondary data is data that has been collected by someone else, generally for another purpose. Secondary data is relatively inexpensive (or already paid for) to obtain. However, because it was gathered for other purposes, it may be necessary to tease-out the information needed for the SAFA assessment. SAFA recognizes existing sustainability programmes and efforts as key data resources. The use of existing rules, norms and standards expedite assessment for users, while avoiding duplication by integrating existing data. Appendix A provides some examples of partner initiatives for potential data sources. SAFA is coordinating with existing meta-initiatives and tools, as well as the establishment of a common taxonomy including the SAFA framework, components of a sustainability assessment and definitions in order to facilitate common understanding and equivalencies among different initiatives. Data can also be collected from public and other independent sources of information. However, the use of existing data collected for a different purpose needs to be addressed in the assessment, both in the data collection process and the reporting.

Caution must be taken when relying on best practices or estimations/proxies which create variances and subjectivity of performance. In addition, there are variances in

temporal scope and timing of the data collection that influence the usability of existing data. These issues must be considered. There may often be a direct trade-off between feasibility (costs, time and availability), particularly for small-scale producers, with accuracy of the performance assessment.

Example Box 8. **Using existing data**

Entities may already have much of the data they need to successfully complete a SAFA at their fingertips. Sources may include other tools or reporting mechanisms the entity has used. During the pilot phase, Groupe AGECO, a Canadian consulting group specialized in socio-economic studies, strategic planning and social responsibility assessment (including Social-LCA) in the agri-food sector, used the SAFA for the Canadian organization Fédération des producteurs du Québec (newly renamed as the Éleveurs de porcs du Québec – Quebec Pork Producers).

The Quebec pork producers represent more than 3 500 pork producers, who employ over than 20 000 employees and produce more than 7 million pigs annually. The scope of the SAFA pilot focused specifically on the pork production level, of a representative sample of 182 pig farmers who participated to previously conducted LCA-based studies conducted in 2010-12, including a carbon and water footprint assessments, as well as a socio-economic performance analysis.

An Environmental LCA, within an ISO standard framework, is an internationally recognized approach that evaluates the potential environmental and human health impacts associated with products and services throughout their life cycle, from raw material extraction, including transportation, production, use, and end-of-life treatment. A Social LCA focuses on businesses' behaviour and on the relationships they have with their stakeholders, such as their workers, the local community, their business partners, etc. This tool aims to evaluate the degree of social responsibility of businesses towards their stakeholders by using a set of socioeconomic indicators related to a list of social issues of concern, going from working conditions and local engagement to environmental practices.

Existing data from these studies were used to respond to several SAFA indicators. For example, the indicator related to Employment Relations required that "Personnel have legally binding work contracts and no precarious employment". The S-LCA assessment on whether the farm workers had access to written and formal working contracts showed that only 20 percent of farmers provide their workers with such a document. Although AGECO was able to use this information to respond to this indicator, it conducted focus groups and spot-check interviews to confirm that this data from the S-LCA was still relevant.

AGECO found that in some cases, the evaluation scales of SAFA and the S-LCA were different, and the focus of the evaluation was sometimes dissimilar. But after the pilot experience they found that the SAFA provided an opportunity to complete, structure and organize the S-LCA results in a coherent way. Using existing data also allowed their organization to save time and money in completing the SAFA assessment. In the end, AGECO felt that overall, by linking these tools together, SAFA gives the opportunity to organizations to better assess and communicate about their sustainability, hence contributing to promote more socially-responsible practices in the agri-food sector.

Primary data

Primary data is collected (measured, calculated or estimated) from production sites associated with the unit processes within the system boundary (ISO14044:2006). Directly collecting the data needed has the advantage of being specifically tailored to the SAFA assessment and indicator. However, primary data tends to be expensive to collect and takes a long time to process. Entities undertaking a SAFA can supplement this existing data with site visits, scientific sampling, interviews, stakeholder surveys and reviews of their internal documents and programmes within the SAFA Framework. The methodology is reflected in the Accuracy Score.

Data collection guidelines

For some indicators, data collection is especially difficult, as well as measurements in relation to the "best" achievable objective. In some cases, exact thresholds are region-specific and require expert knowledge. Especially in the environmental dimension (e.g. air, water, biodiversity), degradation drivers are often independent of the enterprise's management, extending to larger ecosystems and wider timelines.

While SAFA cannot determine specific data protocols that would be applicable globally, SAFA reporting would require transparency on the data collection protocols (timing, content and type of data which are reflected in the Accuracy Score).

In small enterprises with low levels of documentation (e.g. small producer groups or farms), almost all enterprise-related information will likely be collected via a farmer interview and a personal inspection of farm and fields. This means that the "how" and "when" of data collection can have influence on data quality and SAFA results.

Before and during data collection:

- identify potential data sources and challenges and the precautionary measures to maintain the integrity of the assessment (e.g. timing issues, proxies);
- document data accuracy and quality issues using existing data;
- access and organize existing data and sources (e.g. CSR audit reports, assessments);
- map existing data with SAFA sub-themes and default indicators;
- identify data collection plan to fill in gaps with plan;
- determine (and create, if necessary) a method for collection, storage of data and retention of data, merging existing and supplemental data;
- during data collection, the entity should monitor and support data collection activities;
- use the most precise and reliable performance data available;

» data should be collected using standardized measurement methods; where quantitative data are used, these should be expressed in the International System (SI) units.

Determining the Accuracy Score

As previously explained for data collection, there are many potential sources for data that SAFA users may access to implement SAFA indicators. The accuracy of the final ratings and the SAFA report will depend on the quality of the data used. In some situations, it may be possible for an enterprise to access high quality data for some indicators, but not for others. In order to increase the transparency and credibility of the SAFA results, an Accuracy Score, determined by the quality of data used, is a part of the SAFA Performance Report.

UNDERSTANDING THE ACCURACY SCORE		
Characteristics	• Provides a snapshot of overall integrity of the assessment. • Guides SAFA users as to where to focus resources for improvement in data collection and sustainability assessment in the future. • Does not impact the rating (red to dark green) of indicators, sub-themes or themes. • Can be completed simultaneously to indicator rating in the assessment process. • Based on the quality of data, determined by the assessor using SAFA's criteria.	
Components	**Timeframe**	Is the data based on the most current information about the enterprise?
	Type	Is it primary data, secondary data, or a general estimate?
	Methodology	Was the data collected according to the SAFA Guidelines?

Components of the Accuracy Score

The components of the Accuracy Score include the timeframe, type and methodology, all of which play a role in determining the quality of the data used in SAFA and the scoring.

Timeframe of data

Different types of data may need to be collected on different timeframes. For example, data regarding energy and water use may be calculated at multiple times per year, while data regarding living wage for the region may be updated annually. The most accurate data will be the most current available. Ideally, data used in SAFA assessments will be no older than 1-2 years, unless otherwise requested in the indicator measurement instructions.

Data that is older than 2 years may still be reliable, and may be used if more recent data is not available, though this will lower the Accuracy Score to "moderate quality."

SAFA recommends that data older than 5 years be refreshed if possible. If used, this data would receive an Accuracy Score of "low quality."

Type of data

There are various types of data, as described generally in the "Data Collection" section of the SAFA Guidelines. To assign an Accuracy Score to the data quality, SAFA considers whether the data is primary, secondary or estimation:

- High quality: primary data collected for the SAFA assessment, or primary data collected using a sustainability tool, for a previous audit or by a 3rd party;
- Moderate quality: secondary data used as a proxy to make a generalized but educated assumption regarding the enterprise;
- Low quality: estimates made based on general information about the enterprise that are not based on primary or secondary data.

Methodology of data collection by type of data

The appropriate methodology for collecting data depends on the type of data and the subject matter of the indicator. The following sections describe minimum guidelines for the methodology to collect accurate data to be used in the SAFA assessment according to each type of data: primary, secondary or estimations.

Primary data

There are two main methodologies for collecting primary SAFA data.

- Primary data collected by third party or using a sustainability tool: primary data about the enterprise's activities may be in the form of audit reports or existing certifications, or other such data sources generated by third parties. In addition, there are many sustainability tools that assist users to calculate information such as carbon emissions. Primary data from these tools, listed in Appendix A, is highly recommended for use in SAFA assessments.

  Regarding certifications: the fact that the enterprise has passed an inspection does not in itself serve as a data source for that enterprise in reference to the certification's standards. The detailed information about actual activities found to be in compliance with the individual standard requirements must be documented in the certification report, for this data to be considered of highest quality in a SAFA assessment.

» Primary data collected directly for the SAFA assessment purpose: primary data collected by the assessor for the SAFA itself is considered highest quality within the different sustainability dimensions, based on the following:

DIMENSION	HIGHEST QUALITY DATA CRITERIA OR TYPE USED IN EACH DIMENSION
Governance 	Current business documents or records (e.g. personnel manuals, organization's bylaws). Sources may be website or company records.
	Interviews with stakeholders that meet interview criteria.*
	Interviews with management and senior management that meet interview criteria.* Interviews with management in this dimension may be used as a means to confirm certain data, but should not replace review of actual company records, where relevant.
Environmental 	Direct sampling or testing (e.g. soil tests, waste water tests).
	Company records of current resource use such as utilities (e.g. electricity, water) or fuel for transportation.
	Visual inspection of grounds and facilities that meets inspection criteria.**
Economic 	Review of actual company records and book-keeping.
	Current business plan or other financial planning documents.
	Interview with book-keeper or management. For secondary information or confirmation of data, not to replace review of actual records, where relevant.
Social 	Interviews with employees that meet interview criteria.*
	Review of employee files, and related paperwork such as pay-stubs.
	Physical inspection of workplace and facilities that meets inspection criteria.**
	Interviews with suppliers that meet interview criteria.*
	Interviews with supervisory staff, human resources, or management that meet interview criteria.*

*** Interview Criteria**

Highest quality data for some indicators requires interviewing various individuals or focus groups. Data from interviews can only be considered highest quality (in terms of credibility of the data source) if at least the following criteria are met:

How many individuals are interviewed? Best - random sampling that includes members of staff groups with all diversity factors including age, gender, ethnicity, seniority at the enterprise, vulnerability factors such as disabilities, etc.

Who conducts the interview? Best - interviewer must not be management or a supervisor, should ideally be someone external to the enterprise, needs to speak the language of the employees and be sensitive to labor issues.

Ethics of the interview, including respect of agreed codes of conduct and standards of research practice? Best – respect of confidentiality, anonymity, privacy, data protection and the possibility to withdraw from the survey at any time.

**** Inspection Criteria**

Highest quality data for certain indicators requires an inspection of the facilities or workplace itself. In these cases, the inspection may not be completed by management. Ideally, the inspection will be completed by a 3rd party or trained individual outside of the enterprise, unaccompanied by management.

Example Box 9. **Conducting interviews**

A key method of data collection for the SAFA assessment is interviewing employees and other actors in the enterprise. This step is necessary for data collection in all four dimensions. However, the challenge when conducting interviews is to ensure that measures are taken to gather objective information. Interviews generate qualitative rather than quantitative data, which can be more challenging to analyze. In the pilot process, one assessor dealt with this challenge by combining in-person interviews with online surveys to make the process more efficient.

This was an urban farm, located in Canada, with easy access to computers and internet. The operation had a rotating group of part-time employees and a small number of investors and co-owners. The assessor determined that the operation qualified as a small to moderate scale farm.

There were several indicators that required data collection through interviews. As a result of the farm's scale and access to resources, not much existing data was available for environmental indicators, such as GHG emissions or even water usage. Without having these metrics to rely on, the assessor decided to use practice-based indicators as a proxy for performance. The assessor thus began data collection for these indicators with a thorough, in-person interview with one owner. Through this process she established a clear understanding of all farm operations and activities, agricultural practices and production cycle.

She found that the in-person interview provided her with a great deal of broader information, and a good sense of the operations, but she needed to follow-up to obtain more specific details. To do this, and to ease the burden on the farmer, she prepared an online survey with multiple choice and fill-in-the-blank style questions.

To develop the survey, she began by taking the environmental indicators that SAFA uses, and then breaking down the operations and activities of the enterprise according to which SAFA indicators they would impact. For example, under the GHG emissions indicator, she noted that irrigation type would have an impact. She then researched best practices for urban farming in her region and compiled a list of activities that would qualify for the high rating in each indicator. Next to irrigation type, she noted: drip irrigation would be a best practice.

She then compiled a list of questions in an electronic survey, which the farmer was able to fill out in a matter of a few hours. This combination of a preliminary in-person interview with follow-up through an electronic survey allowed for a more precise data collection through interviews, and was less burden on the farmer.

Secondary data

SAFA users may not always be able to collect primary data for all indicators. In some cases, secondary data may provide a reliable source from which assumptions about the performance of the enterprise being assessed can be drawn. In this case, the assessor should make sure that the secondary data used is current and published by a reliable source. Preferably, statistics or scientific information used as secondary data will come from a peer-reviewed source.

SAFA users will need to assess based on their own judgment if the quality of the secondary data used is the best available. If it is, this data may be considered "moderate quality". If it is not, this data should be considered "low quality".

Example Box 10. **Using secondary data as proxy for performance data**

In some cases, finding primary data for an indicator is not possible, as a result of the limited resources of the entity, or the limited research or testing available for that indicator. In these cases, the use of secondary data as a proxy is possible, but it must be done carefully. The secondary data available may come from existing studies by the operation, or studies relevant to that operation or industry. In the case of one group of smallholder growers in Thailand, this was exactly the type of data they were able to obtain. Their experience is a good example of how to diligently extract useful data for SAFA from existing studies.

The Sustainable Palm Oil Production in Thailand (SPOT) project was commissioned by the German Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) and was implemented by GIZ in cooperation with the Thai government, the Office of Agricultural Economics (OAE) and several other local partner institutions. The project worked with 500 smallholder palm oil producers and aimed to promote sustainable palm oil production and to support the establishment of certification systems for sustainably produced palm oil in Thailand.

This group decided to conduct a SAFA pilot assessment on a selection of 30 of their small-scale producers. One indicator this group realized they could not collect performance data for was GHG emissions. All members of the group were small-scale producers and did not have the means to measure or track GHG emissions.

Therefore, the primary assessor used data from a previously conducted study funded by the BMU on developing a GHG calculation methodology for the Thai palm oil industry: GHG Emission Optimization Guidelines for Life Cycle of the Palm Oil Industry. As part of this original study, samples had been taken from operations nationwide in the industry and information had been compiled from the Ministry of Agriculture's database. This original study had used these resources to identify sources of GHG in oil palm plantation (mainly from the production and use of N-fertilizers) and best practices (by optimizing fertilizer usage) for smallholders to reduce their GHG emissions as follows.

After the study, the small-scale producers in this group had received related trainings and had been able to adopt the recommended best practices. The SAFA assessor was able to take the information regarding the GHG emissions correlated with best practices in the original study and estimate the total emissions that the group would have, based on their size, inputs and crops grown. For example, one component of the training included teaching farmers about the appropriate amount of fertilizer to use according to the needs of the crop. The assessor assumed that those who had received the training now used the appropriate amount of fertilizer. This represented a general reduction in their GHG emissions as per the previous year, before the training.

After reviewing the data, the assessor was able to assign a "Best" rating for this indicator to this group of smallholders, because GHG emissions, biological pollutants and other air pollutants were minimized through the adoption of practices such as mulching and cover crops, soil and leaf analysis, and Integrated Pest Management methods, such as the use of barn owls for bio-control of rats.

While the method used in this example does not generate an exact measurement of GHG emissions, it is a good example of how to use available secondary data to generate educated estimates as proxy for performance data.

Estimations

The final type of data that may sometimes be used in a SAFA assessment are estimations, generally made by the enterprise management or staff themselves, regarding the performance of the operation. An important distinction to make is that estimations are different from data collected in interviews. For example, the assessor may estimate that a farm operation uses xx quantity of fuel per year, and assume their carbon emissions impact from this estimate. In the absence of documentation, the ability to test or complete a tool or calculation, or the ability to draw from reliable secondary data, estimates may be used to complete the SAFA indicators. However, these should be considered "low quality" data and points for improvement in data quality in the future.

Example Box 11. **Conducting interviews at a large enterprise**

Groupe AGECO, a Canadian consulting group, used the SAFA guidelines to assess the Canadian organization Canadian Sphagnum and Peat Moss Association (CSPMA). The CSPMA regroups 17 peat moss producers and marketers employing over 2 600 employees and 1 300 seasonal workers. The SAFA pilot focused on the peat moss producers, whose activities involve the extraction, processing, and distribution of the product. Specifically, the assessment covered a sample of seven producers who participated in previous analysis (among which a Social and Environmental Life Cycle Assessment). These businesses account together for 70 percent of all peat moss produced in Canada.

To complete the SAFA, AGECO used interviews to gather information for the indicator "Stakeholder Dialogue". Interviews with representatives among the organizations were necessary to check and complete this information because it was unavailable in existing reports/assessments. In addition, since the identification of stakeholders is often an implicit and informal process within organizations, it was also important to detail, describe and understand how this practice was performed to qualify the performance.

Several interviews took place all along the projects with representatives of the organizations. In most cases, discussions took place during conference calls, where 2 or 3 experts of the organizations answered AGECO questions. The people interviewed were generally members of the monitoring committee, although additional experts joined from time to time to discuss specific issues.

These informal interviews were themselves a complement to a more structured focus group that took place during the SAFA pilot. This formal meeting allowed AGECO to inform, describe and question internal management, experts and producers, as well as external stakeholders (various key actors identified based on the relationships and interests they shared with the organization). These discussions were conducted by using slides and discussion guides. Two facilitators always guided the discussions to make sure it was lively and not tiresome. When possible, AGECO asked interviewees to provide them with written and formal documents to prove that the disclosed information was correct (e.g. internal procedures). Finally, AGECO also asked third party reviewers to review the methodology, as well as the content of the CSR report they produced, based on the SAFA evaluation to make sure the information and results were both sound and rigorous.

The methodology used by AGECO to carefully conduct interviews and focus groups and to tailor them to the needs of the assessment based on existing and available data is a good example of how to use interviews for data collection at a large enterprise level.

Steps to determining the Accuracy Score

The basic steps to determine the Accuracy Score are determined by the components Timeframe, Type and Methodology described in the previous section. With that information, an Accuracy Score can be determined for the SAFA Performance Report.

- **Determine quality level of each indicator and assign score.** After rating the performance for an indicator, consider the quality of the data used for the assessment. Assign scores per indicator based on whether the data is "high", "moderate" or "low" quality.
- **Calculate the average at sub-theme level.** Once Accuracy Scores have been assigned to all indicators in a sub-theme, an average score can be calculated for the sub-theme as a whole. A mathematical average may then be taken for each sub-theme by adding up the total points and dividing by the total number of indicators. If this math results in ½ points, users are encouraged to round down to the lower score.
- **Calculate the average at theme and overall level.** After all sub-themes have been scored, accuracy scores can be assessed at the theme level, and a final overall score for the SAFA assessment can be established as well, using the same principles.

The final overall Accuracy Score will be reflected in the SAFA Performance Report. A simple checklist can help in calculating the data quality Accuracy Score.

DATA QUALITY PER INDICATOR	CRITERIA	CHECKLIST	ACCURACY SCORE
High quality data	Is data current? Maximum 1-2 years old.		3
	Is it primary data collected directly for SAFA?		
	Is it primary data from previous 3rd party audit or sustainability tool?		
Moderate quality data	Is it primary data older than 2 years, but considered still reliable?		2
	Is it secondary data?		
Low quality data	Is it primary data older than 5 years?		1
	Are they estimations or proxies?		

Selecting indicators and rating thresholds

For conducting a SAFA, indicators are specific measurements or assessments that provide evidence as to whether or not a certain condition exists. By using indicators, an entity can demonstrate their level of sustainability performance on the SAFA themes and sub-themes.

There are different understandings of what a metric, indicator and performance indicator consist of. In an effort to create a common vocabulary, SAFA defines a set of terms that will form the basis of the framework and assessment:

- An indicator provides evidence that a condition exists, or certain results have or have not been achieved, and can be either quantitative or qualitative.
- a metric refers to a unit of measurement that is quantitative.

Types of indicators

All indicators are not created equally and provide different evidence depending on the type.

- **Performance-based indicators, also called results-oriented or outcome indicators.** Performance based indicators are focused on the results of compliance with an objective and can measure the performance of an operation, identify trends and communicate results.
- **Practice-based indicators, also called prescriptive or process indicators.** These indicators prescribe that the necessary tools and systems be in place to ensure best practices. These indicators are process, rather than outcome-oriented. For example, these indicators assume that having health and safety management systems in place leads to better management of health and safety issues. The cause-effect between a given practice and a result is however never precise. In fact, there is no science agreement on most important topics, such as the cause-effect of management practices on greenhouse gases and climate change. Thus, one can assume that a practice may yield a desired result but with a substantial margin error.
- **Target-based indicators.** These indicators focus on whether the operation has plans, policies or monitoring, with targets and ratings based on steps towards implementing them.

SAFA default indicators strive to be measurable, verifiable performance-based metrics. These indicators focus on outcomes or results of the entity; do not prescribe certain practices, as what matters is effective delivery of sustainability. In fact, **it is reaching the sub-theme objective that matters**, while a multitude of means is permitted to achieve that objective, including innovations. However, there are sometimes scientific and economic limitations (particularly for small-scale producers) inherent in some types or contexts of performance measurements. In these instances, SAFA proposes default indicators that are practice-based that have been correlated to performance outcomes (best management practices), which are particularly more appropriate for small-scale producers.

Example Box 12. **Using practice-based indicators as proxy for performance data**

Occasionally when performance data is not available, SAFA provides an option for users to determine a rating by evaluating their practices. During the pilot projects, AhikāKai, a virtual marketing and sales platform for indigenous foods in New Zealand, found that they had to use this option. AhikāKai platform is a social enterprise established by a Maori tribal council, Ngai Tahu. The platform is designed to assist in the economic and social development of family enterprises. It is a new and developing initiative and currently consists of families producing traditional foods.

For their assessment, the indicator on "Reduction of GHG emissions" was not possible to analyze with performance data. The enterprises operate at a cottage-industry scale and there was not the capacity to gather and record all of the primary data required to measure against this indicator. Instead, the assessor looked at the enterprise's practices, beginning by assessing which practices were related to GHG emissions. The primary source of GHG emissions from the enterprises concerned fuel consumption associated with harvesting and fishing, with small amounts of electricity associated with processing and packaging. The assessor considered the following practices which were in place:

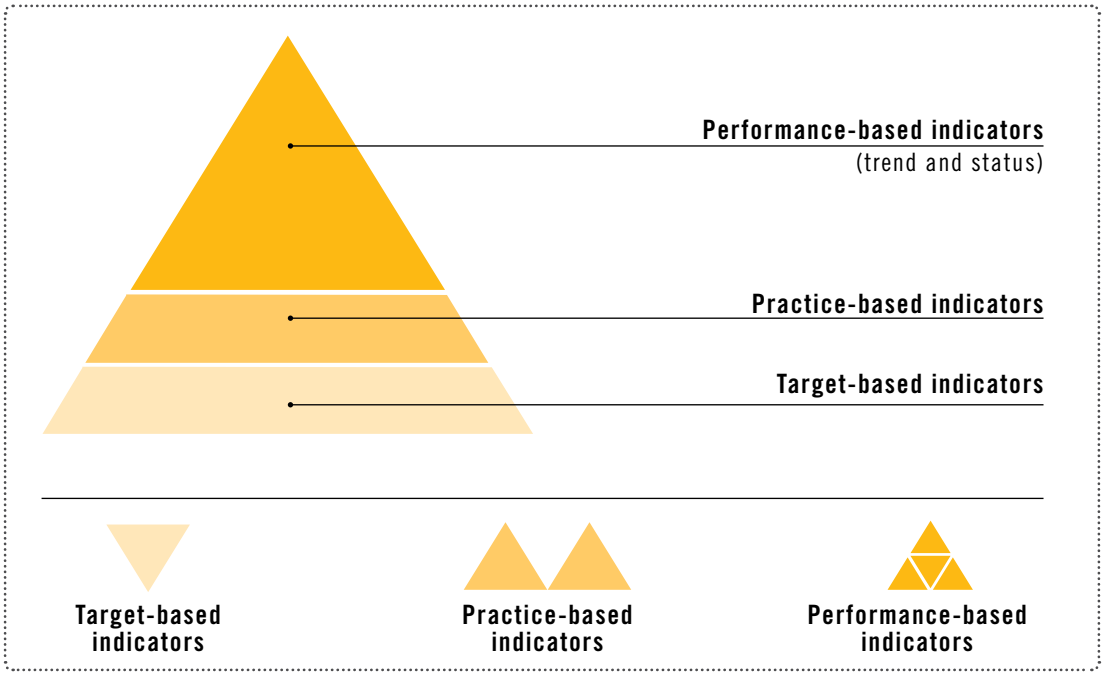
» Measures taken to reduce fuel consumption over time (e.g. efficient navigation and boat operation).
» Estimates regarding boat refueling and whether this was decreasing over time relative to catch.
» Investments in improved equipment efficiency (e.g. motor size and age).
» Whether a choice was made to use an available carbon-neutral electricity supplier for processing.
» Whether a choice was made to use a carbon-neutral packaging supplier.

The amount of fuel consumption became apparent through identifying how often refueling took place, while the levels of efficiency became apparent through the efficiency of equipment and a demonstrated awareness of practices to reduce fuel consumption. Finally, the choice of carbon neutral suppliers indicated the level of commitment to greenhouse gas reduction.

The assessors were able to obtain information about these practices by conducting interviews, rather than by using tools or tests, which allowed the assessment to go forward. In the end, AhikāKai was able to establish a rating for this indicator using practices as a proxy for performance data. In addition, the assessors noted after their pilot experience that beginning with interviews about practices had been a good place to start in raising awareness among their members of sustainability issues and options for continual improvement.

SAFA includes a hierarchy of indicators as outlined in Figure 9. Performance-based indicators are more relevant and effective than practice-based indicators in demonstrating performance and impacts and are thus, at the "top of the pyramid". Where no relevant practices are implemented, SAFA looks for the lowest indicator of intent to improve specifically target-based indicators. These are necessarily at the "bottom of the pyramid".

Figure 10. **Hierarchy of indicators**



SAFA's default indicators were developed based on what expert analysis considers to be the most critical individual components of a sub-theme to be measured in order to assess sustainability at the sub-theme level. Default indicators are applicable at the macro level – meaning to all enterprise sizes and types, and in all contexts. Default indicators serve the purpose of providing standardized metrics to guide future assessments on sustainability. However, default indicators contain only the frame for the rating scale. Within the Guidelines, default indicators can be rated at the top level of sustainability performance (dark green score) and unacceptable level of performance (red score), but they do not contain full rating scales (as this is only possible at a contextualized level).

The primary goal of default indicators is to measure or assess performance. However, in some sub-themes, assessing performance may require access to data that is difficult for certain users to collect, or may be currently impossible, particularly for small-scale producers. At the same time, another challenge facing performance indicators is that in some cases one metric or measurement is not enough to provide a satisfactory analysis of sustainable performance. This is particularly true for the environmental dimension which includes multiple types of indicators for all of the sub-themes.

All of the SAFA default indicators can be found in the separate document "SAFA Indicators". In this document, each default indicator is detailed in terms of: an overall description; relevance to the enterprise type (i.e. size) and supply chain level; unit of measurement; how to measure; rating; limitations; and sources of further information on that specific indicator.

The result of this phase is a list of the best indicators for sustainability performance, based on the unique qualities of the entity's operation type, location and surroundings.

Determinating thresholds

SAFA seeks to offer a fair playing field to assessing all types of enterprises across regions and sectors. While flexibility is required to account for the diversity of settings, subjectivity needs to be minimized in order to secure fairness of the SAFA outcomes. The SAFA scoring system is crucial to this end.

Indicator rating

SAFA offers a 5 scale rating for performance. Generally the best rating and unacceptable practices are defined for each sub-theme (see Part 3), with the three middle ratings to be defined by the user based on context. This is detailed per indicator in the complement "SAFA Indicators".

PERFORMANCE	PERCENTAGE SCORES
BEST	80-100 percent
GOOD	60-80 percent
MODERATE	40-60 percent
LIMITED	20-40 percent
UNACCEPTABLE	0-20 percent

Indicator weighting

In order that all sub-themes are weighted equally, it is necessary to weight indicators in instances where there are multiple indicators at the sub-theme level. When sub-themes only have one indicator, no weighting is necessary. The main dimension where weighting is a critical step is the environmental dimension, for which all of the sub-themes have three or more indicators.

The different types of indicators within the SAFA system have varying weight in terms of their likelihood to fulfill the sub-theme objective. Performance indicators can be considered very accurate, because they require the collection of primary data on the enterprise. Proxy indicators (practice indicators) however are less accurate, as they give a good estimate of performance but do not measure actual impacts. Finally target, policy or documentation indicators for example, do not necessarily reflect performance. For these reasons, SAFA has developed a system to differentiate indicators types. The goal of this system is to give higher weight to performance indicators.

When discussing ratings, SAFA differentiates between rating in the environmental dimension, where different types of indicators (target, practice and performance) coexist, versus all other dimensions where indicators do not follow a hierarchy but have equal standing within each sub-theme.

Rating sub-themes in the governance, economic and social dimensions

All relevant default indicators have to be chosen for a SAFA assessment in the governance, economic and social dimensions. Given that all sub-themes have the same weight, and in several sub-themes, more indicators are present, the weight is distributed evenly among indicators within each sub-theme in these dimensions, as the following table shows.

IF NUMBER OF INDICATORS PER SUB-THEME IS:	THEN INDICATOR WEIGHT IN THE GOVERNANCE, SOCIAL AND ECONOMIC DIMENSIONS
1	100 percent
2	50 percent
3	33 percent
4	25 percent

Most sub-themes will receive the same score as assessed for the indicator, as there is only one indicator (red/orange/yellow/green/dark green) and no need for weighting. In case there are two indicators in a sub-theme in these dimensions, the mean has to be taken of the two scores, which have equal weight in the overall sub-theme score. If the mean is not possible, the lower score needs to be given (for instance if one indicator rates "yellow" and the other indicators rates "orange", than the sub-theme will be rated as "orange"). In the few instances where a sub-theme has three and four indicators, the same rules apply: taking the mean or the lower score. An easy way of calculating this is giving points to each color code:

RATING	SCORE	PERCENTAGE SCORE
BEST	5	80-100 percent
GOOD	4	60-80 percent
MODERATE	3	40-60 percent
LIMITED	2	20-40 percent
UNACCEPTABLE	1	0-20 percent

For example if there are three indicators in a sub-theme:

- The maximum potential score is 3 indicators x 5 points (best/dark green) = 15
- The actual ratings are 2 yellow indicators (2x3) and one dark green indicator (1x5) = 11
- Divide the actual total score by the maximum total score (11/15) = 0.73
- The final sub-theme score is 73 percent. This is between 60 and 80 percent, which corresponds to dark green rating, or good performance.

Indicators which were deemed irrelevant with clear rationale could be omitted, thus changing the total maximum score for that sub-theme in question. For instance, if one indicator is irrelevant in a sub-theme which has four indicators, then the maximum score will be 15 (3 x 5) instead of 20 (4 x 5).

However, if indicators are omitted which were not deemed irrelevant with a justification provided for each one, the resulting rating for the omitted indicator is 0 percent or unacceptable. This score must be averaged with other indicator scores in calculating the sub-theme rating. Thus, if a sub-theme contains only one indicator, and it was omitted without justification, the sub-theme rating is 0 percent, or unacceptable. If a sub-theme contains three indicators, and one is omitted without justification, a 0 percent or unacceptable score must be averaged with the other two indicator ratings to determine the overall sub-theme rating.

Rating sub-themes in the environmental dimension

The environmental dimension sub-themes have multiple indicators and indicator types: target, practice and performance. The majority of the sub-themes have 3 or more indicators. This difference from the other dimensions has multiple reasons. While the combination of target, practice and performance indicators are always the "preferred" SAFA approach, alternative indicators are necessary to address the barriers and challenges of small-scale producers outlined in the "Small-scale producers and SAFA" section. In addition, there is some research and scientific evidence linking good agriculture practices to performance done around the world.

Example Box 13. **Rating Indicators**[4]

One of the most important steps in the SAFA assessment is carefully rating indicators. This can be a challenge, because even once the contextualized ratings are established, determining how to evaluate the data collected will require careful decision making.

In the SAFA pilots, PRONATUR, a cooperative in Peru, assessed six of their member farms. For this group, the indicator "Nutrient Balances" was a challenge, as they found they had no data available about actual content of plant-available nitrogen, phosphorus or any other nutrient. The exact indicator question given by SAFA was: "what share of your land is sufficiently supplied with macro- and micronutrients?" To come up with the most accurate answer, PRONATUR first identified the factors that determine if soils do have enough nutrients. They determined that it was mainly the soil organic matter in combination with the structure of the soil, the pH of the soil and what was added as natural fertilizer. Based on this list of components, they took the next step of collection of all the data they could find to match these components. On average, the six assessed farms had a soil organic matter in the root zone above 5.16%. The prevailing soil texture was medium; not too fine and not too coarse. The pH was between 5.5-7.3, which is more or less neutral. The soils were fertilized only with natural materials so that no salts, which are usually the basis of chemical substances, could have any impact on microbial life. An average of 25 tons of compost was applied per hectare per year, enriched with goat dung or guano de isla and transported. The final step was analyzing this data to determine a rating for this indicator. The rating framework given in the pilot SAFA tool was linked to the share of land with sufficient macro- and micronutrients supply in percentage. Though they had not been able to conduct any lab-based soil analysis on exactly this question, they were able to assess their data and could assume that the four components they researched represented a good baseline for the "best" score, as the practices were applied to the entire cultivated area and the performance on the researched components was very good. In this manner, PRONTAUR was able to carefully assign an accurate rating based on a compilation of data.

Rating indicators took a different shape for the company Allos, an organic manufacturer based in Germany, who called on the Research Institute of Organic Agriculture (FiBL) to complete the SAFA pilot: rating the SAFA indicators for GHG emissions was particularly tricky. The assessors began working with the indicator "GHG Reduction" by asking: what functional unit to use as a baseline? And, which company or farm to compare themselves with for rating purposes? After conducting research into popularly used GHG measurements and their industry, they decided not to calculate GHG emissions directly but to consider all measures that the company implemented that have an impact on GHG emissions and assign a rating based on these. For instance, the share of renewable energies used and the share of land under reduced tillage were taken as components of this indicator. As Allos owned a wind turbine, the share of energy produced by this wind turbine was considered. Only measures which showed a scientifically proven impact on the SAFA sub-theme "Greenhouse Gases" where taken into account. Therefore, a comprehensive literature review was conducted for the different measures.

They found that the main advantages of this approach were that benchmarks could be set in a more plausible way, based on company practices and activities and possible flaws were excluded in CO_2 calculations (e.g. with respect to N_2O emissions from fertilizer application). The assessors then collected data on the company and its context. Everything relevant with respect to the sub-theme in question was taken into account. For instance, the electricity mix in Germany was relevant for judging the performance of Allos. The assessors then determined the rating by normalizing scores on a scale from 0 to 100 percent, with 100 percent representing a state in which everything necessary was done by the company to ensure that the objective of a GHG sub-theme was fully achieved, and 0 percent representing a state in which nothing was done, or even adverse actions were taken.

4 Unlike this present version, the Test Version of the SAFA Guidelines was flexible on rating indicators in order to gauge users' creativity and derive lessons for the current Guidelines.

The hierarchy of the indicator types needs to be reflected in the overall rating of each environmental sub-theme. All indicators need to be chosen, with small-scale producers allowed the exception. Small-scale producers, for whom data for some performance indicators may be too difficult to collect, can omit the performance indicators, with documentation in the SAFA Performance Report. If small-scale producers omit a performance indicator because of lack of available data or other reasons, they must justify why they have omitted this indicator. Then the omitted indicator may be considered excluded from both the sub-theme rating and the total possible sub-theme accuracy score. If a regular enterprise omits a relevant performance indicator, this is not the case. In this case the omitted indicator receives a 0 percent or unacceptable score automatically, which affects the overall sub-theme rating. The total potential Accuracy Score for the sub-theme does not change, meaning that the Accuracy Score will reflect the omission of this indicator.

All SAFA sub-themes have equal weight and all environmental sub-themes have at least three indicators of different type and thus, weight:

- Performance indicators receive the most weight.
- Practice-based indicators or those that are determined to be a valid proxy for performance or impact are given the second most weight - except for small-scale producers for whom performance indicators may be impossible to measure (for them, practice-based indicators could represent the highest in the hierarchy).
- Target-based indicators based on documentation, presence or existence of policies, plans, and targets or monitoring are given the lowest amount of weight.

Table 5 highlights the different rating scales for the hierarchy of indicators in the environmental dimension.

Table 5. **SAFA indicator types and rating scales for the environmental dimension**

INDICATOR TYPE AND DESCRIPTION	POTENTIAL RESPONSES	RATING SCALES
Performance indicators are considered those that take a direct measurement, utilize primary data from the operation itself, or otherwise calculate the actual impacts of the operation on the sustainability issue.	Yes/no/partial Percentage	80 percent or more/Yes - SAFA defined
		60 percent - 80 percent - User Defined
		40 percent - 60 percent Partial - User Defined
		20 percent - 40 percent - User Defined
		20 percent or Less/ No - SAFA defined
Practice-based indicators are those that identify certain practices which, based on general industry consensus or secondary data (such as scientific evidence), have been determined to be a proxy for a certain level of performance and thus considered "better practice". It may also be easier for small-scale operations to collect data on practices than on measurements for performance.	Yes/no/partial List of practices	Examples of better practices – SAFA defined
		List of practices - User Defined
		List of unacceptable practices – SAFA defined
Target indicators refer to indicators regarding the existence of a plan or policy with a particular sustainability target, such as "GHG reduction by 10 percent". The intention behind these indicators is that the enterprise has a plan with a target that matches the SAFA sustainability goal for that sub-theme. Primarily used in environmental dimension.	Yes/no/partial	Written plan and steps taken towards targets
		• Written plan available to all stakeholders but no steps towards target OR • Set target, steps taken but no written plan OR • Written plan, steps taken but not available to all stakeholders
		No requirements met

Thus, the following weighting applies to the environmental indicators:

- **Target (T)** indicators = 1 point
- **Practice (R)** indicators = 2 points
- **Performance (P)** indicators = 3 points.

The following combination of indicators exists in the environmental sub-themes. These points are given only in case the best scores are achieved in individual indicators. Thus, the table represents the maximum potential score per sub-theme.

COMBINATION OF INDICATOR TYPES IN THE ENVIRONMENTAL DIMENSION	MAXIMUM POTENTIAL INDICATOR POINTS IN THE ENVIRONMENTAL DIMENSION
T- R - P	1+2+3= 6 points
T- R - P - P	1+2+3+3 = 9 points
R - P - P - P	2+3+3+3 = 11 points
R - P - P - P - P	2+3+3+3+3 = 14 points
T - R - P - P - P	1+2+3+3+3 = 12 points

The rating is different when the best score is not achieved in any of the indicators:

RATING	TARGET INDICATOR POINTS	PRACTICE INDICATOR POINTS	PERFORMANCE INDICATOR POINTS
BEST	1	2	3
GOOD	0.75	1.5	2.25
MODERATE	0.5	1	1.5
LIMITED	0.25	0.5	0.75
UNACCEPTABLE	0	0	0

All three types of indicators, target, practice and performance, have a 5-scale rating. The rating weight increases incrementally as the score goes up from unacceptable to best.

As an example, if we take a sub-theme with three indicators (Target-Practice-Performance) and a SAFA assessment of Target scored dark green, Practice dark green and Performance yellow:

- total maximum potential score is 1+2+3 = 6
- total actual score is 1 (Target best/dark green) + 2 (Practice best/dark green) + 1 (Performance moderate/yellow) = 4
- final score for the sub-theme is 4/6 = 66 percent.

  This is between 60-80 percent, which corresponds to the good/green rating.

If any indicator is left unanswered, it is treated the same as unanswered indicators in the other dimensions. In SAFA, all indicators that are relevant must be used. If an indicator is not deemed irrelevant with a justification, or the enterprise is not a smallholder who justifiably cannot access certain data, any unanswered indicator will automatically be considered an unacceptable or 0 percent rating.

Rating for small-scale producers and irrelevant indicators in the environmental dimension

Small-scale producers may opt to omit performance indicators. However, unlike with other enterprises, when small-scale producers omit the performance indicators they do not automatically receive a 0 percent or unacceptable rating for this omission. Instead, small-scale producers will be asked to justify why they were unable to access necessary data to complete the indicator.

The same applies to those indicators which are not relevant to an enterprise. This may be as a result of the industry, geography, or other reasons. If an indicator was deemed

irrelevant during contextualization (e.g. indicators dealing with soils may be irrelevant for some fishery operations), the omission of this indicator does not receive a 0 percent or unacceptable rating. Instead the assessor must explain why and how the indicator was irrelevant.

Example: a small-scale producer determines that he cannot feasibly calculate the performance indicator "GHG balance" in the Greenhouse Gases sub-theme. As a Performance indicator, it has a potential maximum score of 3. As a consequence, 3 should be subtracted from the total maximum potential score for that sub-theme. The final report should list and provide rationale for all indicators which were omitted during the assessment either due to: (i) small-scale producers not being able to collect data; or ii) irrelevance of the indicator question to the enterprise.

An enterprise may choose to only use certain indicators in each sub-theme, if certain types of data are unavailable. However, the overall score and sub-theme rating will both be lower than if all indicators are chosen. The enterprise can therefore receive the highest score by selecting *all* of the default indicators in their assessment.

Rating at the theme level

To obtain a performance score at the theme level, several sub-theme scores have to be aggregated into a single score. Each sub-theme score weights the same. The entity should calculate an arithmetic mean of the sub-theme scores, or if not available on the lowest score basis. The following guidelines should be applied:

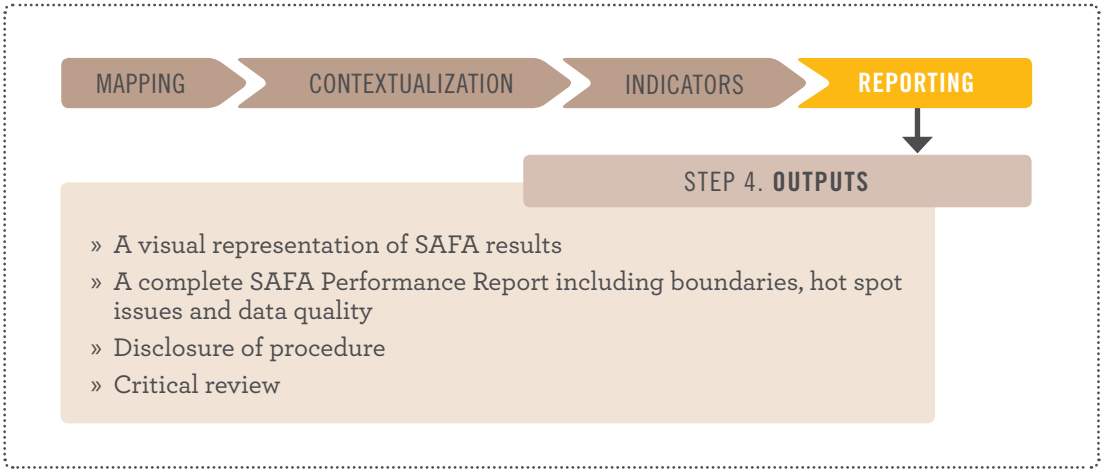
- The calculation process, including rules for aggregation and weighting of indicator values - must be transparent, with all decisions presented and justified in the Performance Report.
- Data insufficiencies can sometimes require the estimation of certain values; in order to ensure transparency, the Accuracy Score should be included at sub-theme and theme level.
- Decisions on exclusions must be justified and described.

During the interpretation of results with regard to context, a holistic approach should be adopted. The assessed entity should be perceived and understood as a whole because of the inter-relationships of themes and sub-themes. For example, results for the Freshwater, Land and Biodiversity themes may be linked with the same activities, such as soil tillage, use

of crop protection products and wastewater discharge. Such linkages should be identified and addressed explicitly, as the resulting synergies, trade-offs and side effects of activities will affect the planning and implementation of improvement measures.

All types of aggregation have in common that a gain in communicability is accompanied by a loss of information and a risk of relevant information being masked. All aggregated reporting should be transparent with any decision or judgment call justified clearly in the SAFA Performance Report. Sub-themes and themes with low scores are useful for identifying areas of improvement and should be highlighted in the SAFA Performance Report.

STEP 4. **REPORTING**



RESOURCES All documentation notes from Steps 1-3.

TOOLS Appendix B. SAFA Performance Report checklist.

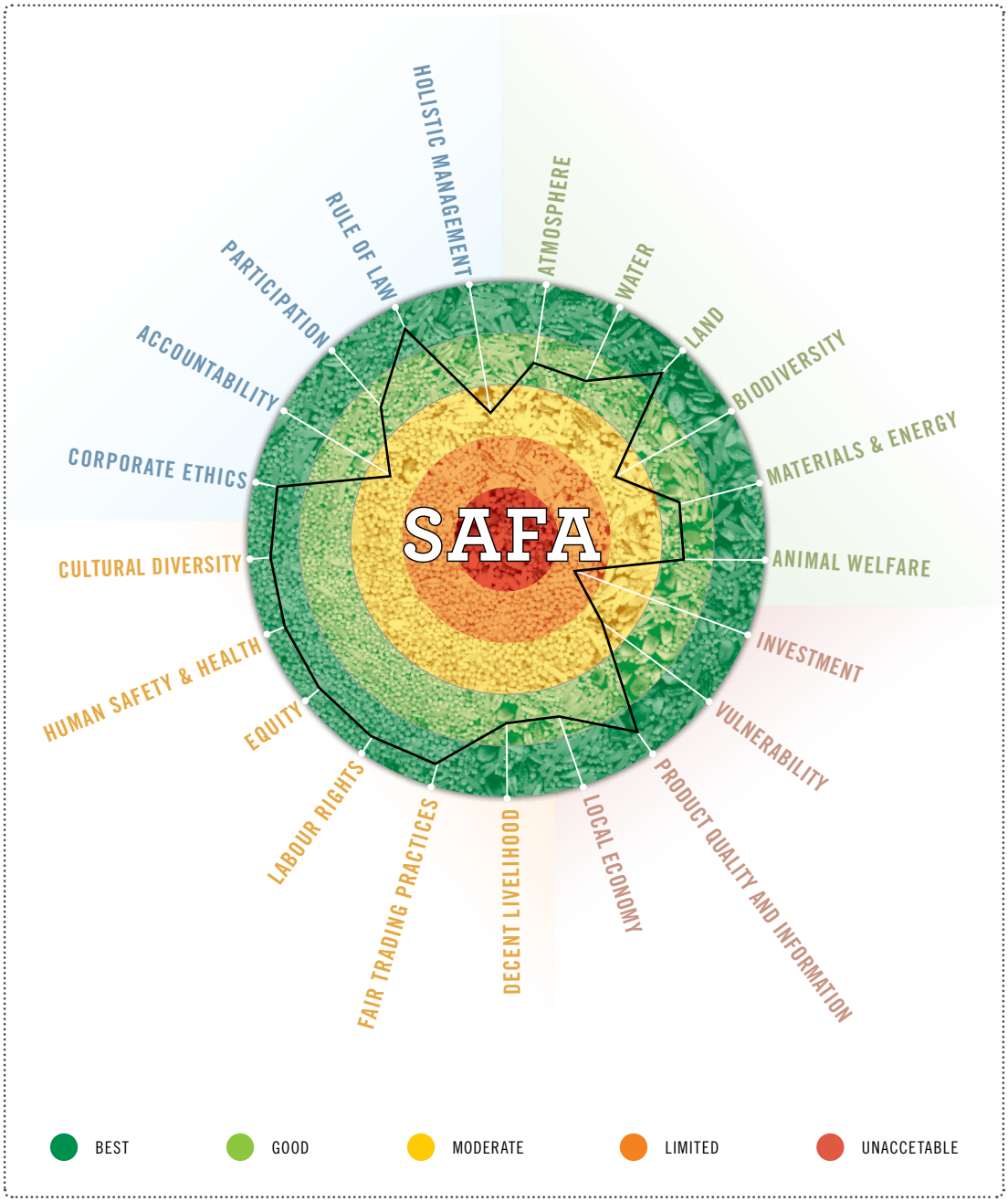
Step 4 activities consist of combining the documentation from the previous steps into a Performance Report for either internal purposes or external purposes.

Visualization

Sustainability is a complex topic and even with aggregation of the over hundred indicators and 58 sub-themes, understanding all of this data can be challenging and difficult to communicate internally or externally. Trying to find related content can also be difficult and understanding the relationships in a two dimensional spreadsheet is daunting. But data visualizations can make all of that much easier, allowing to see the concepts and relationships. Data Visualization is a method of presenting information in a graphical form.

A possible illustration of the overall sustainability performance and sustainability gaps is provided in Figure 11. This visualization of the SAFA sustainability performance ratings is depicted in the polygon of a hypothetical enterprise. The thick black line connects theme performance following a traffic light color code: best/good (green), needs improvement (yellow/orange) or unacceptable (red).

Figure 11. **SAFA sustainability polygon (example of an entreprise performance)**



The final report

The final report is a synthesis of the SAFA assessment, including definition of scope, boundary setting, qualified themes' ratings (with the Accuracy Scores), hotspot issues details, irrelevant sub-themes justified and areas for improvement identified.

Disclosure of procedure

The disclosure of procedure and methodology information should be transparent and documented, regardless of intended use. Details on the selected system boundaries, indicator, thresholds, data sources, inclusion of data from other sources including assumptions and performance ratings should be included. In the presence of irrelevant sub-themes and where a boundary is narrowed, the SAFA reporting needs to be transparent on what has been left-out from the assessment, with a clear documented rationale. Where evidence does not exist for material or hot spot issues, performance ratings should disclose assumptions and risks associated with the issue. The Report should identify areas for improvements based on the contextualization and ratings.

The assessment's accuracy depends on the data and methodology of calculation used, reflected in the Accuracy Score at sub-theme, theme and overall level. If a company wishes to communicate the SAFA report outside of internal purposes, the complete report must be shared. This includes information on the selected system used for boundaries, indicators, thresholds, data sources, inclusion of data from other audits, and stakeholder's relations.

Critical review

A critical review fosters the quality, credibility and transparency of the assessment. The information and ratings included in a report should be supported by documentation that could be reviewed and understood by someone other than the Report author. The review should provide all information needed for a critical appraisal by interested stakeholders. This is in line with the procedure outlines in LCA (ISO, 2009) and the G4 Guidelines (GRI, 2013), the transparency principles of the Bellagio STAMP (IISD, 2009) and the ISEAL Impacts Code (ISEAL Alliance, 2010).

Organizations can use a variety of approaches to enhance the credibility of their reports depending on the use of the results (see Table 7). In a SAFA, the critical review can be handled at 2 levels:

- Level 1 – where a SAFA is being undertaken for internal use, by small-scale producers or less formal purposes:
  - Preference for the use of performance-based indicators and if these are not available, practice - or target-based indicators can be used.
  - Preference for primary (high quality data) and if this is not available, secondary data (moderate or low quality) can be used.
  - For the internal assessment of the SAFA, it may be sufficient to have an internal committee provide the review and feedback.
- Level 2 – where a SAFA is being used for business to business communication or business to consumer communication:
  - Use of performance-based indicators, to the extent possible.
  - Use of primary data (high quality data) to verify indicators, where ever possible.
  - External verification of the SAFA assessment shall be undertaken by a suitably qualified 3rd party.

Type, comprehensiveness and complexity of the review should be defined during the SAFA scoping phase.

Sharing of results

Enterprises undertaking a SAFA have the possibility of benefiting from the experiences of others and sharing results. This could be across supply chains or within a supply chain with different suppliers, creating valuable lessons learned. This will allow enterprises operating in the same region or production/processing sector to build learning on best practices and establishing thresholds. Since sustainability is often considered a pre-competitive issue by the private sector, as testified by the cooperation of numerous companies in the frame of multi-stakeholder initiatives (e.g. WEF, 2010), mutual access to SAFA-related information is in the interest of participating companies.

Use of results

SAFA is intended primarily for self-evaluation and internal communication about sustainability performance for self-improvement. It is possible to use the SAFA Performance Report for communication with other businesses to establish a common understanding of sustainability aspects and for this, the use of the Level 2 compliance review is encouraged.

Example Box 14. **Use of results for self-improvement**

One of the unique benefits of the SAFA report is the visualization of performance across dimensions and themes. This can be a helpful mechanism for entities of all sizes to identify hotspots of sustainability performance. While this is not a mandatory step in the SAFA assessment, it is an opportunity that one Community Supported Fishery operation in the pilot phase chose to take advantage of.

As a small-scale operation, this entity did not regularly conduct sustainability assessments of their entire business. However, their mission was sustainability focused and their shareholders and stakeholders were interested in increased sustainability. Therefore, one of their motivations to complete a SAFA assessment was to learn about what areas they were performing well in, and what areas they could improve.

After the data collection and indicator, sub-theme and theme rating phases were completed, the final polygon revealed that the entity was performing well in some areas they did not expect to, and not as well in others that they had overlooked. The assessor was able to easily generate a one page report on hotspot areas - both of high performance and of low performance - simply by using the polygon as a guide, and reviewing the performance data for indicators in each hotspot theme.

This hotspot analysis gave the entity a starting place for addressing certain sustainability issues in the coming year. If the entity completes a new SAFA assessment, they will be able to use the same procedure to compare hotspot performance from year to year and measure any improvement.

SAFA results can be used for internal management, as well as learning and communication purposes. For credibility, it is essential that the SAFA procedures and results have a high degree of transparency. The completion of a SAFA assessment does not allow the entity to use the logo of SAFA or FAO in any way that implies endorsement or certification, as no one is verifying the claim. SAFA is not intended for business-to-consumer communication, as public assurance requires that certain characteristics or attributes of the product (or its production method), as laid down in specifications, be observed. SAFA does not assess products or processes – but enterprises. However, reference can be made to "Consistency with the SAFA principles and procedures" provided that the assessment is made fully transparent in all its choices and customization (e.g. with regards to boundaries, data sources, indicator selection, rating).

SAFA Guidelines for claims and communications are based on, but are not limited to, the following:

- U.S. Federal Trade Commission's (FTC's) Guides for the Use of Environmental Marketing Claims;
- Canadian Competition Bureau guidance PLUS 14021 Environmental claims - a guide for industry and advertisers;
- United Kingdom's Department for Environment, Food, and Rural Affairs (DEFRA) Green Claims – Practical Guidance How to Make a Good Environmental Claim;
- Consumers Union Greener Choices;
- The European Commission's Claims Guidance 2000;
- ISO 14020 series ((14020, 14021, 14024, 14025) on environmental labels and declarations;
- Global Reporting Initiative Reporting Principles, GRI 4.

SAFA communication principles

- Self-declared claims shall be accurate, verifiable, relevant, able to be substantiated and not misleading.
- Claims shall be based on scientific methodology that is sufficiently thorough and comprehensive to support the claim and that produces accurate and reproducible results.
- Information concerning the procedure, methodology and any criteria used to support claims shall be available and provided upon request to all interested parties.
- The formulation of claims shall take into consideration all relevant aspects of the life cycle of the goods or service, although not necessarily considering a full life-cycle analysis.

Table 6. **SAFA communication claims**

LEVEL OF COMMUNICATION	SAFA COMPLIANCE REVIEW LEVEL	KEY AUDIENCE	POTENTIAL VEHICLES	**SAFA REFERENCE**
Product	Level 2	Consumer	Labels on and off product	NONE
Brands	Level 2	Consumer, staff, NGOs, media	CSR report, company website, media, in store marketing	*"Consistency with the SAFA principles and procedures"* with report disclosure
Industry partners including B2B	Level 2	Industry, Government, NGOs, media	CSR report, company websites, media	"*Consistency with the SAFA principles and procedures*" with report disclosure
Sustainability metric partners	Level 1	Varies	Websites, tools, assessments	"*Aligned with the SAFA framework*"

If the polygon is communicated through whatever communications vehicle, the following must be shown next to the polygon:

- A box on boundary choice and cut-off criteria.
- Accuracy Score.
- Excluded indicators and sub-themes.
- Details on hotspot sub-themes and indicators.

See Appendix B: SAFA Performance Report Checklist.

SECTION THREE

SUSTAINABILITY PROTOCOL

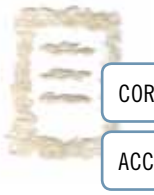
OVERVIEW OF SUSTAINABILITY DIMENSIONS AND CONSTITUENT COMPONENTS

The main objective of this section is to provide the background and rationale for the SAFA sustainability dimensions, themes, sub-themes and indicators. This section should be read in its entirety to understand the holistic approach of SAFA. It also serves as a reference document for implementers of SAFA who need further details to determine relevance or inclusion in their SAFA scope.

This section begins with an overview of the high level, overarching dimensions of sustainability: good governance, environmental integrity, economic resilience and social well-being. It is recognized that these dimensions are broad and encompass many aspects. There are numerous definitions depending on the context (e.g. government, corporate, individual producer). For the purposes of SAFA, a broad definition and aspects are covered by this dimension. The scope of topics considered under each dimension is the SAFA Themes.

In the next section, each of the 21 sustainability themes are detailed including a definition for the purposes of SAFA, relevance, goals and sub-themes and sub-theme objectives with some suggestions on indicators. Summary tables can be found in each Theme section.

The guiding vision of SAFA is that food and agriculture systems worldwide are characterized by all four dimensions of sustainability: good governance, environmental integrity, economic resilience and social well-being. These are each explored in the following table.



GOOD GOVERNANCE

CORPORATE ETHICS	Mission Statement	Due Diligence		
ACCOUNTABILITY	Holistic Audits	Responsibility	Transparency	
PARTICIPATION	Stakeholder Dialogue	Grievance Procedures	Conflict Resolution	
RULE OF LAW	Legitimacy	Remedy, Restoration & Prevention	Civic Responsibility	Resource Appropriation
HOLISTIC MANAGEMENT	Sustainability Management Plan	Full-Cost Accounting		

ENVIRONMENTAL INTEGRITY

ATMOSPHERE	Greenhouse Gases	Air Quality		
WATER	Water Withdrawal	Water Quality		
LAND	Soil Quality	Land Degradation		
BIODIVERSITY	Ecosystem Diversity	Species Diversity	Genetic Diversity	
MATERIALS AND ENERGY	Material Use	Energy Use	Waste Reduction & Disposal	
ANIMAL WELFARE	AnimalHealth	Freedom from Stress		

ECONOMIC RESILIENCE

INVESTMENT	Internal Investment	Community Investment	Long-Ranging Investment	Profitability	
VULNERABILITY	Stability of Production	Stability of Supply	Stability of Market	Liquidity	Risk Management
PRODUCT QUALITY & INFORMATION	Food Safety	Food Quality	Product Information		
LOCAL ECONOMY	Value Creation	Local Procurement			

SOCIAL WELL-BEING

DECENT LIVELIHOOD	Quality of Life	Capacity Development	Fair Access to Means of Production	
FAIR TRADING PRACTICES	Responsible Buyers	Rights of Suppliers		
LABOUR RIGHTS	Employment Relations	Forced Labour	Child Labour	Freedom of Association and Right to Bargaining
EQUITY	Non Discrimination	Gender Equality	Support to Vulnerable People	
HUMAN SAFETY & HEALTH	Workplace Safety and Health Provisions	Public Health		
CULTURAL DIVERSITY	Indigenous Knowledge	Food Sovereignty		

SUSTAINABILITY THEME PROTOCOLS

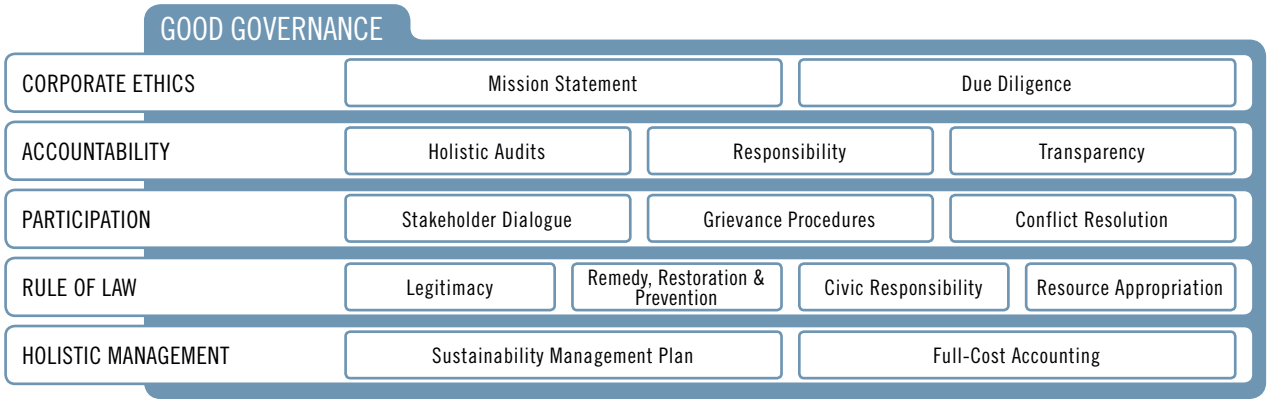
The sustainability theme protocols provide detailed guidance for each of the 21 SAFA sustainability themes. Each protocol includes examples of suitable indicators to determine sustainability performance for the sub-themes.

Outline of SAFA sustainability theme protocols

- **Definition of the theme**: during the SAFA consultation phase, numerous definitions and connotations were identified depending on context, purpose and use of the theme. Focusing on the SAFA vision and purpose, a basic definition is proposed for orientation, but not necessarily definitive.
- **Relevance of the Theme to sustainability**: importance of the theme to sustainable development, and in particular to sustainable food and agriculture systems.
- **Theme sustainability goal**: translation of societal and higher-level goals to one operational goal in the food and agriculture sector.
- **Sub-themes objectives:** translation of the theme goals to operational objectives at the supply chain level. Examples of best performance and unacceptable conditions and practices for each sub-theme are provided, along with **examples of indicators**.

GOOD GOVERNANCE

Governance is the process of making and implementing decisions (UNESCAP, 2009), be it in the environmental, economic or social spheres. Unless good governance is seriously considered, sustainability will remain a mirage. For SAFA, this includes the aspects of Corporate Ethics, Accountability, Participation, Rule of Law and Holistic Management.



While governance is not traditionally included as a separate dimension of sustainable development, the UN Indicators of Sustainable Development Indicator framework (versions of 1996, 2001 and 2007) presented sustainability themes according to the social, environmental, economic and institutional dimensions. SAFA expands on the earlier institutional dimension of this UN framework and builds on existing corporate social responsibility tools in order to establish the governance dimension. The weight given to governance in the SAFA Guidelines is in line with other business approaches, such as the UN Principles for Responsible Investment, the UN Global Compact (UNGC/IFC, 2009) and the GRI Guidelines (GRI, 2013).

The governance dimension of SAFA revolves around an understanding of Good Corporate Governance (GCG) that explicitly takes into account all affected stakeholders. SAFA has taken forward the governance dimension, particularly because SAFA users are concerned with value chains and stakeholder relations, in which good corporate governance is of paramount importance.

An enterprise committed to sustainable development needs a sustainability-oriented governance structure, in which content, values and responsibilities of the company are clearly stated and through which transparency and accountability are ensured. It organizes processes that facilitate an active participation of all stakeholders. Further elements include a strict orientation towards legitimacy and the rule of law and a rigorous sustainability management. A new element brought by SAFA is "Full-Cost Accounting", a still nascent approach embedded in the intent of all those striving for triple bottom line considerations. A business purpose that contradicts or ignores the sustainability principle will not lead to a sustainably operating enterprise in the long run.

THEME G1 – CORPORATE ETHICS

Definition of Theme

Corporate Ethics in SAFA refers to the sustainability principle being embedded in the fabric of the whole enterprise. Sub-themes included are: Mission Statement; and Due Diligence.

Relevance of the Theme to Sustainability

Corporate ethics includes the formulation of a statement that goes beyond profit to embrace sustainability and is based on a vision of a future that is attractive to all stakeholders (Maak and Ulrich, 2007). This is the foundation of a successful, sustainable and integrity-oriented enterprise culture (Loew and Braun, 2006; Erwin, 2010). The mission statement should state in credible, clear and authentic words, how the enterprise intends to contribute to sustainable development. For small-scale producers who may be illiterate or just too overworked to write things down, a written statement is not feasible. However, illiterate small-scale producers may have strong and clear missions based on deeply held values and as members of a community of shared values. It is important to acknowledge this kind of mission statement along with the more formal statements one expects from a larger farm or enterprise – especially because in practice, the small operation may have reached a higher level of agro-ecological sustainability and continual improvement than the bigger enterprise. For the operational level, principles are defined through a Code of Conduct (Maak and Ulrich, 2007). The Code of Conduct provides clear guidance in concrete situations, is authoritative, without limiting scopes of action too much, and fosters desirable behavior. It provides management guidance and priorities for decision making in situations where trade-offs between the dimensions of sustainable development are encountered.

Enterprises in the agriculture and food sector have a wide range of governance structures, from a virtual absence of governance to highly sophisticated systems. Governance is also expressed and practiced differently in different cultures. Traditional and tribal cultures use forms which do not fit current Western definitions but which nevertheless can be shown to be effective in managing sustainable development. Size and market power of enterprises in the same sector, region or value chain are equally variable. This often results in major imbalances and disadvantages, particularly where small enterprises depend on large firms that are better organized, but lack a business purpose going beyond profit. Larger size implies a larger sphere of impact and influence and thus, also of responsibility. Therefore, large, well-organized enterprises should contribute to the improvement of

market structures and to the sustainability of production of their suppliers, rather than capitalizing on their weaknesses. In small enterprises typical of agriculture and fisheries, operating culture depends on the personal integrity and values of the entrepreneur, who is personally liable and responsible for the enterprise. Due diligence procedures can help anticipate and prevent negative impacts on environment and people, and thus protect the enterprise's image. The SAFA goals on governance structure are relevant insofar as they inspire reflections on values and principles.

G1 CORPORATE ETHICS

Theme Goal

The enterprise has explicit, publicly available sustainability objectives and effective means of implementation and verification, as well as of identification and proactive addressing of major sustainability challenges.

Sub-theme G1.1 Mission Statement

Sub-theme objective

The enterprise has made its commitment to all areas of sustainability clear to the public, to all personnel and other stakeholders through publishing a mission statement or other similar declaration (such as a code of conduct or vision statement) that is binding for management and employees or members.

Description

The Mission Statement is the highest-level governance statement and should proclaim a commitment to sustainability. To be mission driven, the enterprise must prove the mission is evident in enterprise codes and policies and the governance body can demonstrate the influence of the mission in informing and developing policy and practice. It should be noted however that having a mission that includes sustainability principles is not evidence of sustainable practice. Mission statements can also be used to project an image of sustainable practice beyond the actual effort of the enterprise.

Examples of positive conditions and practices that fulfill this objective:

» 100 percent of employees, or members of a group of small-scale producers, are able to explain the enterprise's mission and identify how it influences the work which they do.

» 100 percent of governance body and senior management can identify the influence of the mission sustainability commitments in the key decisions and processes of the enterprise.

Unacceptable conditions in relation to this objective:

» The enterprise or group of producers has no articulated mission.

» The mission of the enterprise or group of producers does not address sustainability.

» The key planning and reporting documents of the enterprise, or undocumented rituals of the group of producers, show no evidence of sustainability principles.

» The governance body and senior management are unable to identify any examples of mission driven decision making.

» Significant decisions of the enterprise and its practices are contrary to mission.

Example or Default Indicators

G 1.1.1 Mission Explicitness

Is the mission of the enterprise articulated in all enterprise reporting and understood by all employees or members?

G 1.1.2 Mission Driven

Is the enterprise's mission evident in codes and policies, and can the governance body demonstrate the impact of its mission on developing policy and practice?

Sub-theme G1.2 Due Diligence

Sub-theme objective

The enterprise is pro-active in considering its external impacts before making decisions that have long-term impacts for any area of sustainability. This is accomplished through the enterprise following appropriate procedures such as risk assessment and others that ensure that stakeholders are informed, engaged and respected.

Description

Due diligence involves the proactive consideration of the external impacts before making decisions that have long-term impacts for any pillar; environmental, economic, social or governance of sustainability. This is accomplished through the enterprise following appropriate procedures such as risk assessment and others that ensure that stakeholders are informed, engaged and respected. Larger enterprises will typically have more due diligence systems. However, smaller enterprises can have systems such as third party audits in production and processing that address external impact and can be used.

Examples of positive conditions and practices that fulfill this objective:

» Accomplishment of all components of appropriate risk assessment, which includes analysis of internal and external risks, as well as external impact on others in all areas of sustainability.

» Has not experienced any major losses or caused major negative impacts as a result of unmitigated risks.

Unacceptable conditions in relation to this objective:

» The enterprise has no evidence of proactive risk management.

» The enterprise has precedents of unsustainable goods and services procurement, or of acceptance of funds from unsustainable enterprises.

» The enterprise has records of regular losses as a result of unmitigated risks.

» The stakeholders of the enterprise (e.g. staff, local community) are regularly exposed to negative impacts as a result of the enterprise's operations.

Example or Default Indicator

G 1.2.1 Due Diligence

Does the enterprise have a clear policy for impact assessment, appropriate tools for assessment and is it able to show that these are being used to inform decisions which will have a long term impact on area of sustainability?

THEME G2 – ACCOUNTABILITY

Definition of Theme

Accountability in SAFA refers to the disclosure of credible information about strategy, goals and performance to those who base their actions and decisions on this information. Sub-themes included are: Holistic Audits; Responsibility; and Transparency.

Relevance of the Theme to sustainability

Shareholders, contractors, consumers, communities and other stakeholders may have to take decisions based on information disclosed by the enterprise. Accountability includes aspects to ensure such information is complete, correct and accessible. The accountability concept is enhanced in SAFA to cover the disclosure of information about financial, environmental and social performance (the dimensions of the "triple bottom line" approach) and, where possible and relevant, its governance performance.

The success of an enterprise can be affected by the stakeholders' view of its credibility, transparency and performance. Perceptions of an enterprise's integrity and responsibility are affected by how performance with respect to the economic, environmental and social dimensions of sustainability is communicated. Consumers too may prefer products of respectable companies, and shareholders and investors increasingly tend to put their money in operations for which the potential risk has been thoroughly assessed (G100, 2003).

The agriculture and food sector is at the nexus of the biosphere and the human economy and can thus be considered a custodian of land, crops, animals and other resources. Its products are directly used or consumed by everybody. This accounts for the strong reaction of the public to actions and developments in this sector that impact people and the environment. Transparency and responsibility are important for credibility in the food and agriculture sector and SAFA addresses the account-giving relationship.

G2 ACCOUNTABILITY

Theme Goal

The enterprise assumes full responsibility for its business behavior and regularly, transparently and publicly reports on its sustainability performance.

Sub-theme G2.1 Holistic Audits

Sub-theme objective

All areas of sustainability in the SAFA dimensions that pertain to the enterprise are monitored internally in an appropriate manner, and wherever possible are reviewed according to recognized sustainability reporting systems.

Description

Genuine sustainability auditing is evidence of sustainability values being integrated into organizational governance and culture. Institutionalized sustainability reporting and auditing tools have been developed and adopted by many larger enterprises, while smaller enterprises and those early in a sustainability journey may find less prescriptive approaches, such as Social Auditing, more accessible as it is able to make efficient use of all of the existing data systems of the organization. The highly customizable approach has proven effective in diverse cultures where evidence can be produced using a wider range of mediums than only paper or electronic record.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has a regular sustainability audit using a recognized tool and evidence that this is reviewed by a governance body and peer reviewed.

» The enterprise is a small-scale operation that has used a systematic approach of its own, or with the assistance of an outside partner, to regularly review their sustainability performance.

Unacceptable conditions in relation to this objective:

» The enterprise has no evidence of sustainability auditing, either formal or informal.

» Sustainability audits are found to be falsified or consistently fail to address known deficiencies.

Example or Default Indicator

G2.1.1 Holistic Audits

Does the enterprise use an internationally recognized framework for sustainability reporting such as the Global Reporting Initiative, or is social auditing being used by the enterprise?

Sub-theme G2.2 Responsibility

Sub-theme Objective

Senior management and/or owners of enterprise regularly and explicitly evaluate the enterprise's performance against its mission or code of conduct.

Description

The enterprise's governance body takes responsibility for the enterprise's performance in each pillar of the SAFA. Where the enterprise's performance is found wanting, the governance body takes responsibility for improving performance and engaging stakeholders in the monitoring of performance improvement plans. Organizations with more sophisticated governance will find this easier to understand and institute than smaller and emerging organizations; however, some small traditional enterprises have a very sound understanding of leadership responsibility which may translate for this objective.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise can clearly show that its governance body takes responsibility for its impact.

» The enterprise has regular reviews of organizational impact and performance against mission and sustainability goals and appropriately engages all relevant stakeholders in the process.

Unacceptable conditions in relation to this objective:

» The enterprise has no evidence of having compared performance to mission.

» The enterprise has consistently excluded the views of relevant stakeholders.

» The enterprise has not taken early responsibility for its impact in any dispute with stakeholders or when in clear breach of the pillars of sustainability.

Example or Default Indicator

G 2.2.1 Responsibility

Can the enterprise show, through governance papers or internal dialogue, that performance against mission is regularly evaluated with appropriate stakeholder input?

Sub-theme G2.3 Transparency

Sub-theme objective

All procedures, policies, decisions or decision-making processes are accessible where appropriate publicly, and made available to stakeholders including personnel and others affected by the enterprise's activities.

Description

In sustainability circles there is a saying "a little sunlight is a great disinfectant". This refers to how much better sustainability systems and initiatives run when organizations operate in a transparent manner. Real transparency involves understanding the information needs of stakeholders and making accurate, timely and relevant information available in an accessible way.

Examples of best performance in fulfilling this objective:

» The enterprise has a clear commitment to transparency. It has explicit and open policies to deal with requests for information.

» It anticipates the information stakeholders need and makes this available in a timely and accurate manner via channels which are appropriate and accessible to its stakeholders.

» It regularly assesses its performance against this objective and invites stakeholders to rate the performance and comment on how this could be improved.

» It can show a consistent history of improvement in its transparency.

Unacceptable conditions in relation to this objective:

» The enterprise regularly and deliberately withholds information from key stakeholders.

» The enterprise provides information that is not fully accurate.

Example or Default Indicator

G 2.3.1 Transparency

Does the enterprise have a policy which requires management to report on how policies, procedures, decisions and decision making processes are made accessible to stakeholders?

THEME G3 – PARTICIPATION

Definition of the Theme

Participation in SAFA refers to the need for outreach to, and ensuring the potential for involvement of, interested parties, in particular those who are materially affected. This includes the ability to actively take part in decision making. Sub-themes included are: Stakeholder Dialogue; Grievance Procedures; and Conflict Resolution.

Relevance of the Theme to Sustainability

In the context of SAFA, participation denotes stakeholder participation in the widest sense. As with the issue of sustainable development, many different stakeholders may be affected by the enterprises decisions and activities. A stakeholder is any group or individual who can affect, or is affected by, the actions of the enterprise (Freeman, 1984). One needs to distinguish powerful stakeholders who "can affect" from stakeholders with little or no influence who "are affected by" decisions. Particularly concerning the second group, a wide interpretation of the term "stakeholder" should be followed, covering local communities, consumers, farmers and fishers, future generations and biotic resources.

Where there is a large imbalance (e.g. of market power) between stakeholders, the weaker side should be empowered in such a way as to effectively participate in the dialogue. If a misuse of power occurs, or stakeholders are harmed by actions of an enterprise, adequate grievance procedures must be in place to ensure that remedy and restoration are provided (see Rule of Law).

The agriculture and food sector is one of the largest sectors in terms of the number of people working in, dependent upon and affected by it. While identifying, informing and empowering stakeholders is crucial, considering the importance of transparency and credibility in food chains (see Accountability), it also constitutes a further challenge. Enterprises in the value chain will have to cooperate with each other to ensure correct and comprehensive stakeholder information and participation. This offers the advantage of enhanced transparency of the chain and of improved, systematic knowledge of the chain(s) of which the enterprise is part. Even in smallholdings, at the level of rural households and among producers, participation is essential to share knowledge and make fair decisions regarding the use of family or community resources (see Equity).

G3 PARTICIPATION

Theme Goal

All stakeholders substantially affected by the enterprise's activities are identified, empowered and invited to share decision making on activities impacting their lives and having major environmental impacts.

Sub-theme G3.1 Stakeholder Dialogue

Sub-theme objective

The enterprise pro-actively identifies stakeholders, which include all those affected by the activities of the enterprise (including any stakeholders unable to claim their rights), and ensures that all are informed, engaged in critical decision making, and that their input is duly considered.

Description

Stakeholder dialogue involves the identification of stakeholders and effective engagement with these stakeholders that is mutually satisfactory and sustained over time. Effective engagement takes into account an understanding of how asymmetries of power can prevent the engagement of vulnerable stakeholders and involves a commitment to identifying barriers to engagement for all stakeholder groups and working with those groups to overcome barriers. It is of greatest value when an organization can incorporate the views of its stakeholders in its decision making. Engagement may take many forms and increasingly might embrace new technologies and social media as well as, more traditional surveys, meetings, interviews and focus groups.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has a clear commitment to stakeholder engagement and participation. It is able to describe how it identifies stakeholders and how spokespersons are identified and endorsed. It is able to list all stakeholders and identify those who are vulnerable or ordinarily unable to claim their rights.

» Has achieved satisfactory engagement with 80 percent of identified stakeholders, including all vulnerable stakeholders and those unable to claim their rights.
» Is able to identify potential barriers to engagement for stakeholders, has developed strategies to overcome these barriers, and has evidence of this being successfully employed in 80 percent of cases. It has process improvement plans developed or in development for the remainder.
» Is able to identify how decisions have been impacted by stakeholder engagement and has evidence (minutes, notes, source documents) of the impact and the enterprise has evidence of how the impact of stakeholder engagement was communicated back to stakeholders.

Unacceptable conditions in relation to this objective:

» The enterprise is unable or unwilling to describe the process used for identifying or engaging with stakeholders or the process of identification and engagement excludes the most vulnerable and those unable to claim their rights.
» The enterprise has identified or engaged with fewer than 30 percent of total stakeholders, or less than 50 percent of most vulnerable stakeholders, unable to claim their rights.
» The enterprise has unexplained failures to identify and act upon more than two barriers.
» The enterprise fails to develop and implement strategies to overcome barriers for more than 50 percent of identified barriers.
» The enterprise has not engaged stakeholders or is unable to demonstrate that its stakeholder engagement has genuinely affected the decisions it has made.
» The enterprise routinely fails to inform stakeholders of the outcome of engagement.

Example or Default Indicators

G 3.1.1 Stakeholder Identification

Can the enterprise identify all material stakeholders and describe the process by which they were identified?

G 3.1.2 Stakeholder Engagement

Does the enterprise use appropriate mechanisms to engage with each group of stakeholders?

■ **G 3.1.3 Engagement Barriers**

Is the enterprise aware of, and does it address barriers to participation of less powerful stakeholders?

■ **G 3.1.4 Effective Participation**

Can the enterprise describe actual stakeholder participation (including "least-powerful" stakeholders), its impact on their decision making and how this impact was communicated to stakeholders?

Sub-theme G3.2 Grievance Procedures

Sub-theme objective

All stakeholders (including as stated above, those who cannot claim their rights, personnel, and any stakeholders in or outside of the enterprise) have access to appropriate grievance procedures, without a risk of negative consequences.

Description

Asymmetries of power can be reduced with the provision of clear, accessible and fair grievance procedures. The procedures need not be identical for all stakeholder groups but should follow the principles of natural justice and be designed to be culturally appropriate and where possible, mirror processes which are familiar to and respected by the stakeholder group. This objective is primarily relevant to large-scale operations; however, it should be considered relevant for any enterprise for which objective G3.1 was deemed relevant.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise is able to identify grievance procedures for all affected stakeholders and these are proactively publicized. These procedures meet the standards of natural justice and are supported by stakeholders.

» Can provide evidence that procedures are being used, data on use and reports of satisfactory resolutions.

Unacceptable conditions in relation to this objective:

» The enterprise has no formal grievance procedures for any stakeholders or has procedures which do not meet the standard of natural justice.

» Stakeholders overwhelmingly reject the processes used and there is widespread distrust of the procedures.

Example or Default Indicator

G 3.2.1 Grievance Procedures

Can the enterprise describe grievance procedures for each stakeholder group, how they are publicized (especially with "least powerful" stakeholders) and their current usage?

Sub-theme G3.3 Conflict Resolution

Sub-theme objective

Conflicts between stakeholder interests and the enterprise's activities are resolved through collaborative dialogue (i.e. arbitrated, mediated, facilitated, conciliated or negotiated), based on respect, mutual understanding and equal power.

Description

All enterprises have real or potential conflicts with their stakeholders. Conflicts can be disputes of interests where the rights of the parties are in conflict and have not been resolved, or disputes of rights where the interests of the parties have been resolved but the interpretation of the rights conferred are in dispute. To achieve compliance with this indicator, organizations will need to show that conflicts between stakeholder interests and the enterprise's activities are resolved through collaborative dialogue (e.g. arbitrated, mediated, facilitated, conciliated or negotiated), based on respect, mutual understanding and equity. Addressing conflicts within and between sectors requires engagement with different stakeholders.

Examples of positive conditions and practices that fulfill this objective:

» All relevant stakeholder groups are identified and no unexplained obvious omissions of significant potential conflicts are present.

» The enterprise has identified examples of *actual* conflicts, with descriptions of how they were resolved, providing evidence of how they were based on collaborative dialogue, and were based on values of respect, mutual understanding and equity. If there are no examples of conflicts of interest in the last 5 years, the enterprise should be able to describe *how* they would resolve a *potential* conflict in this event.

» The enterprise provides actual examples demonstrating collaborative dialogue AND consistent with values of respect, mutual understanding and equity.

Unacceptable conditions in relation to this objective:

» The enterprise identified less than 50 percent of relevant stakeholders, or more than two unexplained obvious omissions of significant conflicts.

» Cannot provide actual examples demonstrating collaborative dialogue OR consistent with values of respect, mutual understanding and equal power.

» Cannot provide hypothetical (and realistic) scenario demonstrating collaborative dialogue or consistent with values of respect, mutual understanding and equal power.

Example or Default Indicator

G 3.3.1 Conflict Resolution

Can the enterprise identify potential conflicts of interest with and among various stakeholder groups, and provide examples of resolution through collaborative dialogue, based on respect, mutual understanding and equal power?

THEME G4 – RULE OF LAW

Definition of the Theme

The United Nations defines the Rule of Law as a principle of governance by which all persons and entities are "accountable to laws that are publicly promulgated, equally enforced and independently adjudicated". In the simplest terms, it is compliance with legislation. In SAFA, the Rule of Law is considered in a business context, its central aim being the protection of the individual and group rights of all (Ehm, 2010). Sub-themes included are: Legitimacy; Remedy, Restoration and Prevention; Civic Responsibility; and Resource Appropriation.

Relevance of the Theme to sustainability

The Rule of Law (ROL) is a concept important to modern legal systems and international agreements. These laws have to be consistent with international human rights standards (UN, 2004). Among the key elements then is accountability before the law, legal certainty and legal transparency.

An enterprise committed to the ROL will only conduct activities that can be considered legitimate in the light of the moral rights of all humans, as expressed in the Universal Declaration of Human Rights (UN, 1948). Businesses must respect and avoid being complicit in human rights violations by the state, even if they are formally legal under applicable national law. Enterprises with a large sphere of influence and impact should not only respect the ROL in their own operations, but require business partners to do the same.

In the context of agriculture, forestry and fisheries, there are several important elements: equitable access to, and legal certainty over natural resources on which production depends; stakeholder participation in decisions affecting natural resource use and access; the presence of complaints and disputes mechanisms to monitor, enforce and ensure access to justice; and the legal empowerment of stakeholders.

Enterprises in food and agriculture operate in a variability of legal frameworks, with different degrees of legal certainty and recognition of a universal ROL. Where states and judiciaries are weak, unclear or illegitimate situations can evolve, for example concerning ownership of and access to land, clean water and other resources. This applies in particular to remote rural regions, where law enforcement tends to be particularly difficult. Major imbalances between market players (see Corporate Ethics) can further contribute to situations where "might makes right".

Enterprises in the food supply chain can be very large and powerful, dwarfing even nation states and yet, operate in highly competitive environments where there exists constant pressure to reduce costs. Some enterprises become involved in changing the regulatory environment within which they operate. In the case of organizations with strong commitment to sustainability values, enterprises may strive to promote or enhance the impact of regulatory or even voluntary codes, such as fair trade and seek to strengthen these. Others are involved in trying to weaken and reduce coverage, or limit sanctions. And others through organized lobby groups have sought to directly gain advantage over other stakeholders through for instance, removing or lowering minimum wage regulations.

G4 RULE OF LAW

Theme Goal

The enterprise is uncompromisingly committed to fairness, legitimacy and protection of the Rule of Law, including the explicit rejection of extortion and corruption and of the use of resources that are under legal dispute, whose use contradicts international agreements, or which are considered illegitimate by affected stakeholders. Moreover, enterprises will proactively work to improve the protections offered to the environment, vulnerable workers and communities by seeking to strengthen applicable laws and codes in concert with affected stakeholders.

Sub-theme G4.1 Legitimacy

Sub-theme objective

The enterprise is compliant with all applicable laws, regulations and standards voluntarily entered into by the enterprise (unless as part of an explicit campaign of non-violent civil disobedience or protest) and international human rights standards (whether legally obligated or not).

Description

Operational legitimacy will firstly be judged by the enterprise's adherence to the rule of law. Legal or regulatory breach is a significant reputational risk for organizations and it is important that the organization's governance body is fully informed and setting clear direction for management.

This does not mean that the enterprise will always necessarily obey the rule of law but that any breach must be considered seriously at a governance level and be assessed against the enterprise's mission and values. Adherence to the rule of law is a minimum standard and to achieve excellence in this objective, the enterprise will be able to prove that it has gone beyond the rule of law by adopting and complying with applicable international voluntary codes consistent with its mission. This supra-legal initiative can be progressively adopted and its development should be included in organizational plans.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise can provide evidence of a governance-endorsed risk management strategy in operation to ensure legal and regulatory compliance, including of any standards voluntarily entered into, and international human rights standards.

» All laws, regulations and voluntarily entered codes, are included in this evidence.

» The governance body reviews this and any codes not yet adopted which may be applicable against mission.

» The results of the review form part of a regular monitoring report to stakeholders.

Unacceptable conditions in relation to this objective:

» The enterprise is known to be in breach of laws, regulations and adopted codes but this has not been the subject of governance scrutiny.

» The enterprise has no evidence of a governance endorsed risk management strategy in operation, or the strategy is seriously inadequate.

Example or Default Indicator

■ **G 4.1.1 Legitimacy**

Does the enterprise's policy, or producers' code of practices, explicitly require that all applicable laws and regulations, voluntary standards, adopted or existing, be reported to the governance body, members or employees, and regularly reviewed for compliance and congruence with mission?

Sub-theme G4.2 Remedy, Restoration and Prevention

Sub-theme objective

In case of any legal infringements or any other identified breach of legal, regulatory, international human rights, or voluntary standard, the enterprise immediately puts in place an effective remedy and adequate actions for restoration and further prevention are taken.

Description

Operational legitimacy will firstly be judged by the enterprises' adherence to the rule of law and its ability to promptly remedy any breach, restore or compensate the effects of any breach and put in place mechanisms to prevent any future breach. The same regime applies to less sanctioned rules, such as local or national regulations and voluntary codes to which the organization may subscribe or support and should be applied to international human rights standards. While it is ideal for any remedy to be applied immediately, this is not always practicable where significant investigation is required.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise can provide evidence of the prompt remedy, restoration or compensation and action to prevent further breach.

» A review with any affected stakeholder confirms the adequacy of restoration or compensation arising from any breach.

Unacceptable conditions in relation to this objective:

» The enterprise is known to be in breach of laws, regulations and adopted codes and has no evidence that these have been satisfactorily remedied.

» The enterprise has failed to restore or compensate a significant breach.

Example or Default Indicator

G 4.2.1 Remedy, Restoration and Prevention

Can the enterprise show evidence of a prompt and responsible response to legal, regulatory, international human rights and voluntary code breaches, including detailed response on how the breach was remedied, how the effects of the breach will be restored or compensated, and the policies and processes instituted to prevent further breaches?

Sub-theme G4.3 Civic Responsibility

Sub-theme objective

Within its sphere of influence, the enterprise supports the improvement of the legal and regulatory framework on all dimensions of sustainability and does not seek to avoid the impact of human rights, or sustainability standards, or regulation through the corporate veil, relocation, or any other means.

Description

Enterprises in the food supply chain include very powerful global and national businesses. To achieve excellence in this sub-theme, enterprises will need to show that they proactively use that power responsibly and on behalf of the least powerful stakeholders and those who cannot claim their rights. A sustainable food supply chain will be achieved when all parts of the supply chain are free from exploitation of individuals, communities and the environment across all four dimensions of sustainability. Enterprises involved directly or indirectly engaged in activities which seek to reduce the rights of less powerful stakeholders and those who cannot claim

their rights will not meet this objective. This could be burdensome for very small enterprises who are members of large peak bodies but have little practical ability to influence these.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has clear records or register of all groups of which it is a member or supports which are involved in activities which seek to influence laws, regulations, international human rights codes or voluntary codes.

» Examination of the records shows no activities directly or indirectly by the enterprise to reduce the coverage or impact of these laws, regulations, international human rights codes and voluntary codes.

» Where evidence is found of lobbying, the affected stakeholders have been consulted and support the activities.

Unacceptable conditions in relation to this objective:

» The enterprise is found to support organizations who have been lobbying to influence laws, regulations, human rights codes and voluntary codes against the interests of the least powerful and those stakeholders who cannot claim their rights.

» The enterprise governance body has not been informed or directed the lobbying efforts of the enterprise or its agents.

» Lobbying is not conducted in an open and transparent manner and attempts are made by the enterprise to disguise its lobbying activities.

Example or Default Indicator

G 4.3.1 Civic Responsibility

Within its sphere of influence, does the enterprise proactively and transparently support the improvement of the legal and regulatory framework on all four dimensions of sustainability, and does it not seek to avoid the impact of human rights or sustainability standards or regulation through the corporate veil, relocation, or any other means?

Sub-theme G4.4 Resource Appropriation

Sub-theme objective

Enterprises do not reduce the existing rights of communities to land, water and resources, and operations are carried after informing affected communities by providing information, independent advice and building capacity to self-organize for the purposes of representation.

Description

This objective would be typically achieved by ensuring that the principles of Free Prior and Informed Consent (FPIC) are addressed, as well as of those of the Voluntary Guidelines on the Responsible Governance of Tenure. FPIC principles have been developed through extensive consultation to protect communities from unscrupulous resource exploitation and misappropriation. They also provide guidance for enterprises on how to work fairly with communities and some degree of protection to the organizations reputation. Critical to the effective operation of PFIC is the ability for an affected community to be informed. This includes the provision of information; independent advice and the capacity to self- organize for the purposes of representation. For tenure rights, there is need to define and regulate how people, communities and others gain access to natural resources, whether through formal law or informal arrangements. The rules of tenure determine who can use which resources, for how long, and under what conditions. They may be based on written policies and laws, as well as on unwritten customs and practices. The responsible governance of tenure ensures access to land, fisheries and forests are equitably shared. It protects economically and socially marginalized people from alienation from the resources they need to live. Weak governance of tenure is also associated with the over exploitation of natural resources and consequential environmental degradation.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise can demonstrate awareness of stakeholder's pre-existing access to land, water, biodiversity and natural resources, by community asset mapping or other equivalent process.

» Has evidence of satisfying the standard and its stakeholders in respect of the principles of FPIC.
» Has evidence that it recognizes any asymmetries of power between itself and affected communities and that it has worked to ensure communities are well represented in any negotiations.
» Has a record of all transactions related to tenure and access rights and can show clearly all the principles of the Voluntary Guidelines on the Responsible Governance of Tenure are met. Where there has been any breach or alleged breach of tender rights, the enterprise can prove that it has fully and promptly co-operated with any inquiry and remedy process to the satisfaction of affected parties.

Unacceptable conditions in relation to this objective:

» That not all components of FPIC are addressed for all affected stakeholders, or there is any evidence of deceit or deception in the process.
» The enterprise has no records of any due diligence over tenure rights and/or has repeatedly been involved in disputes over a breach of tenure rights. It has failed to remedy tenure and access rights breaches with its stakeholders.

Example or Default Indicators

G 4.4.1 Free, Prior and Informed Consent

Is the enterprise aware of stakeholders' pre-existing access to land, water and resources, has it mapped this to the satisfaction of all affected stakeholders and agreed to take no action to reduce this access until it has fully informed stakeholders, negotiated on equal terms and provided for mutually agreeable compensation, sufficient to allow sustainable livelihoods?

G 4.4.2 Tenure Rights

Is the enterprise aware of stakeholders' pre-existing tenure and access to land, water and resources, and can the enterprise prove that it has fully and promptly co-operated with any inquiry and remedy process to the satisfaction of affected parties in case of any (alleged) breach of tender rights?

THEME G5 – HOLISTIC MANAGEMENT

Definition of Theme

Holistic Management in SAFA is management that aims at the continuous improvement of environmental integrity, economic resilience, social well-being and good governance, with the ultimate goal of operations being fully in line with a sustainable development of society. Sub-themes included are: Sustainability Management Plan; and Full-Cost Accounting.

Relevance of the Theme to sustainability

The topic of holistic management is a relatively new one and thus, not treated in detail by international agreements or recommendations. Some international sustainability reporting standards are aligned or have equivalencies with international norms and reference documents, for example the Global Reporting Initiative.

In business, a successful management of sustainability performance is achieved if the management of environmental, social and governance issues is in line with increased competitiveness and economic performance. The triple bottom line or the triangle of "people, planet and profit" is frequently used to illustrate this. One particular challenge to sustainability management is finding appropriate ways of dealing with trade-offs between sustainability goals. Holistic management is about striking a balance between short- and long-term interests, economic, social and environmental concerns, stakeholders and shareholders. An appropriate code of conduct (see Governance Structure) provides guidance on how to deal with trade-offs.

Enterprises operating in the food and agriculture sector can have effects external to their business on the environment (e.g. air pollution), social (e.g. training of young people) and economic (e.g. added tax basis with local service providers). In historical accounting, these external effects are neither accounted for, nor considered in economic decisions. So enterprises are neither rewarded for positive impacts, nor have to pay for negative impacts. More recently, it is recognized that the consideration of such external effects in decision making and accounting is a cornerstone of sustainable development. Full-cost accounting is an integral part of holistic management that is particularly important in the agricultural, forestry and fisheries sector, where production intensively interacts with the natural environment. However, there still is a lack of adequate methods for putting in practice the full-cost accounting concept.

G5 HOLISTIC MANAGEMENT

Theme Goal

Production and procurement are managed, and accounting is done, with equal consideration of all dimensions of sustainability and of the trade-offs and synergies linking them.

Sub-theme G5.1 Sustainability Management Plan

Sub-theme objective

A sustainability plan for the enterprise is developed which provides a holistic view of sustainability and considers synergies and trade-offs between dimensions, including each of the environmental, economic, social and governance dimensions.

Description

Sustainability plans are a relatively recent phenomenon, used by organizations to provide good governance guidance for its sustainability efforts and to assist in incorporating the values and aspirations for sustainability to be formally included in business planning. The business planning cycle enables governance bodies to hold management accountable for implementing the direction and targets set for the organization. Sustainability planning is rapidly becoming the norm in Western business; one report shows an increase in American businesses having or developing such plans from 38 percent in 2011 to 64 percent in 2013. However, there is a need to ensure these plans are holistic and cover each of the four pillars of sustainability. In forestry, the preparation of a comprehensive forest management plan is a fundamental requirement for sustainable forest management.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has a formal sustainability plan endorsed by the governance body.

» The enterprise is able to provide evidence of the plan, or values in it, being used to improve the sustainability of the enterprise operations, as a result of better decision making and the plan covers each of the pillars of sustainability.

Unacceptable conditions in relation to this objective:

» The enterprise has no sustainability plan.

» The enterprise cannot articulate the values and aspirations that a plan might address.

» The plan does not address each of the sustainability pillars.

» The plan is not implemented.

Example or Default Indicator

G 5.1.1 Sustainability Management Plan

Does the enterprise have a sustainability plan, endorsed by its governing body (or producers' association members or contractors), which provides a holistic view of the enterprise's sustainability and covers each of the environmental, economic, social and governance dimensions, including references to mission and demonstration of progress against the plan, or how the plan has driven specific decisions and their outcomes?

Sub-theme G5.2 Full-Cost Accounting

Sub-theme objective

The business success of the enterprise is measured and reported taking into account direct and indirect impacts on the economy, society and physical environment (e.g. triple bottom line reporting), and the accounting process makes transparent both direct and indirect subsidies received, as well as direct and indirect costs externalized.

Description

Traditional accounting systems deal predominately in actual $ costs in the current year. Matters outside of this, particularly where the $ cost is difficult to determine, or has not been valued, are treated as externalities (matters outside the business equation). As consumers, stockholders and other stakeholders become more aware and concerned about the potential environmental and social impacts of business, they are demanding better information about performance in these areas. This movement began as "triple bottom line" reporting, demanding that an enterprise's

performance be assessed in economic, social and environmental terms. Social auditing and environmental accounting have also contributed to an emerging field of work which seeks to improve the accuracy and use of Full-Cost Accounting (FCA). It is thought these initiatives will enable enterprises to make better decisions because they more fully understand the full impact of these decisions. The FCA process makes transparent both direct and indirect subsidies received, as well as direct and indirect costs externalized. There is not yet an international consensus on an all encompassing standard for FCA. However, very sound work is emerging with comparable tools for some aspects of the accounts, such as measuring an organization's carbon footprint.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has evidence that it collects, analyzes and reports to its stakeholders on its economic, social and environmental impacts and performance.

» The enterprise shows it understands the emerging discipline of FCA and is actively involved in improving the scope and validity of its FCA reporting.

Unacceptable conditions in relation to this objective:

» The enterprise does not account for its impact and performance using any FCA regime.

» The enterprise has significant costs on the environment and community which are externalized from its accounting systems.

» The enterprise has FCA reports which are not validated.

Example or Default Indicator

G 5.2.1 Full-Cost Accounting

Is the business success of the enterprise measured and reported to stakeholders taking into account direct and indirect impacts on the economy, society and physical environment?

ENVIRONMENTAL INTEGRITY

As human activities are passing tipping points, or crossing planetary boundaries (Rockstrom *et al*, 2009), protecting the integrity of the Earth's system is a precondition of any development. Environmental integrity consists of maintaining life support systems essential for human survival by minimizing negative environmental impacts and fostering positive impacts. In a SAFA, the following themes of environmental sustainability are addressed: Atmosphere, Water, Land, Materials and Energy, Biodiversity and Animal Welfare.

ENVIRONMENTAL INTEGRITY			
ATMOSPHERE	Greenhouse Gases	Air Quality	
WATER	Water Withdrawal	Water Quality	
LAND	Soil Quality	Land Degradation	
BIODIVERSITY	Ecosystem Diversity	Species Diversity	Genetic Diversity
MATERIALS AND ENERGY	Material Use	Energy Use	Waste Reduction & Disposal
ANIMAL WELFARE	AnimalHealth	Freedom from Stress	

The state of the world's ecosystems, assessed in 2005 under the Millennium Ecosystem Assessment, concluded that human actions are fundamentally and to a significant extent irreversibly changing the diversity of life on Earth and the integrity of the environment. Critical ecosystem services on which development depends, including air and water purification, soil formation, disease control, pollination and reduced vulnerability to natural disasters such as floods, droughts and landslides are compromised. The poor are overwhelmingly located in rural areas and natural resources are their most important asset. Human activity including land conversion for agriculture leading to habitat loss,

fragmentation and degradation, overexploitation of species due to hunting, fishing and trade are considered the main drivers of the pressures on environmental integrity.

The Convention on Biological Diversity considers that a general application of an ecosystem approach will help achieve a balance of three objectives, namely conservation, sustainable use and the fair and equitable sharing of benefits arising out of the utilisation of genetic resources. The need for an ecosystem approach applies to the whole food and agriculture sector, including livestock, fisheries, aquaculture and forestry. SAFA environmental themes and sub-themes reflect the main areas of concern regarding adverse human impacts and unsustainable exploitation, and give a comprehensive picture of environmental sustainability through a life-cycle approach.

THEME E1 – ATMOSPHERE

Definition of Theme

Atmosphere in SAFA refers to the integrity and preservation of clean air. Priority atmospheric issues include climate change, stratospheric ozone depletion, acidification and eutrophication, urban air quality and tropospheric ozone. Agricultural activities and the food sector are strongly affected by climate change, and at the same time they are major contributors to it. These sectors also release air pollutants such as particulate matter, sulphur dioxide, nitrous oxides, volatile organic compounds and ground-level ozone. Sub-themes included are: Greenhouse Gases; and Air Quality.

Relevance of the Theme to sustainability

Priority atmospheric issues include climate change, ozone depletion, acidification and eutrophication, urban air quality and tropospheric ozone. Their impact relates to human health, biodiversity, health of ecosystems, economic damage and global security.

The resulting decrease of the protective ozone layer causes increased ultraviolet radiation at the earth surface that can damage human health. Terrestrial and marine ecosystems are negatively affected e.g. through reduced photosynthesis.

Global warming refers to the rising of average surface temperature, expected as a result of greenhouse gas (GHG) emissions into the atmosphere from human activity. Many of the effects are long-term, global in nature and irreversible, with consequences for future generations.

Agriculture, forestry and fisheries are strongly affected by global warming, as changes in temperature and rainfall patterns, dramatic weather events and new pests and diseases can impair productive activities. Global warming is already affecting the species composition and other important attributes of the world's forests. Those most vulnerable, rural small-scale producers and small-scale fishers and farmers, women and the poor are predicted to be the most affected, particularly in poor developing regions where people are already vulnerable to food insecurity.

Agriculture, forestry and fisheries activities and the food sector also are major contributors to atmospheric changes from livestock, fertilizers and energy use. Some 20 to 30 percent of global GHG emissions can be associated with food, while crop and livestock production alone account for 10 to 15 percent of global GHG emissions (Bellarby, 2008; EC, 2010). Indirect but significant emissions drivers are the agriculture-driven land

use changes. Emissions from deforestation and forest degradation account for up to 20 percent of global GHG emissions. Aquaculture contributes about 0.96 percent of total CO_2 emissions and between 6.3 and 7.5 percent of agricultural emissions, based on IPCC estimates (Hall *et al.,* 2011); main emissions come from feed production and therefore, different feed formulations, levels of intensification and food conversion ratios are important variables. Fisheries' key emissions come from fuel use for fishing operations and energy demand depends on the type of fishing gear. However, fisheries overall contribution to climate change is minimal (Troadec, 2000) and there is limited fishery-specific information on emissions. In 2000, global marine landings of 80 million tones burned approximately 50 billion liters of fossil fuels, or 1.2 percent of global oil consumption. This represents 1.7 tons of CO_2 emissions per tonne of fish landed (Tyedmers *et al,* 2005).

The environmental impacts of transportation systems have a wide reach, from global warming to local smog and noise. For some organizations, particularly those with extensive supply and distribution networks, environmental impacts associated with logistics may represent a major part of their environmental footprint. The most GHG intensive stages of the fruit and vegetable supply chain are transport network and refrigeration. With the global increase in trade, transportation, particularly refrigerated (land, rail, sea and air) and its associated players, are viewed as major contributors to GHG emissions.

E1 ATMOSPHERE

Theme Goal

The enterprise's actions contain greenhouse gases to the extent possible and do not release quantities of ozone-depleting substances and air pollutants that would be detrimental to the health of ecosystems, plants, animals or humans.

Sub-theme E1.1 Greenhouse Gases

Sub-theme objective

The emission of GHG is contained.

Description

This objective aims to ensure that an enterprise's GHG emissions are contained. Whether an enterprise is complying with this objective can be established by calculating the GHG balance and if difficult to assess, by estimating the impact of practices on GHG emissions and sequestration. GHG balance is the difference between the direct (and indirect) GHG emissions and the on-site sequestration by the enterprise. Direct GHG emissions are emissions from sources that are owned or controlled by the enterprise. On-site sequestration refers to practices such as afforestation and enrichment of soils with soil carbon on the sites of the enterprise. GHG mitigation practices refer to all practices that can potentially mitigate emissions, such as improved livestock and manure management, improved cropland management, restoration of degraded lands, water and rice management, improved fuel efficiency in fishing boats, and reduced deforestation and forest degradation. Resource-efficient practices that reduce the need for fossil-based fuels and for nitrogen fertilizers, or that reduce the methane emissions of ruminants, or the implementation of more efficient refrigeration technologies or technical and operational technologies to reduce freight emissions, can help reduce GHG as well.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise's GHG balance is negative, that is, sequestration on-site is more than total emissions.

» Adopted best practices in GHG emissions that: increase efficiencies of fossil-fuel based inputs; add components of land use change that achieve neutrality in GHG emissions; and sequester on-site to achieve a negative net emissions.

» A written plan, available to all stakeholders, with GHG emission targets and steps, that has been already implemented towards achieving that objective.

Unacceptable conditions and practices in relation to this objective:

» The enterprise's emissions are positive and are showing an increasing trend (i.e. emissions are greater than sequestration and emissions have increased during the last year/last assessed time).

» The enterprise uses any of the following practices: drainage of organic soils for cultivation; creation of open-air lagoons from slurry; application of high rates of

nitrogen fertilizer; overgrazing or high stocking rates; land-use changes that reduce ecosystem soil C stocks (e.g. deforestation, ploughing up long-term grasslands); use of large-scale annual monocultures; slash-and-burn or burning of residues.

Example or Default Indicators

■ **E 1.1.1 GHG Reduction Target**

Has the enterprise set a target in reducing GHG emissions?

▲ **Type:** Target

■ **E 1.1.2 GHG Mitigation Practices**

Which activities and practices has the enterprise implemented that have effectively reduced GHG emissions?

▲▲ **Type:** Practice

■ **E 1.1.3 GHG Balance**

What is the net direct GHG emission (i.e. annual emissions minus sequestration) of the enterprise?

▲▲ **Type:** Performance

Sub-theme E1.2 Air Quality

Sub-theme objective

The emission of air pollutants is prevented and ozone depleting substances are eliminated.

Description

Air pollution derives from different sources, such as: biological air pollution (pollen, small insects, bacteria, fungi, yeasts and algae); physical air pollution (sound, smell, thermal pollution and radioactive radiation); and chemical air pollution (ground-level and stratospheric ozone, aerosols and ammonia). Air quality is measured by measuring ambient concentration of air pollutants, such as particulate matter (PM2.5), ozone (O_3), sulphur dioxide (SO_2), nitrous oxides (NO_x), volatile organic compounds (VOC), smoke and odors. Air pollutants are influenced by many factors, such as local emission sources and weather conditions,

in particular the direction and speed of wind. Thus, an operation may not emit any air pollutants and yet find itself in an area with high pollution due to wind conditions and location (e.g. next to highways). Hence, the attribution of air pollution to an enterprise can be challenging.

Examples of positive conditions and practices that fulfill this objective:

» The ambient concentrations of any relevant air pollutants that occur in the surroundings of the enterprise during the analyzed time-frame do not exceed regulatory ambient levels.

» Adopted air pollution prevention practices, such as: dense soil coverage, proper storage and application of manure, slurry and plant protection products; the installation of effective filters in stables and factories; the installation of spray towers and scrubbers; the use of clean fuels and of catalytic converters in engines of vehicles and boats, etc.

» A written plan, available to all stakeholders, with binding air pollution reduction and prevention targets and steps has been implemented towards achieving the targets.

Unacceptable conditions and practices in relation to this objective:

» Legal threshold values for ambient air pollutant concentrations are repeatedly exceeded in or next to the enterprise's operations, with the air pollution being attributable to the enterprise.

» The enterprise uses any of the following practices : uncontrolled or poorly managed waste incineration; burning of crop residues; has uncovered storage of manure and slurry application without pressure control (e.g. splash plate); substances controlled under the Montreal Protocol whose use should already have been phased out in this country (e.g. Use of chlorofluorocarbon and/or other ozone-depleting refrigerants); has a complete lack of filter equipment in facilities that produce pollutant emissions; uses methyl bromide in storage facilities or for soil fumigation; has open, uncontrolled incineration of wastes that can cause problematic emissions (such as certain polymers, dyes etc.); has evidence of road, railway and water product transportation uncontrolled for air pollution (black smoke, odor and noise).

Example or Default Indicators

■ **E 1.2.1 Air Pollution Reduction Target**

Has the enterprise set a target in reducing the emission of air pollutants?

▲ **Type:** Target

■ **E 1.2.2 Air Pollution Prevention Practices**

Which activities and practices has the enterprise implemented that have effectively reduced air pollutants?

▲▲ **Type:** Practice

■ **E 1.2.3 Ambient Concentration of Air Pollutants**

What is the percentage of days of the year when standard air pollution values have been exceeded in the surroundings of the enterprise?

▲▲ **Type:** Performance

THEME E2 – WATER

Definition of Theme

Water in SAFA covers both freshwater and saltwater. Fresh water is naturally occurring water on the Earth's surface in ice sheets, ice caps, glaciers, bogs, ponds, lakes, rivers and streams, and underground as groundwater in aquifers and underground streams. Saltwater from oceans and seas constitutes 97 percent of the Earth's water. Sub-themes included are: Water Withdrawal; and Water Quality.

Relevance of the Theme to sustainability

Approximately 50 countries are currently facing moderate or severe water stress and the number of people suffering from year-round or seasonal water shortages is expected to increase as a result of climate change. One of the main limiting factors of food production to feed growing populations is water. Agriculture is the single largest user of freshwater on a global basis using a global average of 70 percent of all surface water supplies. Water consumption is growing at twice the speed of population growth. Water security is one of the biggest issues driving management decisions (Little, 2008). The most important factor in producing high quality fresh water is the presence or absence of a functioning forest ecosystem within a watershed. Global issues of health, poverty, deforestation, desertification and land use change are all directly associated with water resources and their management.

Freshwater quality is as important as sufficient water quantities. The increase of urbanized areas and the compaction of arable soils by heavy machinery reduce soil infiltration capacity, resulting in surface runoff, soil erosion and floods. About 20 percent of the world's irrigated land is salt-affected, and salt water intrusion is of particular concern to arid and semi-arid regions and small island states. Inappropriate agricultural water practices can pollute waterways or cause secondary soil salinization and particularly, is affecting areas already facing land and water scarcity (FAO, 2011). At least 70 percent of the pesticide pollution in surface waters is estimated to originate from agriculture.

As demand for water by all users grows, groundwater is being depleted, other water ecosystems are becoming polluted and degraded, and developing new sources of water is getting more costly. Water quality and availability are hitting the world's poorest the hardest. Water plays a pivotal role for sustainable development, including poverty reduction. The use and abuse of, as well as competition for increasingly precious water resources, have

intensified dramatically over the past decades, reaching a point where water shortages, water quality degradation and aquatic ecosystem destruction are seriously affecting prospects for economic and social development, political stability, as well as ecosystem integrity.

The quality of the water in oceans and seas is increasingly threatened by pollution from anthropogenic sources, and with it the fisheries and ecosystem services they support. Coastal areas are particularly vulnerable to pollution downloads related to urbanization and upstream economic activities, including food production.

E2 WATER

Theme Goal

Freshwater withdrawal and use do not hinder the functioning of natural water cycles, activities do not contribute to water pollution that would impair the health of humans, plants and animal communities.

Sub-theme E2.1 Water Withdrawal

Sub-theme objective

Withdrawal of ground and surface water and/or use does not impair the functioning of natural water cycles and ecosystems and human, plant and animal communities.

Description

This objective aims to ensure that an enterprise does not contribute to water supply problems of ecosystems or human water users at any of the sites where it operates. The share of the withdrawals of ground and surface water aims to put the freshwater withdrawals of the enterprise in relation with the regionally available freshwater resources (i.e. annual rainfall, annual groundwater recharge, water carried into the region by allochthonous rivers) over the same period of time. Water conservation practices refer to any beneficial reduction of water loss, use or waste in agriculture and fisheries-based food chains. The reliable assessment of water availability in a certain region can be challenging where no reliable public sources exist, such as

the assignment of water quantities to users in the watershed. It also needs to be linked to the context of the region and other land uses and the cumulative effects.

Examples of positive conditions and practices that fulfill this objective:

» Does not contribute to water supply problems of ecosystems or human water users at any of the sites where it operates.

» Has adopted water conservation practices, such as maximizing the efficiency of irrigation systems, rainwater harvesting, cultivation of water-efficient crops, re-circulating aquaculture systems, use of less water-demanding processing technologies, etc.

» Has a written plan, available to all stakeholders, with water conservation targets and steps have been implemented towards achieving these targets.

Unacceptable conditions and practices in relation to this objective:

» The enterprise overuses water resources, thus putting the existence of human water users and ecosystems at risk.

» The enterprise has: inefficient or not regularly maintained irrigation systems; monoculture cultivation of water-demanding crops/trees in water-scarce areas; inefficient use of water for processing purposes.

Example or Default Indicators

E 2.1.1 Water Conservation Target

Has the enterprise set a target for reducing water consumption or water withdrawals?

▲ **Type:** Target

E 2.1.2 Water Conservation Practices

Which activities and practices has the enterprise implemented that have effectively increased the efficiency, or reduced the amount of, freshwater used in the operation?

▲▲ **Type:** Practice

E 2.1.3 Ground and Surface Water Withdrawals

What is the share of annual withdrawals of ground and surface water as a percentage of total renewable water?

▲▲▲ **Type:** Performance

Sub-theme E2.2 Water Quality

Sub-theme objective

The release of water pollutants is prevented and water quality is restored.

Description

This objective aims to ensure that enterprises address water quality issues and risks associated with water pollution. Substances discharged into water bodies without adequate treatment compromise the health of humans, animals and ecosystems. Most water pollution comes from non-point sources (e.g. through sedimentation), whereas point source water pollution occurs where wastewater is discharged. Many practices can prevent and/or reduce water pollution, for example management practices that control the volume and flow rate of runoff water, soil conservation practices, the proper storage and application of manure, slurry and silage, and appropriate facility wastewater and runoff management. The levels of water pollutants are influenced by many factors, such as local emissions sources and weather conditions. An operation may not even emit any water pollutants, yet finds itself in an area with high pollution because of its location. Small-scale enterprises are probably less able to test for the concentrations of water pollutants and may rely on either monitoring conducted by public agencies, or rely on practice or target indicators to establish compliance with this objective.

Examples of positive conditions and practices that fulfill this objective:

» No critical water quality thresholds are exceeded in water bodies affected by the enterprise operations.

» All wastewater discharged and reused by the enterprise is of a quality that will not cause harm to the health of humans, plants, animals and ecosystems.

» Practices for the effective prevention of water pollution are implemented.

» The enterprise has a written plan, available to all stakeholders, with clean water targets or reduction of water pollution.

Unacceptable conditions and practices in relation to this objective:

» Has repeated releases of water pollutants that result in critical water quality thresholds been exceeded.

» Has wastewater with pollutant concentrations that are dangerous to the health of humans, plants, animals and ecosystems, and/or that exceed applicable legal thresholds (or, in the absence of such thresholds, WHO recommendations) being discharged repeatedly and in quantities that exceed the diluting capacity of the concerned surface waters.

» Has applied pesticides that are not allowed by law.

» Has an absence of any buffer zones to protect surface water and violates water protection areas.

Example or Default Indicators

■ **E 2.2.1 Clean Water Target**

Has the enterprise set a target for improving the quality of the water affected by the operations?

▲ **Type:** Target

■ **E 2.2.2 Water Pollution Prevention Practices**

Which activities and practices have been implemented that have effectively reduced or prevented the release of water pollutants?

▲▲ **Type:** Practice

■ **E 2.2.3 Concentration of Water Pollutants**

What is the percentage of days of the year when standard water pollution values have been exceeded in water (groundwater, surface water, coastal and marine water) as a result of the enterprise's operations?

▲▲▲ **Type:** Performance

■ **E.2.2.4 Wastewater Quality**

What is the share of wastewater with a good water quality (concentrations of faecal coliforms, heavy metals, BOD and COD below critical levels) as a percentage of the total wastewater from the enterprise`s operation?

▲▲▲ **Type:** Performance

THEME E3 - LAND

Definition of Theme

The part of the Earth not covered by water is land and for the purposes of SAFA is essentially the soil resources. Sub-themes included are: Soil Quality; and Land Degradation.

Relevance of the Theme to sustainability

Humans use soils to grow food and fodder crops, renewable raw materials and energy. Soils provide ecosystem services including water purification, nutrient cycling, carbon storage and buffer, filter and habitat functions. Yet, land and soil are finite resources.

Soil conservation is a set of management strategies for prevention of soil being eroded from the Earth's surface or becoming unhealthy from overuse, over irrigation, acidification, or other chemical soil contamination. Agriculture and forestry play a pivotal role in sustainable land use, occupying two thirds of terrestrial surface. Natural fertile soils can hardly be increased, but can easily be destroyed (World Soil Charter, 1981). Given the limited availability of original fertile soils, more than 80 percent of the required growth of agricultural production until 2050 will have to come from yield enhancement on currently cultivated soils (FAO, 2011). Due to expanding human requirements, fertile land, suitable for primary production of biomass, is a scarce resource. The magnitude of land cover change threatens the stability and resilience of ecosystems, including through its impacts on global warming.

Soil cover is important to prevent erosion, loss of nutrients (reduces productivity), efficient use of water, soil and chemical run off resulting in reduced water quality and desertification. Soil carbon, related to its organic content, is widely accepted as a major factor in its overall health. There exists also the potential of soil as a carbon sink or offset for climate change. Soils are highly complex ecosystems and the single most important production factors for human nutrition. Maintaining and rehabilitating soil health is an absolute imperative. Approximately 40 percent of agriculture lands are considered degraded due to poor practices including unsuitable land allocation, inappropriate farming and grazing practices and lack or misuse of appropriate technologies. The most important processes (in terms of area) are water erosion, wind erosion, salinization, compaction and chemical pollution (Oldeman et al., 1991; MEA, 2005). Desertification was identified as one of the greatest challenges to sustainable development during the Earth Summit in 1992.

E3 LAND

Theme Goal

No land is lost due to surface sealing or mismanagement of arable lands and pastures, and soil fertility is preserved and enhanced.

Sub-theme E3.1 Soil Quality

Sub-theme objective

Soil characteristics provide the best conditions for plant growth and soil health, while chemical and biological soil contamination is prevented.

Description

This objective covers the protection and enhancement of soil physical, chemical and biological properties used by an enterprise. Monitoring and managing soil physical structure such as the soil texture, porosity and structure reveal the grade of nutrient- and water-holding capacity of the soil which are important aspects for its health and productivity. Monitoring and managing soil chemical quality determines a soil capacity to deliver various functions that are essential for vegetation growth, nutrient cycling and other ecosystem functions. Monitoring and managing soil biological quality include the macro and microorganisms present in soils; soil organisms provide a multitude of benefits for soils and ecosystems, including breakdown of organic matter leading to nutrient and carbon release, improving soil structure and water holding capacity, providing a sink for GHG emissions and regulating pests among others. Monitoring and managing soil organic matter content is considered to be an indicator for soil quality and productivity influencing physical, chemical and biological properties of the soils. In particular, it contributes to soil aggregate stability, improving soil structure and hence, soil aeration and infiltration, leading to a higher water-holding capacity in the soil. Content and quality of soil organic matter also affect the nutrient cycling and gas (including carbon dioxide) exchange in soils, and are thus related with soil life, soil fertility and the functioning of ecosystems.

Examples of positive conditions and practices that fulfill this objective:

» Soil physical structure is in excellent condition on all land used by the enterprise, with no signs of soil compaction of structural degradation.

» Soil chemical quality is in excellent condition on all land used by the enterprise, with no signs of chemical soil degradation.

» Soil biological quality is in excellent condition on all land used by the enterprise, with no signs of biological soil degradation, i.e. a reduction of soil life.

» Soil organic matter content and quality are in excellent condition on all land used by the enterprise, with no signs of quantitative or qualitative losses.

» Adopting soil improvement practices to improve the physical, chemical and biological properties of the soils used by an enterprise and tackling all problematic aspects for soil quality by effective measures on all areas concerned.

Unacceptable conditions and practices in relation to this objective:

» On a substantial share of land (e.g. 10 percent of the total area), soil physical structure, chemical or biological quality has been damaged to an extent that allows no more growth of productive vegetation or soil functioning (specialist plant species with low biomass not included), especially if this can be attributed to the enterprise management activity.

» On a substantial share of land (e.g. 10 percent of the total area), soil organic matter content is massively and rapidly reduced, for example by draining peat land or plowing up of grassland.

» Measures for enhancing or conserving soil quality (where it is already very high) have been implemented on less than 20 percent of the used area.

Example or Default Indicators

E 3.1.1 Soil-Improvement Practices

What activities and practices have been implemented that have effectively increased the quality and fertility of soils?

Type: Practice

■ **E 3.1.2 Soil Physical Structure**

On what share of the utilized land are the conditions of soil physical structure good in consideration of the local climate and bedrock?

Type: Performance

■ **E 3.1.3 Soil Chemical Quality**

On what share of the utilized land is the chemical quality (e.g. synthetic compounds, pesticides) of soil high in consideration of the local climate and bedrock?

Type: Performance

■ **E 3.1.4 Soil Biological Quality**

On what share of the utilized land is the biological quality of soil high in consideration of the local climate and bedrock?

Type: Performance

■ **E 3.1.5 Soil Organic Matter**

On what share of the utilized land are content and quality of soil organic matter high in consideration of the local climate and bedrock?

Type: Performance

Sub-theme E3.2 Land Degradation

Sub-theme objective

No land is lost through soil degradation and desertification and degraded land is rehabilitated.

Description

This objective addresses the serious issue of land degradation. Implementation of land conservation and rehabilitation practices aim at preventing the loss of productive soils and at rehabilitating degraded soils.

Examples of positive conditions and practices that fulfill this objective:

» Achieving a positive land balance, that is rehabilitating more land than degrading land on the enterprise site.

» Conservation practices are in place in all sites threatened by soil degradation, and rehabilitation practices are in place in all sites that were previously degraded. This includes controlled application of organic fertilizer, planting living fences, increase of soil coverage, terracing, better drainage, etc.

» Having a written plan, available to all stakeholders, with land conservation and rehabilitation targets.

Unacceptable conditions and practices in relation to this objective:

» Soils are completely destroyed (usually to construct buildings) without any compensatory measure and without any meaningful usage of the removed soil material.

» Measures to conserve and rehabilitate soils are taken on less than 20 percent of the affected area.

Example or Default Indicators

E 3.2.1 Land Conservation and Rehabilitation Plan

Does the enterprise have a plan which describes the steps of conserving or enhancing soil health and rehabilitating degraded soils?

▲ **Type:** Target

E 3.2.2 Land Conservation and Rehabilitation Practices

Which effective soil conservation techniques and/or rehabilitation measures have been implemented and/or regularly practiced in the operation?

▲▲ **Type:** Practice

E 3.2.3 Net Loss/Gain of Productive Land

What is the ratio between rehabilitated land and degraded land in the enterprise's operations?

▲ **Type:** Performance

THEME E4 – BIODIVERSITY

Definition of the Theme

Biodiversity is the diversity of ecosystems, of species in these ecosystems and of the genome within these species. Agricultural biodiversity encompasses the variety and variability of animals, plants and micro-organisms which are necessary to sustain the functions of the agro-ecosystem, its structure and processes for, and in support of, food security. Sub-themes included are: Ecosystem Diversity; Species Diversity; and Genetic Diversity.

Relevance of the Theme to sustainability

The protection of biodiversity is essential for humankind, not only because a great diversity of species is utilized, but also because healthy ecosystems provide vital services like pollination, pest management, filter functions of soils and the regulation of nutrient cycles. In 1997, the global economic value of ecosystem services was estimated at USD 16 to 54 trillion (Costanza *et al.*, 1997); global GDP then was USD 18 trillion. Measures for the protection of biodiversity and ecosystems pay off, return on investment being estimated to exceed cost by a factor of 10 to 100 (TEEB, 2009). However because the services and costs for impacting them are externalized (see Holistic Management), there has been limited market incentives for the protection of biodiversity.

Human activity is altering ecosystems at unprecedented scales and intensity. Biodiversity is adversely affected by pollution, land degradation, habitat fragmentation and loss, introduction of exotic species, climate change and natural disasters. The overuse of fish resources endangers livelihoods, especially for small-scale fishers in developing countries (FAO, 2010b). A significant majority of the world's terrestrial biodiversity is found in forest ecosystems. The continuing net loss of forests is alarming: over 6 million hectares per year between 1990 and 2000 (FAO, 2012d). Almost this entire decline is taking place in tropical forests, as they are the most biologically diverse ecosystems on earth. The production of genetically modified crops over large areas is increasingly associated with resistance by weeds to glyphosate (UNEP, 2011), thus compromising the resilience of GM-based production systems. Agriculture, forestry and fisheries dispose of powerful levers to influence biodiversity, such as the allocation of areas to different uses, the choice of species, varieties and breeds, fertilization, harvesting etc. In agricultural landscapes, biodiversity depends on the landscape's richness in biological structures and on the intensity of farming.

E4 BIODIVERSITY

Theme Goal

The areas under agriculture, forestry and fisheries are managed sustainably, ensuring conservation of all forms of biodiversity.

Sub-theme E4.1 Ecosystem Diversity

Sub-theme objective

The diversity, functional integrity and connectivity of natural, semi-natural and agrifood ecosystems are conserved and improved.

Description

Ensuring the effective conservation or improvement of complex ecosystems, including those with agricultural and/or forest components, requires a broad landscape approach. The purpose of landscape and marine habitat conservation plans is the conservation, protection and restoration of wildlife habitat. Land use and land cover change (LULCC), where natural/semi-natural habitats (e.g. wetlands, primary forests, protected waterways, mangrove forests) or structurally complex land use systems (e.g. grasslands, agroforestry, polycultures) have been replaced by ecologically less valuable forms of land use and land cover. Ecosystem services that benefit and at the same time are shaped by agricultural practices include nutrient cycling, pest regulation, pollination, maintenance of soil fertility, water quality and climate regulation. The adoption of ecosystem-enhancing practices builds functional relationships and processes within ecosystems. However, the question of what is a sufficient ecosystem diversity can be difficult to answer, as scientific and normative aspects mix when it comes to biodiversity targets.

Examples of positive conditions and practices that fulfill this objective:

» Structural diversity on the utilized and adjacent enterprise is at least as high as in natural ecosystems of the same region; polyculture is practiced both on land and in aquatic (i.e. multi-trophic) operations.

» All areas at all sites used can be considered to be ecologically well-connected.
» The net LULCC caused by the enterprise is positive (more "upgrading" than "downgrading" of habitat) and the enterprise has not caused any ecologically degrading LULCC off-site. Failing this a partial compliance may be given if the enterprise has not caused any ecologically degrading LULCC.
» Practices that aim at enhancing functional relationships and processes within ecosystems by different actors in agriculture-based food chains, such as: greater diversity and integration of plants and animals (including fish), maintenance of semi-natural habitats with native vegetation and flowers, creation of pest-suppressive conditions, etc.
» A written habitat conservation plan, available to all stakeholders, with exact targets and time-frames and steps implemented towards achieving those targets.

● **Unacceptable conditions and practices in relation to this objective:**

» The enterprise has utilized all its and adjacent land/aquatic habitat and covered it with monocultures with a single habitat layer and no substantial horizontal heterogeneity, although the landscape would be structurally diverse without human influence.
» The enterprise has less than 20 percent of the area of all sites used considered being ecologically well-connected.
» The activities of the enterprise have contributed substantially to reducing the connectivity and structural complexity of the landscape.
» The enterprise has caused ecologically degrading LULCC, without any ecological compensation measures either on-site or off-site and the net LULCC caused by the enterprise is negative.
» Has undertaken unacceptable practices such as: annual monoculture cultivation and/or high external input livestock/aquaculture systems (e.g. stocking densities that exceed the local carrying capacity by a factor of 2 or more); conversion of land use or land cover change from more complex systems (e.g. natural or semi-natural forests, grasslands and lakes), to arable land/aquaculture farms/single species operations; reliance on off-farm synthetic inputs for both fertilizers and pesticides and/or complete reliance on off-farm feed.

Example or Default Indicators

- **E 4.1.1. Landscape/Marine Habitat Conservation Plan**

  Does the enterprise have a plan that describes how to conserve or rehabilitate a diversity of habitats within its sphere of influence?

  ▲ **Type:** Target

- **E 4.1.2 Ecosystem-Enhancing Practices**

  What activities and practices have been implemented that have effectively enhanced the functioning of ecosystem services, as well as the connectivity of ecosystems?

  ▲▲ **Type:** Practice

- **E 4.1.3 Structural Diversity of Ecosystems**

  On what share of utilized area does the enterprise have a high structural diversity of habitats?

  ▲▲▲ **Type:** Performance

- **E 4.1.4 Ecosystem Connectivity**

  What share of the natural and semi-natural ecosystems in the operation are connected with similar ecosystems (within and adjacent to the operation's borders) in a way that allows an exchange between populations of key species?

  ▲▲▲ **Type:** Performance

- **E 4.1.5 Land-Use and Land-Cover Change**

  Were any primary habitats (e.g. wetlands, primary forests, grasslands, protected waterways) converted during the last 20 years by the enterprise's operations, including in areas where its inputs are sourced?

  ▲▲▲ **Type:** Performance

Sub-theme E4.2 Species Diversity

Sub-theme objective

The diversity of wild species living in natural and semi-natural ecosystems, as well as the diversity of domesticated species living in agricultural, forestry and fisheries ecosystems is conserved and improved.

Description

The diversity of species in natural, semi-natural and productive landscapes and seas can be influenced by a number of factors. Diversity of production focuses on the share of utilized area where a diverse crop rotation and/or several species are kept at the same time (e.g. polycultures, agroforestry, rice-fish systems). The diversity and abundance of threatened and vulnerable wild species reflects the integrity of the ensemble of species native to the site and must be protected from invasive species. Many practices can contribute to the protection and rehabilitation of species, such as maintaining a diversity of plants and animals in production, the cultivation structurally diverse stands of perennials, the protection of structures and habitats needed by wildlife (e.g. bird nesting aids and insect nesting boxes) and the establishment of habitats within cultivated landscapes that can serve as refuge to animals. The establishment of species conservation targets and plans for the conservation, protection and rehabilitation of species is not only important for rare or endemic species but also for capture fisheries, regardless of the species they target (e.g. migratory stocks of some tuna species).

Examples of positive conditions and practices that fulfill this objective:

- Has all of the utilized area either covered with diverse crop rotations or has a polyculture/multi-trophic system in place AND all animal production is characterized by a high species diversity.
- The diversity and populations of the threatened and vulnerable species have increased, without creating imbalances in the ecosystem AND the populations of introduced alien species have decreased AND the species selection and monitoring methodology have been approved by public or private conservation specialists or organizations.
- The enterprise has implemented all feasible conservation and rehabilitation practices and for some of these, positive effects can be proven.
- The enterprise has written habitat/species conservation targets, available to all stakeholders, with exact objectives and time-frames and steps have been implemented towards achieving these targets.

Unacceptable conditions and practices in relation to this objective:

- » Crops are grown in monoculture, without any crop rotation, or only in a two-year constant rotation with the same two crops, although alternative crops would be available.
- » Highly intensive single-species farming, forestry, fisheries operations and plantations.
- » The enterprise has no information about the development of populations of threatened, vulnerable and introduced species in ecosystems managed or influenced by the enterprise's operations.
- » Populations of threatened and vulnerable species have decreased and introduced species have become invasive and this can partly be attributed to the impact of the enterprise's operations.
- » The enterprise has implemented less than 20 percent of the feasible species conservation practices or the enterprise's activities have contributed to deteriorating conditions for wildlife conservation and rehabilitation.

Example or Default Indicators

E 4.2.1 Species Conservation Target

Has the enterprise set a target for the conservation and rehabilitation of the populations of rare and endemic species in its sphere of influence?

▲ **Type:** Target

E 4.2.2 Species Conservation Practices

What activities and practices has the enterprise implemented to protect, maintain and/or rehabilitate the integrity of populations of wild plants and animals in its sphere of influence?

▲▲ **Type:** Practice

E 4.2.3 Diversity and Abundance of Key Species

Have the diversity and abundance of threatened or vulnerable wild species on the one hand, and invasive species on the other, increased in the operation? If so, by what share?

▲▲▲ **Type:** Performance

E 4.2.4 Diversity of Production

On what share of the utilized area does the enterprise have a diverse crop rotation and/or use several species at the same time?

Type: Performance

Sub-theme E4.3 Genetic Diversity

Sub-theme objective

The diversity of populations of wild species, as well as the diversity of varieties, cultivars and breeds of domesticated species, is conserved and improved.

Description

The importance of the abundance and diversity of species cannot be understated for both agriculture and wild species. From wild species, pest resistance genes are rare and predominantly found in unimproved varieties or wild accessions – the same can be said about pathogen resistance, thus wild ancestors and relatives are the keys to genetic diversity. Microorganisms, along with invertebrates, are also invaluable contributors to ecosystems, as they pollinate crops and trees, recycle nutrients in soils, ferment bread and cheese, help animals digest otherwise indigestible forage and, with proper management, can provide natural protection against plant pests. There are a wide range of strategies that can be adopted to enhance genetic diversity including using locally adapted varieties/breeds, protecting and preserving wild biodiversity and saving of seeds and breeds.

Examples of positive conditions and practices that fulfill this objective:

» For all species, the main genetic lineage of crops/exotic breeds, or the most common genetic lineage within exotic breeds where no locally adapted breeds exist, does not represent more than 50 percent. The threshold for a too high genetic uniformity should be determined with the help of experts and for each individual species.

» At least 50 percent of the cultivated lands are used for locally adapted, rare or traditional varieties OR at least 50 percent of the animal population consists of locally adapted or rare breeds.
» On at least 5 percent of the enterprise's lands, non-utilized plants are growing AND there is a high diversity of wild taxa.
» Most of the seeds of those species and varieties where this is feasible are saved from year to year OR the enterprise is engaged with the breeding of at least one locally adapted breed of animals in the operation, if feasible.
» The enterprise encourages its input providers to save seeds and keep rare/traditional breeds and promote such practices in the enterprise's communication with all stakeholders.
» Practices are implemented to enhance the genetic diversity of wild species on, or adjacent to its operations.

● **Unacceptable conditions and practices that fulfill this objective:**

» The enterprise does neither save any seeds, nor use open pollinating varieties, although this would be feasible OR it does not keep any locally adapted and/or rare breeds, although this would be feasible.
» The enterprise does not have even 1 percent of land with non-utilized plants OR the diversity of the chosen taxa is low.
» The common lineage/exotic breed or one genetic lineage within exotic breed where no locally adapted breeds exist occupies 100 percent of lineages/breeds, in all species used.
» The enterprise discourages its input providers (verbally or simply by avoiding making contracts with such producers) to save seeds, use open-pollinating varieties and/or keep rare/traditional breeds, although the enterprise could do so.
» The enterprise undertakes any of the following practices: monoculture cultivation and/or intensive livestock/aquaculture operations (e.g. stocking densities that exceed the carrying capacity of local pastures/aquaculture operations by more than a factor of 2); has land use or land cover change from more complex systems, such as natural or semi-natural forests and lakes, to arable land/aquaculture

farms/single species operations; has no habitat left aside for wildlife (e.g. buffer strips, wildflower strips); captures/buys any fish species from stocks that are endangered; production of crops is based on a single genetic lineage or all production of animals is based on a single genetic lineage of an exotic breed.

Example or Default Indicators

■ **E 4.3.1 Wild Genetic Diversity Enhancing Practices**

What activities and practices has the enterprise implemented that have effectively helped to conserve or rehabilitate the genetic diversity of wild species in its operation?

▲▲ **Type:** Practice

■ **E 4.3.2 Agro-Biodiversity *in-situ* Conservation**

For each species, what is the share of production from others than the most common genetic lineage/breed?

▲ **Type:** Performance

■ **E 4.3.3 Locally Adapted Varieties/Breeds**

What is the share of production accounted for by locally adapted varieties/breeds and by rare and traditional (heirloom) varieties and breeds?

▲ **Type:** Performance

■ **E 4.3.4 Genetic Diversity in Wild Species**

How big is the share of the enterprise's operation that shows a high diversity in non-utilized plants, animals and microorganisms?

Type: Performance

■ **E 4.3.5 Saving of Seeds and Breeds**

Does the enterprise's operation save seeds, or engage with breeding work to conserve traditional and/or rare breeds on farm?

▲ **Type:** Performance

THEME E5 – MATERIALS AND ENERGY

Definition of the Theme

Materials and Energy in SAFA refer to the material input into an economy delivered by the natural environment, the transformation and use of that input in economic processes (extraction, conversion, manufacturing, consumption) and its return to the natural environment as residuals or wastes. Sub-themes included are: Material Use; Energy Use; and Waste Reduction and Disposal.

Relevance of the Theme to sustainability

The flows of materials into, within and out of the human economy have reached unprecedented levels. Unsustainable consumption and production patterns fuel material consumption, energy use and waste generation. For example, 30 percent of foods produced are not consumed, meaning the inputs made to its production are wasted as well. Food loss and waste account for 3.3 Gtonnes of greenhouse gas emissions per year, wastage of 350 km^3 of water and undue occupation of 28 percent of world's agricultural land (FAO, 2013).

The large quantity of global waste poses great challenges with regard to recycling and disposal. Improper transport of hazardous waste, especially its export to countries with insufficient national regulations on waste treatment, poses serious threats to humans and ecosystems. Sustainable management of these flows is a key component of the green economy concept (UNEP, 2011), which rests on the twin pillars of efficient resource utilization and circular material flows (recycling and reuse).

Global energy use is by many accounts the most damaging activity on the planet. Its many adverse impacts degrade air, water and soil quality, human and ecological health. Current energy comes primarily from the burning of fossil fuels such as coal, oil and natural gas. This burning produces a number of by-products, which mostly go into the air as pollution, affecting people's health and damaging soil and crops, freshwaters and streams, ecosystems and accelerate corrosion of buildings and building materials.

Substantial cuts in the consumption of fossil fuels and associated CO_2 emissions are necessary in order to avoid further temperature increases and the associated impacts of climate change. With population growth, industrialization and urbanization trends, demand is rising. Challenges to sustainable energy use include geological (limited stocks of fossil fuels), biological (limited productivity of vegetation), economic (cost of renewables) and social (limited acceptance of renewables) limitations. The two main

strategies to slow down the growth and impact of burning fossil fuels are: energy efficiency (through technology) and recycling. Estimates are that the world could halve the growth of energy demand simply through energy efficiencies and use more renewable/alternative fuels. Renewable fuels are those that are continuously available and sustainable in our environment (emissions neutral) like wind, solar, geothermal, hydropower and biomass.

E5 MATERIALS AND ENERGY

Theme Goal

Damage to ecosystems and contribution to resource scarcity resulting from non-renewable material extraction, non-renewable energy use and waste disposal are minimised through economical and efficient use, consequent reuse and recycling/recovery and safe disposal.

Sub-theme E5.1 Material Use

Sub-theme objective

Material consumption is minimized and reuse, recycling and recovery rates are maximized.

Description

Achieving efficiencies in the use of materials results in a wide range of environmental, societal and economic benefits. Various materials that are of vital importance to the functioning of food value chains stem from non-renewable sources (e.g. Phosphorus fertilizers, fossil fuel, machinery, agrochemicals). As many of these sources have to be considered as finite, reliance on them should be gradually reduced by reverting to renewable alternatives and recycled non-renewables. The replacement of virgin non-renewable materials with recycled and renewable materials and the reduction of the material intensity of production (as a measure of eco-efficiency) are central pillars of a green economy.

Examples of positive conditions and practices that fulfill this objective:

» The nitrogen and phosphorus balances of the operation do not deviate by more than 10 percent from zero, that is supply and demand (imports and exports) are in balance.

» The operation is completely independent from virgin non-renewable materials.

» The material intensity of production per unit of produce has substantially decreased over the past five years. The percentage threshold for a "substantial" reduction of material intensity should be set and justified by internal and external experts, based on the level of material intensity already achieved by the company at the beginning of the analyzed period.

» All feasible practices to reduce material intensity and replace non-renewable, virgin materials have already been implemented.

Unacceptable conditions and practices in relation to this objective:

» Major imbalances of nitrogen and/or phosphorus flows prevail over a prolonged period and as a consequence, crop yields are reduced (nutrient deficiency), or neighboring terrestrial and aquatic habitats suffer damage from eutrophication.

» Less than 20 percent of material inputs are procured from renewable and recycled sources, although it would be technically and economically feasible to achieve higher shares.

» The material intensity of production per unit of produce has substantially increased over the past five years.

» Less than 20 percent of the feasible material intensity saving practices has been adopted and/or less than 20 percent of the company's materials-saving potential has been realized.

Example or Default Indicators

E 5.1.1 Material Consumption Practices

What practices and activities has the enterprise implemented that effectively replaced virgin non-renewable materials by recycled/reused/renewable ones in the operation and replaced synthetic inputs with natural inputs?

Type: Practice

■ **E 5.1.2 Nutrient Balances**

What is the nutrient balance of the operations (supply vs demand, or imports vs exports at farm or parcel level) for nitrogen and phosphorus?

Type: Performance

■ **E 5.1.3 Renewable and Recycled Materials**

What share of the enterprise's total material use is generated from off-operation virgin sources?

Type: Performance

■ **E 5.1.4 Intensity of Material Use**

How has the quantity of materials used (per unit produce) in the operations changed during the last 5 years?

Type: Performance

Sub-theme E5.2 Energy Use

Sub-theme objective

Overall energy consumption is minimized and use of sustainable renewable energy is maximized.

Description

While a shift from non-renewable to renewable and sustainable source of energy will enhance the sustainability of food value chains, enhanced energy efficiency and reduced energy use are further necessary pillars on the way to a sustainable energy system. Not all enterprises however have access to renewable and sustainable types of energy at an affordable price; however as renewable energy technologies progress, they will be more common and affordable.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise is completely independent from non-renewable and non-sustainable sources.

» Energy use per unit of produce of the enterprise has constantly and substantially decreased over the past five years.

» All feasible energy-saving practices have already been implemented and the enterprise uses its full energy-saving potential.
» The enterprise has a written plan, available to all stakeholders, with a binding renewable energy target and steps have been implemented towards achieving the target.

Unacceptable conditions and practices in relation to this objective:

» Less than 20 percent of net total energy supply is procured from renewable and sustainable sources, although it would be technically and economically feasible to achieve higher shares.
» Energy use per unit of produce of the enterprise has increased over the past five years.
» Less than 20 percent of the feasible energy saving practices has been adopted and/or less than 20 percent of the company's energy-saving potential has been realized.

Example or Default Indicators

E 5.2.1 Renewable Energy Use Target

Has the enterprise set a target for the share of renewable and sustainable energies in its total direct energy use?

Type: Target

E 5.2.2 Energy-Saving Practices

What practices and activities has the enterprise implemented that effectively reduced the energy requirements in its operation?

Type: Practice

E 5.2.3 Energy Consumption

How has the total direct energy consumption changed during the last 5 years?

Type: Performance

E 5.2.4 Renewable Energies

What share of total direct energy use is generated from sustainable renewable sources?

Type: Performance

Sub-theme E5.3 Waste Reduction and Disposal

Sub-theme objective

Waste generation is prevented and is disposed of in a way that does not threaten the health of humans and ecosystems and food loss/waste is minimized.

Description

The generation of waste, and in particular of hazardous waste, creates disposal problems that can cause social problems (e.g. health risks, noxious odors), environmental pollution (e.g. leaching from inappropriate disposal, gaseous emissions) and economic damage (e.g. cost of disposal and rehabilitation). The adoption of waste reduction plans and safe disposal practices is a foundation of sustainable production in value chains. With regards to food waste, the minimisation of food losses during production, post-harvest and processing, as well as food waste that occurs at marketing and consumer level are an ethical imperative to all enterprises.

Examples of positive conditions and practices that fulfill this objective:

» Food losses and waste do not exceed an inevitable minimum over the entire sphere of influence of the analyzed enterprise. Where losses cannot be prevented, all concerned food is put into use via other channels for reuse (e.g. charities, feed), recycling (e.g. compost) or recovery (e.g. anaerobic digestion).

» The waste storage, treatment and disposal practices of the enterprise pose no threat to the health of humans and ecosystems.

» All feasible practices to reduce waste generation have already been implemented OR all of the enterprise's operations are "zero-waste" operations.

» The enterprise has a written plan, available to all stakeholders, with binding waste reduction targets, and steps have been implemented towards achieving the targets.

Unacceptable conditions and practices in relation to this objective:

» Food loss and waste in the sphere of influence of the analyzed enterprise have increased over the past years, OR the share of food loss and waste is higher than

usual in the same sector and region and the enterprise has taken no action to put these into use via other channels.

» The waste storage, treatment and disposal practices of the enterprise cause unacceptable or even illegal risks to the health of humans and ecosystems.

» Less than 20 percent of the feasible practices have been implemented OR less than 20 percent of the company's waste reduction potential has been tapped.

Example or Default Indicators

■ **E 5.3.1 Waste Reduction Target**

Has the enterprise set a target in reducing the generation of waste, as well as the hazardousness of this waste, in or by its operations?

▲ **Type:** Target

■ **E 5.3.2 Waste Reduction Practices**

What practices and activities have been implemented that effectively reduced waste generation in the enterprise's operation?

▲▲ **Type:** Practice

■ **E 5.3.3 Waste Disposal**

How much solid waste does the enterprise generate that is not segregated, stored and in such a manner that it is rendered non-hazardous to humans and environment at the point of release from the enterprise?

▲▲▲ **Type:** Performance

■ **E 5.3.4 Food Loss and Waste Reduction**

What is the share of food that is lost or wasted in the enterprise's operations and what share is reused, recycled or recovered?

▲▲▲ **Type:** Performance

THEME E6 – ANIMAL WELFARE

Definition of the Theme

Animal Welfare is the physical and psychological well-being of animals. Sub-themes included are: Health; and Freedom from Stress.

Relevance of the Theme to sustainability

The farm animal production sector is the single largest human user of land, contributing to soil degradation, water quality and availability issues, and air pollution, in addition to detrimentally impacting rural and urban communities, public health, and animal welfare. It is one of the key drivers of deforestation in the Tropics. The scope of this sector's global impacts has been largely underestimated. Meat, egg, and milk production are not just the direct product of rearing and slaughtering of farm animals. Rather, the animal agriculture sector encompasses grain and fertilizer production, substantial water use, and significant energy expenditures for transportation of inputs and finished products. Animal agriculture's greatest environmental influence may be its contributions to climate change. According to the FAO, the animal agriculture sector is responsible for 18 percent, or nearly one-fifth, of human-induced greenhouse gas emissions, greater than the share contributed by the transportation sector.

By 2050, global farm animal production is expected to double from present levels, with most of those increases in the developing world. Livestock production under conditions inappropriate for animal welfare and health is a major concern across production systems and geographical regions. Common problems include overstocking, reliance on un-adapted breeds, excessive or inadequate use of veterinary medicines, lack of space, light, clean water and adequate fodder and cruel treatment. Ethical considerations are a major reason to take care of animal welfare. For agronomic reasons as well, they have to be kept such that their well-being is ensured, meaning that animals must be kept in an environmentally unproblematic and species-appropriate way. Animal welfare applies to the same extent to terrestrial and aquatic animals. Appropriate stocking densities, raising conditions and the respect of slaughtering ethics are equally applicable in fisheries and aquaculture, as they are for livestock and poultry animals.

During the last decade, many of the developed countries have seen a rapid move toward explicit farm animal welfare standards. In 2005 the World Organization for Animal Health (OIE) adopted guidelines for the international welfare of domesticated and food

animals. In Europe, the process has been led partly by national governments and the European Union which have created mandatory animal welfare standards for most animal-based commodities. In the United States, there are some legal protections against what are considered the worst abuses, but the food service and retail sectors have played a major role, with some companies creating standards that their suppliers are required to meet. This has also been caused by public shift in perceptions towards animals with demands for standards and safeguards for the care and use of animals in research, trade and production.

E6 ANIMAL WELFARE

Theme Goal

Animals are kept in such conditions that they can express their natural behaviour and are free from hunger, thirst, discomfort, pain, disease and other distress.

Sub-theme E6.1 Animal Health

Sub-theme objective

Animals are kept free from hunger and thirst, injury and disease.

Description

Animal health is a state of physical and environmental well-being. For the sake of simplicity, it can also be understood as the absence of illness and injury. Activities that support animal health include good nutrition, health care and freedom from stress, factors that reduce the need for veterinary treatments, as well as unwanted animal losses.

Examples of positive conditions and practices that fulfill this objective:

» Preventive measures are preferred and no synthetic growth promoters (including hormones) are used.

» Injury and disease rate is minimal or lower than benchmark values, if available.

» Regular check-up, if feasible, by professional animal healthcare.

» All animals in the enterprise's sphere of influence benefit from integrated health-promoting measures.

Unacceptable conditions and practices in relation to this objective:

» Use of forbidden veterinary products and synthetic growth promoters and/or inhumane treatment (including hormones).

» Although substantial health problems prevail, less than 20 percent of the concerned animals benefit from measures to promote animal health in an integrated manner.

Example or Default Indicators

E 6.1.1 Animal Health Practices

What activities and practices has the enterprise implemented that effectively promoted the health of animals, while reducing the use of veterinary drugs and preventing animal losses due to disease and injuries?

Type: Practice

E 6.1.2 Animal Health

What share of the enterprise's animals is healthy and has not required any treatment with veterinary drugs against illness or disease?

Type: Performance

Sub-theme E6.2 Freedom from Stress

Sub-theme objective

Animals are kept under species-appropriate conditions and free from discomfort, pain, injury and disease, fear and distress.

Description

Humane animal handling practices seek to ensure that animals can enjoy the "five freedoms", namely freedom from: hunger and thirst; discomfort and pain, injury and disease; fear and distress, and freedom to express normal behavior. Freedom from stress increases animal health, as well as the quality of animal products.

Examples of positive conditions and practices that fulfill this objective:

» All animals in the enterprise sphere of influence have the possibility to behave according to their specific needs.

» All animals in the enterprise sphere of influence live all of their life without experiencing serious and prolonged stress.

» Avoidance of routine tail docking, teeth clipping, castration, de-horning and comparable practices.

» There were no dead animals due to inhumane treatments.

Unacceptable conditions and practices in relation to this objective:

» 20 percent (or less) of animals in the enterprise sphere of influence do not have the possibility to behave according to their specific needs.

» Inhumane and illegal treatment of animals, such as butchering with a dull knife, or unnecessarily long transport, without sufficient space and water.

» Practices to reduce the level of stress are implemented for less than 20 percent of the concerned animals.

Example or Default Indicators

E 6.2.1 Humane Animal Handling Practices

Which practices and activities has the enterprise implemented that effectively reduced the suffering and risk of injury of animals during all phases of their life, including transport and killing?

▲▲ **Type:** Practice

E 6.2.2 Appropriate Animal Husbandry

What share of the enterprise's animals has the possibility to behave according to their specific needs?

▲ **Type:** Performance

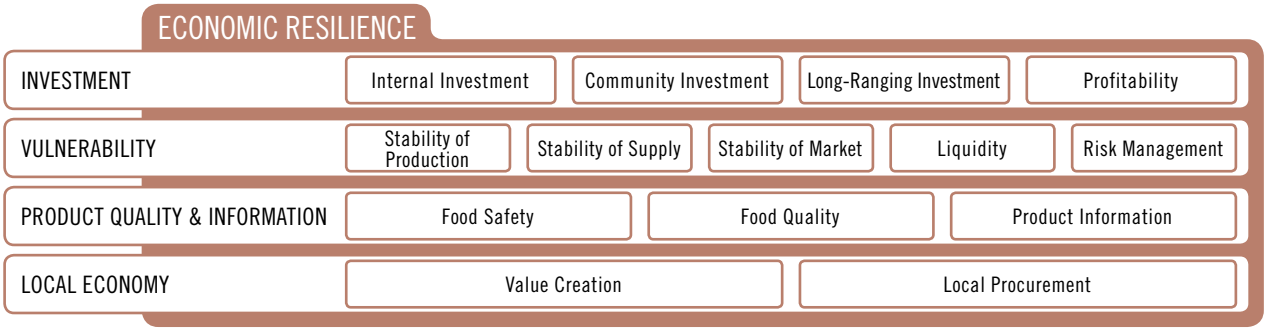
E 6.2.3 Freedom from Stress

What share of the enterprise's animals has sufficient freedom to move around, live free of pain, discomfort and distress all the time, during all phases of their life, including during transport and killing?

▲ **Type:** Performance

ECONOMIC RESILIENCE

In a world dominated by shocks, SAFA focuses on economic resilience, more than on economic development. Economic activity involves the use of labour, natural resources and capital to produce goods and services to satisfy people's needs (Jörissen *et al.*, 1999). The following themes are covered by the economic dimension of SAFA: Investment; Vulnerability; Product Safety and Quality and Local Economy.



This dimension of sustainability is directly linked with the fulfilment of needs, a pillar of sustainable development as defined by the World Commission on Environment and Development (WCED, 1987). Sustainability in the social and environmental domains is supported by functioning economies and institutions. While inter-related, it is critical to assess economic sustainability as a sustainability dimension in its own right.

To be considered economically sustainable, an enterprise should be capable of paying all its debts, generating a positive cash flow, compensating for the negative externalities it may generate, and adequately remunerating workers and shareholders. In addition, it should have buffer mechanisms (savings, assets) to cope with changes and shocks out of its control, for example, economic downturns, damaging weather, or catastrophic accidents. In essence, it must be economically resilient.

Some aspects of economic sustainability have potential tensions or tradeoffs with the other concepts, such as “sustainable growth” and “green economy”. Steady and adequate economic growth is a common proxy for positive socio-economic development. Economic growth is the declared goal of most nation states and was endorsed by WCED (1987) and UNEP (2011). The possibility of endless economic growth in a limited ecosphere has been contested by many, and even dismissed as an oxymoron (Daly, 1990). Increasingly, the goal of decoupling economic growth from the use of limited natural resources is becoming popular (UNEP, 2011).

The SAFA Guidelines forego the macro-economic issue of growth rates in favour of a micro-economic approach that focuses on the enterprise and the local community resilience.

THEME C1 – INVESTMENT

Definition of the Theme

In SAFA, the term 'investment' is seen from a microeconomic perspective, that is it is putting money into something, such as capital goods, human resources or ecosystems, with a view to gain. Investments at the enterprise, community and value chain level are considered. Sub-themes included are: Internal Investment; Community Investment; Long-Ranging Investment; and Profitability.

Relevance of the Theme to sustainability

Investment is an important factor in sustainable development. Improved production and marketing and transfer of financial resources and knowledge are critical to ensure that economic growth leads to social development, while preserving or enhancing the natural resource base. Decisions about how and where to invest reflect the strategic direction of the enterprise. Financial speculation, another form of investment, today has an enormous importance for the economy, including in the food and agriculture sector. Investments into sustainable development at the community level are important. Investment in sustainable value chain development is considered, as it requires coordinated investment by actors along the chain, with private enterprises having a key role in investing in improved logistics, transportation, post harvest treatment, storage facilities, etc. Investment that is solely aimed at public relations (e.g. branding, advertisements) does not fall into the scope of this theme.

Sustainable investment aims at supporting a development of the enterprise towards enhanced social, environmental, economic and governance performance. Such investment can for example take the form of research and development expenditures, development and/or acquisition of infrastructure equipment that reduces polluting emissions to the environment, services as monitoring, measures or technologies that enhance buffering capacity against any kind of shocks (e.g. build-up of soil organic matter to better withstand drought spells), and measures directed at capacity building or creating awareness of sustainability in the organization. Some investment into sustainability may have been done under different titles in the past, for example "lean manufacturing", or "eco-efficiency". A survey by MIT Sloan Management Review and The Boston Consulting Group revealed that "a growing number of companies are now increasing their investments in sustainability"; 59 percent of respondents said they had increased their commitment to sustainability from 2009 to 2010. As benefits, improved brand reputation (49 percent),

reduced costs due to energy efficiency (28 percent) and increased competitive advantage (26 percent) were most frequently cited (Haanaes *et al.*, 2011).

Investment in the agriculture and food sector includes investment into agricultural and agro-ecological research, agricultural training, the improvement and utilization of neglected and underutilized crops, and smallholder agriculture (IAASTD, 2009). Fisheries and aquaculture are equally concerned by these types of investment.

C1 INVESTMENT

Theme Goal

Through its investments, the enterprise enhances its sustainability performance and contributes to sustainable development at the community, regional, national or international levels.

Sub-theme C1.1 Internal investment

Sub-theme objective

In a continuous, foresighted manner, the enterprise invests into enhancing its sustainability performance.

Description

This objective relates to an enterprise investing resources (i.e. time, human resources, funds) to improve the enterprises own sustainability performance at any number of the dimensions: governance, environmental, social and economic. Improving the enterprise sustainability performance requires the commitment of the governance body and the capacity to generate change accordingly. Without proper investment allocation and oversight of this matter, it is less probable that an enterprise could make significant progress.

Examples of positive conditions and practices that fulfill this objective:

» Having a monitoring system in place to oversee the sustainability performance of the enterprise at social, economic, environmental and governance levels.

» The enterprise has prioritized activities and practices that targeted the improvement of the enterprise's sustainability performance.
» The enterprise can demonstrate progress in its sustainability performance during the last five years.

Unacceptable conditions that relate to this objective:

» The enterprise has not implemented any investment in the last 5 years aimed at monitoring and improving its sustainability performance.

Example or Default Indicator

C 1.1.1 Internal Investment

In which activities and practices has the enterprise invested during the last 5 years to improve and monitor its social, economic, environmental and governance performance?

Sub-theme C1.2 Community investment

Sub-theme objective

Through its investments, the enterprise contributes to sustainable development of a community.

Description

Investing in a community refers to the allocation and use of multiple resources (i.e. time, human resources, funds) to address and contribute to resolve a community need(s). The enterprise's micro-environment includes the community where operations are taking place, so there is an organic relationship between the enterprise's activities and investments, and the community's sustainable development. Whether directly or indirectly, the enterprise's operations have an influence on the community.

Examples of positive conditions and practices that fulfill this objective:

» The investments and activities implemented by the enterprise address and meet at least some identified community need.

» There are records of multiple positive socio-economic and environmental impacts as a result of the enterprise's investments and activities implemented.
» There is not a disproportionate (over)consumption of resources (i.e. financial, energy, natural) in the investments made.
» Community beneficiaries acknowledge the effective and positive contribution of the enterprise to the community sustainable development.

Unacceptable conditions in relation to this objective:

» The enterprise investments or activities increase community(ies) needs, either directly or indirectly.
» There are records of negative socio-economic or environmental impacts, as a result of the enterprise's investments or activities implemented.
» The investments or activities jeopardize community(ies) by over-consumption of resources (i.e. financial, energy, natural).

Example or Default Indicator

C 1.2.1 Community Investment

How has the enterprise's investments contributed to address and meet community needs, with an efficient use of resources and maintaining an environmental balance?

Sub-theme C1.3 Long-Ranging Investment

Sub-theme objective

Investments into production facilities, resources, market infrastructure, shares and acquisitions aim at long-term sustainability rather than maximum short-term profit.

Description

Financial sustainability is a major pillar to ensure the enterprise's operations and growth in the long-term and over its life cycle. An enterprise needs to develop business plans and allocate resources to strengthen its capacity to generate and increase profits over the long term – such as research on product development,

training programmes for selected employees, acquisition of resources, such as land or businesses, equipment and facilities, design and implementation of a marketing strategy. The enterprise also needs to invest for long-term solvency and profitability in order to remain in business and to enhance its potential and growth. Investiments to strengthen its capital structure (i.e. financial, natural, physical, human and social), as well as its competitive advantage in the marketplace, are needed to guarantee a sound economic performance, financial responsibility and long-term success. However, the development of business plans and the making of long range investment does not always ensure the business viability and growth of an enterprise during its entire life cycle, as other factors might affect its performance, for instance, the enterprise's governance and management, external policies and regulations and market forces.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has undertaken investments that aim to generate profits over a period of at least five years.

» The enterprise has undertaken investments to generate profits in the short-term and has met completely its financial needs and obligations of the current year.

» The enterprise has a business plan or an up-to-date document articulating revenue streams, growth plans, and an operational action plan that projects the generation of financial resources for the future.

Unacceptable conditions in relation to this objective:

» The enterprise has not done any investment that aim to generate profits over a period of at least five years.

» The enterprise invests only to maximize its profit in the short-term.

» The enterprise has an incomplete, or no, business plan and does not have any intention to develop one.

Example or Default Indicators

C 1.3.1 Long Term Profitability

Do the enterprise's investments aim to establish and reinforce the conditions to maintain, generate and increase the enterprise profits in the long-term?

■ **C 1.3.2 Business Plan**

Does the enterprise have a business plan or an up-to-date document articulating revenue streams, growth plan, and an operational action plan that projects the generation of financial resources for the future?

Sub-theme C1.4 Profitability

Sub-theme objective

Through its investments and business activities, the enterprise has the capacity to generate a positive net income.

Description

Financial profitability is a major pillar to ensure the enterprise's operations and growth in the long-term and over its life cycle. Key contributing factors to the profitability of an enterprise include its net income, its costs of production, as well as the prices it sets and receives for its goods and/or services. Trends in these over time provide insights into the profitability of an enterprise.

Examples of positive conditions and practices that fulfill this objective:

» The enterprises total revenue earned in the last 5 years exceeds the total expenses, including interest and taxes over the same period.

» The enterprise has completed a process to determine the total cost of the products sold and per unit of production and has calculated the break-even point.

Unacceptable conditions in relation to this objective:

» The enterprise has a negative net income in each year of the last five years.

» The enterprise has not completed any process to determine the total cost of the products sold, per unit of production or calculated the break-even point.

» The full cost of a unit of production is not recovered. The enterprise has not implemented any steps to improve the conditions lying behind the fact that the cost of unit of production is not recovered.

Example or Default Indicators

- **C 1.4.1 Net Income**

  Does the earned revenue that the enterprise retains exceed the total expenses, including interests and taxes associated with producing the goods sold, during the last five years?

- **C 1.4.2 Cost of Production**

  Has the enterprise completed a process to determine the total cost of the product sold and per unit of production to calculate its break-even point?

- **C 1.4.3 Price Determination**

  Has the enterprise considered a break-even point to negotiate with their buyer'(s) selling price in all contracts?

THEME C2 – VULNERABILITY

Definition of the Theme

Vulnerability relates to exposure, sensitivity and adaptive capacity of both human and natural systems. Thus, it includes the degree of exposure to risk (hazard, shock) and uncertainty, and the capacity of households or individuals to prevent, mitigate or cope with risk. Sub-themes included are: Stability of Supply; Stability of Market; Liquidity; Risk Management; Stability of Production.

Relevance of the Theme to sustainability

The vulnerability of enterprises, value chains and markets to the dynamics of natural and socio-economic environments can be buffered and their resilience enhanced by building and maintaining adaptive capacity. Building resilient social, economic and ecological systems is a key challenge on the way to sustainable development (Folke *et al.*, 2002).

In economic systems, strong dependence on single suppliers and/or buyers due to a dominance of one or few companies, or because only a single product is marketed, can increase the risk of the enterprise if this supplier/buyer, or product, is gone. Factors that contribute to resilience include a diversity of suppliers of production factors (including capital and labor) and a diversity of income sources. Generally, and contrary to diversity, the duration and stability of business relationships are predictors of resilience. Striking a balance between the long-term goal of maintaining the diversity of production and marketing channels needed to maintain resilience on the one hand, and the short-term drive to reduce unit costs on the other, is a major challenge. A third pillar of resilience is a sufficient buffering capacity, in the form of assets, inventory, formal and informal insurance, which can help an enterprise withstand shocks and changes.

Enterprises in the food and agriculture sector operate under very volatile conditions. Market dynamics, weather, political developments and technological progress are out of the control of producers and operators and can be unpredictable. The globalization and growth of markets, as well as climate change, enhance the uncertainty and volatility of economic and environmental conditions (e.g. IPCC, 2007). In today's industrial agro-ecosystems, which rely on a narrow species and genome basis, production can be disrupted if only one or few species substantially suffer stress or loss. While such agro-ecosystems mainly depend on the availability of buffers in the form of energy (fuel), pesticides and financial liquidity, buffering capacity can also be provided by soils with

sufficient content and quality organic matter and a good water retention capacity, by a diversity of utilized species, varieties and breeds, and by services provided by natural ecosystems (e.g. biological pest control).

Vulnerability and resilience in agriculture and food systems are not internationally regulated. However, measures known to enhance resilience through increased diversity and buffer capacity are defined in international sustainable agriculture and organic standards, as well as for sustainable forestry, fisheries and aquaculture.

C2 VULNERABILITY

Theme Goal

The enterprise's production, supply and marketing are resilient in the face of environmental variability, economic volatility and social change.

Sub-theme C2.1 Stability of Production

Sub-theme objective

Production (quantity and quality) is sufficiently resilient to withstand and be adapted to environmental, social and economic shocks.

Description

As part of its risk management strategy, an enterprise needs to reduce as much as possible the negative impact of having production shortages due to economic, social and environmental shocks, and to ensure that volume and quality of the production are met. There are a number of strategies that can influence the stability of production; however, the applicability and effectiveness will vary between situations. There are mechanisms that ensure that the quantity and quality of the production is sufficiently resilient to withstand environmental, social and economic shocks and which reduce the risks that might threaten the enterprise's production process and business commitments and quality standards. Product diversification allows the enterprise to expand beyond its product range, by modifying existing products or adding new products. It is a business strategy that could provide sales

opportunities and growth to the enterprise through additional market potential. It aims to increase sales volume from new products and new markets. It also includes brand extension, or the creation of new brands for existing products. Product diversification also serves to manage the risks (i.e. market, weather, price) that the enterprise may face by spreading it across multiple products and markets.

- **Examples of positive conditions and practices that fulfill this objective:**
  - » The enterprise has a plan to guarantee the required volume of production and the compliance with quality standards in the event of facing social, environmental and economic shock.
  - » The enterprise has implemented all mechanisms included in the plan in order to achieve its objectives.
  - » The enterprise currently produces a wide variety of products, goods, species or varieties of plant or animal for income generation OR the enterprise offers a wide variety of services to the industry.
  - » The enterprise has conducted a risk analysis to determine its level of vulnerability versus the type and number of products, goods, species and varieties of plant or animal it currently produces for income generation OR the enterprise has conducted a risk analysis to determine its level of vulnerability versus the type and number of services it offers.
  - » The result of the risk analysis does not recommend as a priority a greater product diversification.

- **Unacceptable conditions in relation to this objective:**
  - » The enterprise has not developed any plans, nor has identified any mechanism to guarantee the required volume of production and the compliance with quality standards in the event of facing social, environmental and economic shocks.
  - » The enterprise has not advanced in implementing any mechanism to guarantee production and quality levels.
  - » The enterprise currently produces only one product, good, specie or variety of plant or animal for income generation.
  - » There are records that reveal that the enterprise has an unfavorable level of vulnerability due to its mono-production.

» The enterprise has not progressed in implementing any step towards product diversification.

Example or Default Indicators

- **C 2.1.1 Guarantee of Production Levels**

  What are the actions and mechanisms that the enterprise has put in place to reduce the negative impact of the risks that could affect meeting the target volume of production and quality standards?

- **C 2.1.2 Product Diversification**

  Does the enterprise produce more than one product, specie or variety of plant or animal for income generation?

Sub-theme C2.2 Stability of Supply

Sub-theme objective

Stable business relationships are maintained with a sufficient number of input suppliers and alternative procurement channels are accessible.

Description

Stability of supply is influenced by procurement channels, or the ways the enterprise obtains the input supplies (e.g. seed, fertilizers, food ingredients, packaging) required to produce the product(s) to be sold in the market or to offer the core enterprise's service(s) to clients. Ensuring that inputs, goods and services, are delivered on time, reduces the enterprise's vulnerability and risk exposure to suppliers that might affect reaching the expected production levels, or delivering the type and quality of service offered. Suppliers that maintain a mutually beneficial business relationship with the enterprise for long periods of time contribute to the overall stability. Diversifying the enterprise supply structure helps to have the capacity and flexibility to face and to resolve any kind of problem the enterprise could face in the market. It also reduces supply risk default. Having a large number of suppliers does not mean necessarily that the supply chain is diversified. It is equally important to assist and train the suppliers on what the enterprise expects from them, and what the enterprise will do with the inputs provided.

Examples of positive conditions and practices that fulfill this objective:

- The actions and mechanisms implemented target maintaining business relationships with a number of suppliers that could guarantee the required input supply.
- The actions and mechanisms implemented enable the access to alternative procurement channels in case current suppliers fail to provide the required inputs.
- There are no records of input supply shortages, or periods during which the enterprise has failed to meet the expected volume of production on time or to deliver the service offered.
- 100 percent of contracts with suppliers are based on fair and beneficial terms and conditions, and have remained on-going over the last 5 years.
- The enterprise has conducted a risk analysis of its supply chain in order to identify its level of vulnerability to certain input supplies and suppliers.
- The enterprise has developed and implemented a strategy to minimize the supply risk and to establish a diversified supply structure when it is more appropriate.

Unacceptable conditions in relation to this objective:

- No actions and mechanisms have been implemented to guarantee the required input supply or to reduce its supply risk.
- There are records of input supply shortages that have undermined the production process and the delivery of products and services to the market.
- No contracts with suppliers that enhance business development, based on fair and beneficial terms and conditions has remained on-going over the last 5 years.
- There are records of unfavorable practices that the enterprise has had with any of its suppliers during the last five years.
- There are records that reveal that the enterprise has an unfavorable level of vulnerability to certain input supplies and suppliers.

Example or Default Indicators

C 2.2.1 Procurement Channels

Which actions and mechanisms has the enterprise put in place to reduce the risk of having input supply shortages, including maintaining ongoing business relationships with suppliers?

- **C 2.2.2 Stability of Supplier Relationships**
  What share of supplier contracts/business relationship has remained on-going over the last 5 years?
- **C 2.2.3 Dependence on the Leading Supplier**
  What share of inputs comes from the leading supplier?

Sub-theme C2.3 Stability of Market

Sub-theme objective

Stable business relationships are maintained with a sufficient number of buyers, income structure is diversified and alternative marketing channels are accessible.

Description

Marketing channels refer to the ways the enterprise ensures the transfer and sale of the products and goods to the next stage of the food chain and to the final consumer. Key tasks include: making contact with potential buyers, negotiating price and conditions, contracting, transferring the products and goods. The ultimate goal of the marketing channels is to guarantee that the products or goods are sold at an appropriate time, and the enterprise earns revenue. Ensuring that the products and goods are sold at the appropriate time is a major business target. In order to guarantee this success, the enterprise requires designing and implementing a marketing strategy to identify potential buyers that could meet the enterprise expectations and could eventually purchase its products and goods. Market risk could be significantly reduced through the establishment of stable business relationships with a diversified number of buyers. Furthermore, it could be minimized through the identification of alternative marketing channels that could be accessible when contracts, agreements or relationships are discontinued. In post-harvest chain, in perishable products, additional uncertainties have to be handled because of vulnerabilities in market supply and prices influenced by climate conditions/diseases or other disasters, such as consumers´ behavior, among others.

Examples of positive conditions and practices that fulfill this objective:

» The actions and mechanisms implemented have targeted a diversified income structure with at least three or more buyers, where no buyer is responsible for a substantial part of the annual income obtained from the products sold.

» The actions and mechanisms implemented have targeted a consolidated income structure where buyers have maintained a business relationship for at least more than a year, with written contracts or agreements.

» The actions and mechanisms implemented allow the enterprise accessing alternative marketing channels in case contracts, agreements or business relationships are discontinued.

» Since the implementation of such actions and mechanisms, there has been no records of related financial loses, as all products or goods have been sold.

Unacceptable conditions in relation to this objective;

» One buyer is responsible for 100 percent of the annual income obtained from the products sold.

» The income structure of the enterprise is made of one or two buyers only.

» No actions and mechanisms have been implemented to enhance a diversified and consolidated income structure.

» There are no written records regarding the sales agreement, or the purchase order from the buyer.

» There are records of financial losses, as the enterprise hasn't been able to sell the products or goods at the appropriate time, and it has kept a large and unnecessary level of inventory, when applicable.

Example or Default Indicator

■ **C 2.3.1 Stability of Market**

Which actions and mechanisms has the enterprise put in place to ensure a diversified and consolidated income structure from product sales or from the services provided?

Sub-theme C2.4 Liquidity

Sub-theme objective

Financial liquidity, access to credits and insurance (formal and informal) against economic, environmental and social risk enable the enterprise to withstand shortfalls in payment.

Description

The ability to sustain appropriate levels of financial liquidity against economic, environmental and social risks is critical for a sustainable enterprise. Net cash flow measures the liquidity level of the enterprise by calculating the net cash flow that results from different activities that the enterprise implements, including for instance, the disposal of a credit line. Safety nets – which could be programmes, institutions, networks, social relationships and mechanisms - support the enterprise to withstand any individual of systemic shock. The need to access safety nets is critical, especially in periods of crises, when for instance, the enterprise faces a lack of cash-flow and is not able to meet its short-term financial obligations (e.g. payment of loans, payment of salaries, purchase of inputs, seeds). Safety nets can be classified as formal and informal. Formal safety nets are those which legally guarantee the enterprise access to financial, economic or social support (i.e. banks, micro-credit institutions, public social programmes, government transfers of food or cash). Informal safety nets provide likelihood of support to the enterprise to cope with the risk and vulnerable situation it is facing, but with no legal guarantee (i.e. family, friends, community groups and non-governmental institutions).

Examples of positive conditions and practices that fulfill this objective:

» Assessing a company's comprehensive free cash flow ratio; although there is no performance-tier system based on an exact percentage, the higher the ratio the better.

» Net cash flow is above 0 (positive). The organization should record positive year-over-year, or season over season, net cash flow. Short-term negative cash flow is accepted only if the enterprise has set-up precautionary measures, like a bridge loan, which will help it survive unexpected cash shortfall situations.

» The enterprise's safety net includes a sufficient number of financing sources that maintain its capital flow.
» The risk analysis of the enterprise does not recognized financial liquidity as a major risk.

Unacceptable conditions in relation to this objective:

» Net cash flow is negative for each year, or season, of the period. Negative cash flow balances put an enterprise at risk of becoming insolvent and cease to exist. While planning to invest in new plant and equipment, the enterprise needs to ensure that the investment will pay-off and generate a positive net present value.
» The financing is maintained from one source, with no alternative back-up financing solutions.
» Financial liquidity is a major risk faced by the enterprise.

Example or Default Indicators

■ **C 2.4.1 Net Cash Flow**

Has the enterprise generated a positive net cash flow in the last five years?

■ **C 2.4.2 Safety Nets**

Does the enterprise have access to formal or informal financial sources to withstand liquidity crises?

Sub-theme C2.5 Risk management

Sub-theme objective

Strategies are in place to manage and mitigate the internal and external risks (i.e. price, production, market, credit, workforce, social, environmental) that the enterprise could face to withstand their negative impact.

Description

Risks that the enterprise could be exposed to include: price, production, market and credit risk, unstable employment relations, unavailability of workforce, conflicts

with the community and other stakeholders, natural disasters, diseases and climate change. Internal risks are those that the enterprise can have more control on within the scope of the business (e.g. accidents at the workplace). External risks are those risks that the enterprise does not have any control on (e.g. heavy rains). There are a number of strategies that can be adopted to manage risks with the development of a risk adaptation and mitigation plan being a common one. This is a structured set of actions and mechanisms to implement to prevent, manage and reduce the extent to which the enterprise is exposed to internal and external risks and likelihood of occurrence, and to minimize possible negative impacts.

Examples of positive conditions and practices that fulfill this objective:

» A set of actions and mechanisms has been implemented to adapt and/or reduce the possible negative impact of all internal and external risks that could potentially threaten the enterprise's business.

» Records that present how the enterprise has reduced the likelihood of occurrence of certain risks, the level of exposure to them and their potential negative impact.

Unacceptable conditions in relation to this objective:

» The enterprise has not evaluated which internal and external risks could potentially threaten its business.

» The enterprise has not implemented any action and mechanism to adapt and/or reduce the possible negative impact of any internal or external risk that could potentially threaten the enterprise's business.

Example or Default Indicator

C 2.5.1 Risk Management

Does the enterprise have a plan to reduce and ready itself against risks that could potentially threaten the business?

THEME C3 – PRODUCT QUALITY AND INFORMATION

Definition of the Theme

Product quality is "the totality of features and characteristics of a product that bear on its ability to satisfy stated or implied needs."(ISO). Sub-themes included are: Food Safety; Food Quality; and Product Information.

Relevance of the Theme to sustainability

All people have the right to expect the products they consume, in particular their food, to be safe and suitable for consumption (FAO/WHO, 2003a). Likewise, producers, processors, retailers and consumers have a right to be informed by their suppliers about all attributes of a product relevant for its utilization. As value chains have become more complex, the number of opportunities for contamination and other quality loss has increased, together with deception concerning origins and quality.

Food can easily be contaminated, for example, through environmental pollution of air, water and soils, the intentional use of chemicals such as pesticides and animal drugs (Campbell, 1992), microbiological contamination and spoilage. Contaminants may also be present in food as a result of the production, manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food (CAC, 2011). Food quality and safety can be achieved through management systems that are built on good agricultural and manufacturing practices. In addition, systematic preventive approaches such as Hazard Analysis and Critical Control Points (HACCP), controlling the flow of food ingredients and products along the entire food chain, as well as traceability contribute to food safety and quality.

The growing number of food safety problems and consumer concerns has prompted governments all over the world to intensify their efforts to improve food safety (WHO, 2007). Traceability systems are also on the rise, especially for certain food products (e.g. meat and livestock products) and consumer demand has driven certification systems that provide guarantee on quality claims.

C3 PRODUCT QUALITY AND INFORMATION

Theme Goal

Any contamination of produce with potentially harmful substances is avoided, and nutritional quality and traceability of all produce are clearly stated.

Sub-theme C3.1 Food Safety

Sub-theme objective

Food hazards are systematically controlled and any contamination of food with potentially harmful substances is avoided.

Description

A food safety hazard is a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect. Some examples are: improper use of agricultural chemicals (i.e. insecticides, fungicides, herbicides, fertilizers), metal and rock fragments, the appearance of virus, bacteria and parasites and the use of some genetically-modified organisms that have been proven to be harmful. The management of food safety risks includes awareness of, and management of, control measures, or the actions that the enterprise can take to reduce the potential of exposure to food hazards, or to reduce the likelihood of the risk of exposure to the hazards being realized. Chemical substances or biological agents used to prevent, destroy, attract, repel, mitigate or control any pest (such as insects, plants pathogens, weeds, fungi or other microorganisms as bacteria and viruses) are classified as moderate, hazardous and highly hazardous pesticides. The category of Highly Hazardous Pesticides include: endocrine disruptors pesticides, immune toxic pesticides, pesticides using hazardous nanomaterials, genotoxic pesticides and environmental toxic pesticides (bee toxicity). Pesticides can cause severe or irreversible harm to health or the environment under conditions of use. An enterprise is responsible for ensuring a healthy and safe environment for its employees, as well as preventing any health and environmental damage in the society from exposure to these pesticides. There are cases in which adulteration of food has been reported due to negligence, accident, or involuntary misconduct

of the enterprise. In these cases, food products that have been distributed and consumed are spoiled or infected because they either contain microorganisms (such as bacteria or parasites), or toxic substances that make them unsuitable for consumption. The occurrence of food contamination could have severe negative impacts on consumers' health. Recurrent incidents of food contamination caused by the enterprise's products and goods could also affect buyers' and consumers' confidence and influence their buying decision.

- **Examples of positive conditions and practices that fulfill this objective:**
  - » Control mechanisms are in effective operation that fully comply with correspondent regulations to prevent and control food hazards and food contamination.
  - » The enterprise has adopted best agricultural and manufacturing practices to prevent and control food contamination, based on the correspondent health and safety regulations.
  - » The enterprise employees are informed and trained and have access to the equipment required to ensure food safety and prevent any contamination incidents.
  - » The enterprise has a policy (extended to the suppliers, when applicable) that prohibits the use of synthetic pesticides in all the stages of the food chain OR the enterprise policy is to use organic and natural pest control, when appropriate.

- **Unacceptable conditions in relation to this objective:**
  - » There are no mechanisms in place to prevent and control neither food hazards, nor food contamination OR there is lack of a written procedure clearly describing actions in case of food safety event, responsibilities, communication and withdrawal procedures.
  - » There are records of food contamination (chemical and biological) incidents from the enterprise products in the last five years OR there is an increasing trend of number of food contamination incidents reported during the period.
  - » There are records of contamination and toxic effects to human health and the environment during the last five year attributed to the enterprise OR there are records that the enterprise has used Highly Hazardous Pesticides during the last five years.

Example or Default Indicators

- **C 3.1.1 Control Measures**

  Does the enterprise have food hazards and safety control measures in place that comply with correspondent and applicable regulations?

- **C 3.1.2 Hazardous Pesticides**

  Have any of the employees handled, stored or used any highly hazardous pesticides during the last five years?

- **C 3.1.3 Food Contamination**

  Were there any documented incidents where pesticide residues, in ingredients or products, have exceeded the maximum allowed limits during the last 5 years, or were there any other documented incidents of chemical or biological food contamination (e.g. due to the use of heavy metals, unapproved GMOs, mycotoxins) during the last five years?

Sub-theme C3.2 Food Quality

Sub-theme objective

The quality of food products meets the highest nutritional standards applicable to the respective type of product.

Description

"Quality standards" refers to the set of rules defined to guarantee food quality and to meet the highest nutritional standards respective to the type of product. Quality standards are also important for forest products, including wood products and non-wood products. Food standards are a body of rules or legislation defining certain criteria, such as composition, appearance, freshness, source, sanitation, purity, which food must fulfill to be suitable for distribution or sale. The enterprise implements quality control measures to ensure that the expected level of quality of the product and nutritional standards are met. Product quality is an important component to leverage the enterprise's market positioning and growth. Its competitive advantage lays predominately in two main factors: quality of the

product and its price. Achieving high quality levels and the highest nutritional standards might benefit considerably the enterprise's business growth. Even though each product might require meeting specific nutritional standards, there are some that might be recommended across the food chain, for instance: level of calories based on the ranges defined by the Dietary Reference Intakes (DRIs), low content of saturated and trans fat, no added sugar, low content of additives, rich in fiber, minerals, vitamins and proteins. The national departments or ministries of health, education or agriculture tend to define and recommend specific nutritional standards for each product that the enterprise should know to ensure its compliance. Even though respecting pesticides maximum residues limits is considered safe in food, food quality is enhanced when such residues are minimal or absent, such as in organic food.

Examples of positive conditions and practices that fulfill this objective:

» 100 percent of the volume of production has successfully passed the quality control that measures the required and highest nutritional standards the product needs to meet.

» Wood and non-wood products meet accepted quality standards.

» The enterprise staff is informed and trained in adopting the best practices to meet the expected food quality levels and the highest nutritional standards.

Unacceptable conditions in relation to this objective:

» Any amount of the production has not passed the quality control that measures the required nutritional standards the product needs to meet.

» The enterprise has not implemented any step towards adopting best practices to produce food products that meet the highest nutritional standards and food quality levels.

Example or Default Indicator

■ **C 3.2.1 Food Quality**

What share of the total volume of production complies with the required quality norms and standards?

Sub-theme C3.3 Product Information

Sub-theme objective

Products bear complete information that is correct, by no means misleading and accessible for consumers and all members of the food chain.

Description

Product labeling is an essential part of transparent accountability to customers and ultimately, consumers. Information usually provides details on the content and composition of products but also particular aspect of the product, such as its origin and its production method. Labeling and claims vary from nutritional, ethical (e.g. fair trade) and production process (e.g. integrated production, biodynamic) characteristics and can include the mundane, such as whether the food is the result of genetic engineering (e.g. GMO-free) or specific consideration to wildlife (e.g. dolphin-free tuna, bird-friendly coffee). Increasingly, mechanisms and procedures ensure traceability over all stages of the food chain, so that products can be easily and correctly identified and, if need be, recalled. Traceability systems improve management of risks related to food safety and guarantees products' authenticity where specific claims are made (e.g. organic), thus giving reliable information to customers. Certified sustainable production enables an enterprise to assure its customers of the sustainability of the entire supply chain (i.e. production, storage, processing, transportation, marketing). It is a growing field and is gaining credibility, as very large and powerful enterprises are subscribing to it.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise fully complies with all relevant legally required labeling codes for its products. It seeks to go beyond minimum standards in providing consumer information, is responsive to its stakeholders and has an accessible system whereby consumers and other stakeholders can obtain further product quality and safety information.

» 100 percent of the total volume of production for the last year can be identified, followed and recalled along the food chain through a traceability system OR

the enterprise has established a traceability system that covers all the products produced, covering all the stages of the food chain.

» The enterprise keeps a procurement record which identifies the certification status for all procurement, distribution and production.

» The enterprise is able to provide evidence of assessments for any non-certifiable procurement, distribution or production and this assessment details the problem, reason for the decision, plan to remedy and date for review.

Unacceptable conditions in relation to this objective:

» The enterprise has not complied with labeling codes and has sought to avoid the impact of these codes or products are knowingly or regularly incorrectly labeled.

» Zero percent of the total volume of production has a traceability system in place or the enterprise has not advanced in designing and adopting a traceability system.

» The enterprise has no records of certification of its procurement, distribution or production or the records of certified procurement, distribution or production are not independently verified or are self-awarded.

Example or Default Indicators

C 3.3.1 Product Labelling

Are applicable product labeling codes fully complied with, and can the enterprise show evidence of exceeding these standards wherever possible?

C 3.3.2 Traceability System

Does the system ensure traceability over all stages of the food chain, so that products can be easily and correctly identified and if need be, recalled?

C3.3.3 Certified Production

Can the enterprise identify all ingredients and inputs used in its enterprise and can it provide evidence of certified sustainable sourcing?

THEME C4 – LOCAL ECONOMY

Definition of the Theme

Local Economy in SAFA is considered from the perspective of the enterprise and the contributions that the enterprise makes to local economic development. Sub-themes included are: Value Creation; and Local Procurement.

Relevance of the Theme to sustainability

In a sustainable economy, the region is not only a place to work, but one where incomes are also spent and invested and where taxes are paid. Local Economic Development (LED) is a process in which all sectors work together to stimulate local commercial activity. It has been considered a cornerstone of sustainable development (UN Habitat, 2009). A sustainable local economy is diversified and does not simply shift the costs of maintaining its good health onto other regions. LED can thus reduce environmental pressures related to transportation of goods over large distances (Norberg-Hodge and Gorelick, 2002). It adds as much value as possible in the region, rather than just exporting raw materials.

LED should foster employment, infrastructural development, as well as a high quality of life (OECD, 2010). Beyond economic growth, it is about providing opportunities for all to obtain decent work at the local level. It can contribute to a region's becoming more resilient to turbulence in the global economy. Rather than opposing globalization, LED strategies aim at strengthening local economies such that they benefit from the exchange with other regions, rather than becoming overly fragile and losing their functionality.

In rural areas, farming substantially contributes to LED through value and job creation and the creation and maintenance of infrastructure (FOAG, 2009). This is particularly relevant for a sustainable development of these areas, as over the last 50 years, 800 million people have moved from rural areas to cities and to foreign countries (IFAD/FAO, 2008). This development often goes along with a "brain drain", that is a loss of competent, innovative workforce who could otherwise play a positive role for the sustainable development of the region. The lack of investment in agriculture and rural areas, not only by private investors, but also by governments, is among the principal causes of rural poverty and migration into cities (IFAD, 2007). This lack of investment has been identified as an underlying cause of the recent food crisis and of the difficulties developing countries encountered in dealing with it. Thus, enterprises in the food and agriculture sector are in a particularly good position to contribute to local economic development in those areas where local value creation is needed the most.

C4 LOCAL ECONOMY

Theme Goal

Through production, employment, procurement, marketing and investments in infrastructure, the enterprise contributes to sustainable local value creation.

Sub-theme C4.1 Value Creation

Sub-theme objective

Enterprises benefit local economies through employment and through payment of local taxes.

Description

Enterprise can support the creation of value in a local economy through employment opportunities and fiscal contributions. The employees the enterprise hires that come from the community, municipality or region where operations are based create a regional workforce. The contribution of the enterprise to the local economy through the employment of local professionals and technicians is a significant component of sustainable development, and might benefit the long-term business viability of the enterprise. Fiscal commitment refers to the enterprise disposition to make effective its responsibility and obligation as a tax contributor by paying the local taxes for which it is eligible. The contribution of the enterprise to the local economy, by paying its correspondent taxes at the appropriate time, is a significant component of sustainable development

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has a human resources policy that prioritizes hiring regional employees when similar skills, profile and conditions are offered in relation to other candidates.

» The enterprise has hired regional employees during the last 5 years in all the cases that similar skills, profile and conditions have been offered to perform adequately the required duties and responsibilities.

» The enterprise has paid all the local taxes that are applicable and due in all countries of operation.

Unacceptable conditions in relation to this objective:

» The enterprise has hired during the last 5 years in all applicable cases non-regional or external candidates when regional candidates offer similar skills, profile and conditions.

» The enterprise has not paid any local taxes that are applicable and due in all countries of operation.

Example or Default Indicators

■ **C 4.1.1 Regional Workforce**

Has the enterprise prioritized hiring regional candidates during the last five years when considering other candidates with similar skills, profile and conditions?

■ **C 4.1.2 Fiscal Commitment**

Does the enterprise pay the applicable taxes as indicated by local regulations?

Sub-theme C4.2 Local Procurement

Sub-theme objective

Enterprises substantially benefit local economies through procurement from local suppliers.

Description

Local Procurement refers to the commitment and effective accomplishment of the enterprise to benefit local economies through procurement from local suppliers. Procurement from local suppliers contributes to make the economy more dynamic. Supply chain stakeholders grow and could generate value through employment, investment in the community and skills development. Instead of buying its inputs supplies from overseas, the enterprise could establish business relationships with local suppliers and integrating them in the supply chain. By doing so, the enterprise could have significant benefits also, such as influencing the quality of the inputs, supporting the productivity and cost-efficiency of its suppliers through the provision of training, technology or financial resources, and the possibility to have regular and personal communication for mutual benefit.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has developed and applied a procurement policy that prioritizes the purchase of inputs, products and ingredients from local suppliers.

» In 100 percent of the cases where local suppliers can provide the required inputs to the enterprise, under equal of similar conditions in comparison to non-local, the enterprise has selected local suppliers.

Unacceptable conditions in relation to this objective:

» In most cases where local suppliers can provide the required inputs to the enterprise, under equal of similar conditions in comparison to non-local, the enterprise has selected non-local suppliers.

Example or Default Indicator

■ **C 4.2.1 Local Procurement**

Has the enterprise procured from local suppliers when equal or similar conditions apply in comparison to non-local suppliers?

SOCIAL WELL-BEING

Social sustainability is about the satisfaction of basic human needs and the provision of the right and the freedom to satisfy one's aspirations for a better life (WCED, 1987). This applies as long as the fulfilment of one's needs does not compromise the ability of others, or of future generations, to do the same. In SAFA, social well-being covers the following themes: Decent Livelihood; Fair Trading Practices; Labour Rights; Equity; Human Health and Safety; and Cultural Diversity.

Basic human needs and rights are defined in the International Bill of Human Rights,

SOCIAL WELL-BEING				
DECENT LIVELIHOOD	Quality of Life	Capacity Development	Fair Access to Means of Production	
FAIR TRADING PRACTICES	Responsible Buyers	Rights of Suppliers		
LABOUR RIGHTS	Employment Relations	Forced Labour	Child Labour	Freedom of Association and Right to Bargaining
EQUITY	Non Discrimination	Gender Equality	Support to Vulnerable People	
HUMAN SAFETY & HEALTH	Workplace Safety and Health Provisions	Public Health		
CULTURAL DIVERSITY	Indigenous Knowledge	Food Sovereignty		

which consists of the Universal Declaration of Human Rights (UN, 1948), the International Covenant on Civil and Political Rights (UN, 1966a) and the International Covenant on Economic, Social and Cultural Rights (UN, 1966b). For the food and agriculture sector, Human Rights are translated into the Right to Adequate Food (FAO, 2004). Human Rights are further specified for work environments in the Declaration of Fundamental Principles and Rights at Work (ILO, 1998).

Guidance on how to protect and respect human rights in business operations is provided

by the "UN Protect, respect and remedy framework for Business and Human Rights". Business enterprises are responsible of respecting human rights, both in their own business activities and where human rights impacts are "directly linked to their operations, products and services by their business relationships" (UNHRC, 2011).

International norms and certification standards widely integrate the concepts and principles of these conventions and declarations. In SAFA, the contribution of the assessed entity to the fulfilment of human needs is at the centre of the social sustainability dimension.

THEME S1 - DECENT LIVELIHOOD

Definition of the Theme

Decent Livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living that meets the basic needs to maintain a safe, decent standard of living within the community and have the ability to save for future needs and goals. Sub-themes included are: Right to Quality of Life; Capacity Development; and Rights of Fair Access to Land and Means of Production.

Relevance of the Theme to sustainability

The Universal Declaration of Human Rights asserts that "everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control" (UN, 1948). Livelihood concepts, as reviewed by Hussein (2002), adopt a broader focus than just the material basis of living. According to Chambers and Conway (1991), a livelihood comprises the capabilities, assets and activities required for a means of living. It is sustainable when it can withstand and recover from stresses and shocks and maintain or improve its capabilities or assets, without undermining the natural resource base.

An adequate standard of living is out of the reach for billions of people around the world, particularly for rural populations in developing countries, for masses of people who have been dislocated from their homelands by economic pressures or environmental crises, and for vulnerable groups such as women and children. Some 1.4 billion people lived in extreme poverty (in 2005) and more than 2.6 billion people lacked access to improved sanitation. Food security is no reality for 875 million people. Analysis of the current situation shows a degradation of livelihoods in many places around the world. Indeed, over-exploitation of natural resources impairs people's capabilities to cope with stresses and shocks and economic crisis, resulting in significant job and land losses add pressures on livelihoods.

The food and agriculture system plays a pivotal role to provide sustainable livelihoods, as it can provide employment and create value for particularly vulnerable people. For small-scale producers and family farms in general, the sustainability of the enterprise and that of the family's livelihood are intertwined, and one cannot be achieved in isolation from the other.

S1 DECENT LIVELIHOOD

Theme Goal

The enterprise provides assets, capabilities and activities that increase the livelihood security of all personnel and the local community in which it operates.

Sub-theme S1.1 Quality of Life

Sub-theme objective

All producers and employees in enterprises of all scales enjoy a livelihood that provides a culturally appropriate and nutritionally adequate diet and allows time for family, rest and culture.

Description

Producers and employees in enterprises of all scales have the right to a quality of life that affords time to spend with family and for recreation, adequate rest from work, overtime that is voluntary and educational opportunity for themselves and their immediate families. In addition, quality of life means that they have the time to produce or procure and prepare healthy meals for themselves and their families that include fresh produce and a culturally appropriate diet. Quality of life furthermore implies the flourishing of culture, and the ability of all to participate in the collective way of life built over generations by an identified group or society. Defining features of a culture include different combinations of the following: language, religion and ethnicity. Culture may be expressed in diets, clothing, philosophy, arts, music, architecture, agriculture, business structures, governance structures, celebrations, rituals and other social interactions and customs. What constitutes a good quality of life however is subjective and relative, and is difficult to quantify in one measurement.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise stakeholders (i.e. primary producers, enterprises and all employees and their families) report that they live free from oppression, in peace, security and mental and physical health with adequate time for personal and family needs.

» 100 percent of employees and personnel involved in the enterprise are paid a living wage.

Unacceptable conditions in relation to this objective:

» The enterprise prevents primary producers or employed workers from speaking their native language, practicing their chosen rituals and religion, enjoying a culturally appropriate diet, with adequate shelter, living with time for family life and culture, free from anxiety or with the constant need for exhausting underpaid labor.

» Overtime is compulsory and not fully compensated.

» Employees are paid below the poverty rate for the region, or below the prevailing average rate the industry.

» Employees are paid by piece-rate at a wage that requires more than standard work-week hours or encourages unhealthy conditions to reach a living wage.

» Docking of pay or withholdings by the employer for punishment purposes.

Example or Default Indicators

- **S 1.1.1 Right to Quality of Life**

  Do all producers and employees in enterprises of all scales have time for family, rest and culture, and the ability to care for their needs, such as maintaining adequate diets?

- **S. 1.1.2 Wage Level**

  Do all primary producers who supply enterprises and all employees earn at least a living wage?

Sub-theme S1.2 Capacity Development

Sub-theme objective

Through training and education, all primary producers and personnel have opportunities to acquire the skills and knowledge necessary to undertake current and future tasks required by the enterprise, as well as the resources to provide for further training and education for themselves and members of their families.

Description

For enterprises to be sustainable, they must provide conditions for stable employment, internal advancement, capacity development and growth for employees. Employees who are learning and growing and feel that they have a promising career path are more likely to do their best work and contribute to the improvement of the enterprise. Similarly, producers have the right to adequate resources so that they can increase their own skills and knowledge, and assure the future of their enterprise by providing opportunities for learning and training for members of their family, community or tribe. It should be noted that large operations have more opportunity for advancement for their employees; however, even small-scale operations with a very small number of seasonal employees may be able to provide educational or training opportunities for them.

Examples of positive conditions and practices that fulfill this objective:

» Small-scale producers network to identify best practices with neighbors and other farmers in the region, seek and attend trainings from extension agents or local non-profits on improved practices.

» Primary producers recruit apprentices, or interested family members, to ensure that the next generation of farm management is ready when the time comes.

» Enterprises enable producers and workers to attend training, conferences, or other learning and networking events, with a view to introducing improved management and techniques that are more productive and efficient, more environmentally sound and innovative and more profitable.

Unacceptable conditions in relation to this objective:

» Employers hire from outside their enterprise when they want new skills or greater capacity and do not give their own workers the chance to advance.

» Primary producers' children seek opportunities elsewhere, as the enterprise fails to adapt and innovate.

» The enterprise discriminates against particular ethnic, gender or racial groupings when selecting candidates for training and advancement.

Example or Default Indicator

- **S 1.2.1 Capacity Development**

  Do primary producers and employees have opportunities to increase skills and knowledge, to advance within the enterprise in which they work or to build the future of their own enterprise?

Sub-theme S1.3 Fair Access to Means of Production

Sub-theme objective

Primary producers have access to the means of production, including equipment, capital and knowledge.

Discussion

Primary producers' rights to access means of production are critical to their ability to build a decent livelihood for themselves and their families. The means of production include knowledge, equipment, and facilities required for the producer to meet the output level necessary to maintain a decent livelihood and cover their costs of production, including paying a living wage to their employees. When primary producers have access to the means of production, they are able to access and implement training or other knowledge transfer regarding the best practices for their operations. They are able to purchase or make equipment and materials that allow for their operation to run efficiently and complete their harvests without facing debt loads that could destabilize their operation.

Examples of positive conditions and practices that fulfill this objective:

» Access to agricultural extension services that are regular and relevant; conferences, trainings, or events that regularly offer opportunities to gain skills; courses at local or online colleges, foundations, or other programmes to teach best practices and skills; other opportunities that allow the enterprise to regularly update their operations to best practices for efficiency and sustainability.

» Access to necessary equipment and facilities.

Unacceptable conditions in relation to this objective:

» The enterprise is unable to maintain facilities and/or buildings or equipment are in disrepair.

» Significant post-harvest losses, contamination or other loss of product occur that reduce profits, and would be preventable with better equipment or implementation of best practices.

» The enterprise does not have access through any conduit to further training or knowledge and skill building regarding their operations.

Example or Default Indicator

S 1.3.1 Fair Access to Means of Production

Do primary producers, including indigenous people, have access to the equipment, capital and knowledge or training necessary for decent livelihood?

THEME S2 - FAIR TRADING PRACTICES

Definition of the Theme

Fair Trading Practices in SAFA include both legal and human rights that allow farmers, pastoralists, fishers, craftspeople and other primary producers to have access to markets where fair prices are negotiated, stable, based on true costs, agreements are long-term and where contracts, whether written or verbal, include a process for settling disputes free from retaliation in a mutually agreed manner. Sub-theme included are: Responsible Buyers; and Suppliers' Freedom of Association and Right to Collective Bargaining.

Relevance of the Theme to sustainability

The fair trading practices theme covers the following objectives for primary producers: the freedoms and rights of association, to collective bargaining, to fair choice of buyers and fair competition, to fair prices, and to fair negotiations and fair trading conflict resolution. The buyers' responsibilities are to fully recognize these rights and freedoms and to negotiate in good faith for mutually agreed fair terms and conditions.

While it is widely recognized that respecting the rights of workers and paying them living wages is essential to agricultural sustainability, fair trading practices for primary producers, whether they employ workers or do all the work themselves, is also essential to maintaining the agricultural sustainability of their enterprises for the long term. In cases where primary producers directly hire workers, it is a fundamental prerequisite for workers' rights to be fully achievable. With the globalization of trade, unfair competition and practices have emerged to create a crisis for primary producers in both developing and developed countries. Primary producers are losing their land, driven to the cities by wars, environmental disasters, misguided public policy and economic desperation. The highly concentrated and multinational agricultural buyers often receive governmental supports that distort markets, encouraging pricing schemes that fail to reflect their full costs to society and the environment while also failing to cover the full costs of production for primary producers. Food policies that encourage or reward the undermining of fair trading practices put constant downward pressure on the long-term sustainability of primary producers.

The position on human rights for workers adopted in SAFA - that of the UN 'Protect, respect and remedy' framework, proposed by the Special Representative of the Secretary-General on the issue of Human Rights and transnational corporations and

other business enterprises (UNHRC, 2011) - applies as well for small-scale producers. The 'respect' pillar of the framework addresses business enterprises. They are responsible for respecting human rights wherever their own business activities and those directly linked with their business relationships cause human rights impacts. In some countries and in some jurisdictions, legal support for fair trading exists, but in all too many rural areas around the globe, primary producers face buyers without adequate oversight, or the necessary tools, information or power to negotiate fair terms. Primary producers also bare an inordinate share of the risks posed by climate and environmental disasters, while receiving market terms that are not sustainable or fairly established. By prioritizing fair trading practices, SAFA helps set the groundwork for programmes that encourage and develop collaborative and cooperative relationships among primary producers and between those producers and the people who work for them. Only by recognizing their common interests will producers and their workers have the power to transform the present globalized markets into a just and sustainable food system.

S2 FAIR TRADING PRACTICES

Theme Goal

Fair trading practices provide suppliers and buyers with prices that reflect the true cost of the entire process of sustaining a regenerative ecological system, including support for right livelihood for primary producers, their families and employees.

Sub-theme S2.1 Responsible Buyers

Sub-theme objective

The enterprise ensures that a fair price is established through negotiations with suppliers that allow them to earn and pay their own employees a living wage, and cover their costs of production, as well as maintain a high level of sustainability in their practices. Negotiations and contracts (verbal or written) are transparent, based on equal power, terminated only for just cause, and terms are mutually agreed upon.

Description

For sustained trading relationships to exist, buyers must pay primary producers prices for their products that reflect the real cost of the entire process of sustaining a regenerative ecological system. This further supports a living wage and a right to decent livelihood for primary producers, their families and workers, as well as covering the producer's costs.

Examples of positive conditions and practices that fulfill this objective:

» 100 percent of trade deals with suppliers are based on contracts with buyers that include a conflict resolution process for resolving differences and agreement that trade relations will not be terminated except for just cause.

Unacceptable conditions in relation to this objective:

» Buyers set prices without consultation with suppliers.
» Buyers make arbitrary changes to a contract without agreement of the supplier.
» Buyers retaliate against suppliers who raise issues or complaints about the terms of trade.
» Buyers terminate trade agreements with suppliers without just cause.

Example or Default Indicator

■ **S 2.1.1 Fair Pricing and Transparent Contracts**

Do buyers through their policies and practices recognize and support suppliers' (particularly primary producers) rights to fair pricing and fair contracts and agreements?

Sub-theme S2.2 Rights of Suppliers

Sub-theme objective

The enterprises negotiating a fair price explicitly recognize and support in good faith suppliers' rights to freedom of association and collective bargaining for all contracts and agreements.

Discussion

Suppliers', particularly primary producers', rights to freedom of association and collective bargaining are basic freedoms that form the necessary basis and prerequisite conditions for fair trading with buyers to be established.

Examples of positive conditions and practices that fulfill this objective:

» Buyers have relationships of trust with 100 percent of their suppliers, based on their rights to freedom of association and collective bargaining.

Unacceptable conditions in relation to this objective:

» A buyer retaliates against suppliers for initiating their rights and freedoms, including canceling of contracts and verbal threats against producers.

» Buyers do not allow producers to share proposed contracts or agreements with family members, or have representative(s) of their choice present during any negotiations and/or seek and retain legal counsel.

» Buyers pit one producer or group of producers against another.

» Buyers retaliate against suppliers who raise issues or complaints about the terms of trade.

Example or Default Indicator

S 2.2.1 Rights of Suppliers

Do buyers explicitly recognize and support suppliers' (particularly primary producers') rights to freedom of association and to collective bargaining?

THEME S3 - LABOUR RIGHTS

Definition of the Theme

Labour Rights refers to the group of legal rights and claimed human rights having to do with labour relations between workers and their employers, usually obtained under labour and employment law. Sub-themes included are: Employment Relations; Forced Labour; Child Labour and Employees' Freedom of Association and Right to Bargaining.

Relevance of the Theme to sustainability

Basic human needs and rights are a framework for human development that has been acclaimed by the vast majority of countries. However, enforcement of international labour standards still represents a major challenge for the food and agriculture sector. Overall, due in particular to its largely informal nature, rural work is seldom covered by national labour legislation, in law and in practice. In some countries and sectors of the economy, human rights violations are a reality, including beatings and violence, the denial of basic freedoms, intimidation and harassment, and even torture and death. The question of how business, particularly multinational enterprises, should deal with human (and thus also labour) rights issues not covered by national law is the subject of intensive debate. The position on the issue adopted in SAFA is that of the UN 'Protect, respect and remedy' framework, proposed by the Special Representative of the Secretary-General on the issue of Human Rights and transnational corporations and other business enterprises (UNHRC, 2011). The 'respect' pillar of the framework addresses business enterprises. They are responsible for respecting human rights wherever their own business activities and those directly linked with their business relationships cause human rights impacts.

Where the principles underlying the international declarations and covenants on human and labour rights have been put into national law, their relevance to the food and agriculture industries is obvious. Many companies in the sector pro-actively recognize their potential to support human rights within their value chains, and also the benefits that arise from doing so. Many international standards and approaches also implemented in the sector address human and labour rights. Human rights and labour rights are also a central issue in the standards of multi-stakeholder commodity roundtables. As labour rights can be a sensitive topic, for example on small-scale and family farms, indicator selection and data collection in the context of SAFA must be done very carefully. For example, it is recommendable to gather evidence from local communities and civil society organizations, including producers' and workers' organizations, as well as from labour inspectors, in

addition to interviewing employees directly. Such mechanisms are particularly important in order to track the respect of main international labour standards in the frame of business relationships established (e.g. sub-contractors).

S3 LABOUR RIGHTS

Theme Goal

The enterprise provides regular employment that is fully compliant with national law and international agreements on contractual arrangements, labour and social security.

Sub-theme S3.1 Employment Relations

Sub-theme objective

Enterprises maintain legally-binding transparent contracts with all employees that are accessible and cover the terms of work and employment is compliant with national laws on labour and social security.

Description

Employment Relations refer to enterprises maintaining legally binding transparent contracts with all employees that are accessible and cover the terms of work. Employment is compliant with national laws on labour and social security. Verbal terms of employment should be discouraged, however they are considered contracts by courts and may be more present with small-scale producers.

Examples of positive conditions and practices that fulfill this objective:

» Enterprises written policies provide legally binding contracts for all employees that meet labour laws and treaties.

Unacceptable conditions in relation to this objective:

» No written contract or terms of employment are provided by the enterprise.

» Contracts do not meet national and international labour laws and treaties.

» Contract terms are not clear to employees.
» Employees (or both employers and employees) are not literate and no provision is made for third party verbal contract terms communications.
» The contract is not made available to employees upon request.

Example or Default Indicator

■ **S 3.1.1 Employment Relations**

Does the enterprise or employees' sub-contractors have written agreements with their employees that at least meet national and international labor treaties including social security, or, for enterprises that are primary producers at least have a clear understanding based on verbal agreement between employer and employees?

Sub-theme S3.2 Forced Labour

Sub-theme objective

The enterprise accepts no forced, bonded or involuntary labour, neither in its own operations nor those of business partners.

Description

While legal slavery has been abolished in the countries where it has been practiced historically, it still exists in many surreptitious and hidden forms. Employers or their hired labour contractors, or crew leaders, keep workers' passports or other documents, thus preventing them from leaving or from protesting against work and living conditions they might find abhorrent. Workers take positions in foreign countries only to discover that the wages or living conditions are not what they were promised and find themselves stranded without the means or language skills necessary to switch to another job or to return home. Unfortunately, there are all too many variations on this theme in workplaces around the world.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise ensures that no forced labor is part of their supply chain through written policies and in practice.

Unacceptable conditions in relation to this objective:

» The enterprise withholds full earned wages for any reason, including until the end of a harvest season or completion of some quota of work.

» The enterprise pressures one spouse to continue working in order to preserve the position of the other spouse, or for other reasons.

» Retaliates by reducing pay or with termination when employees raise important grievances.

» Threatens to turn undocumented worker over to border patrol to force acceptance of low wages or poor working conditions.

» Uses physical or psychological coercion to pressure worker to remain on the job or to accept low wages or poor or dangerous working conditions.

Example or Default Indicator

- **S 3.2.1 Forced Labour**

  Does the enterprise or employees' sub-contractors employ people who are not free to quit or who cannot raise grievances without fear of retaliation?

Sub-theme S3.3 Child Labour

Sub-theme objective

The enterprise accepts no child labour that has a potential to harm the physical or mental health or hinder the education of minors, neither in its own operations nor those of business partners.

Description

Child Labour refers to work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development. Whether child labourers work on their parents' farms, are hired to work on the farms or plantations of others, or accompany their migrant farm-worker parents, the hazards and levels of risk they face can be worse than those for adult workers. Whether or not particular forms of "work" can be called "child labour" depends on the child's age, the type and hours of work performed, the conditions under which it is

performed and the objectives pursued by individual countries. The answer varies from country to country, as well as among sectors within countries (ILO Convention 182). Not all work done by children should be classified as child labour that is to be targeted for elimination. Children's or adolescents' participation in work that does not affect their health and personal development or interfere with their schooling is generally regarded as being something positive. This includes activities such as helping their parents around the home or family garden, assisting in a family business or earning pocket money outside school hours and during school holidays. These kinds of activities contribute to children's development and to the welfare of their families; they provide them with skills and experience, and help to prepare them to be productive members of society during their adult life.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has no employees under the age of 16 that are regularly employed in a way that would interfere with their rights.

Unacceptable conditions in relation to this objective:

» The enterprise hires workers for full-time positions who are under the age of 16.

» The enterprise does not verify the practices of business partners, subsidiaries, input suppliers or sub-contractors to make sure that no minors are employed full time or that children are employed even part time in dangerous work.

» The enterprise assigns jobs to minors that are dangerous to them physically, mentally or morally.

Example or Default Indicator

S 3.3.1 Child Labour

Does the enterprise, or its subsidiaries or sub-contractors, employ minor children, 16 years of age or younger, who are working full time or more, engaged in jobs that are dangerous to them physically, mentally or morally, and who are deprived of the opportunity to live as children, to attend school and/or other appropriate training?

Sub-theme S3.4 Freedom of Association and Right to Bargaining

Sub-theme objective

All persons in the enterprise can freely execute the rights to: negotiate the terms of their employment individually or as a group; form or adhere to an association defending workers' rights; and collectively bargain, without retribution.

Description

Employees' rights to freedom of association and collective bargaining are basic employee freedoms that form the necessary basis and prerequisite conditions for employment to flourish into the future.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise facilitates the establishments of all workers' rights and provides facilities and training on legal rights for all employees.

Unacceptable conditions in relation to this objective:

» The enterprise places restrictions on transparency and negotiations.

» The enterprise retaliates against employees for initiating the rights and freedoms, including cancelling of contracts/subcontracts and verbal threats against labour.

» The enterprise refuses to allow employees to have representative of their choice present during any negotiations or fails to allow employees to share proposed contracts or agreements with family members and/or seek and retain legal counsel.

» Makes arbitrary changes to contract without agreement of employees.

» Pits one employee or group of employees against another.

Example or Default Indicator

S 3.4.1 Freedom of Association and Right to Bargaining

Are the employees in an enterprise free to negotiate, as individuals or as groups, or through a union or representatives of their choosing to set the terms of their employment?

THEME S4 - EQUITY

Definition of the Theme

Equity involves the degree of fairness and inclusiveness with which resources are distributed, opportunities afforded and decisions made. Sub-themes included are: Non-discrimination; Gender Equality; and Support to Vulnerable People.

Relevance of the Theme to sustainability

Social equity is one of the principal values underlying sustainable development, with all people and their quality of life being recognized as a central issue. Equity involves the degree of fairness and inclusiveness with which resources are distributed, opportunities afforded and decisions made. It includes the provision of comparable opportunities of employment and social services, including education, health and justice. Significant issues related to its achievement include the distribution of productive resources and employment, gender and ethnic inclusiveness, and inter-generational opportunity.

As discrimination against women prevails in many places, gender equality is particularly important. Substantially more women live in poverty (829 million) than men (522 million). There is increased recognition of crucial links between poverty eradication, employment and equality (ILO, 2011). Poverty eradication programmes that focus on general income levels only (e.g. by providing income support) frequently miss the underlying causes of vulnerability. For example, schooling levels among poor children can be raised through spending on education, but future income will not increase without policies that effectively address causes of economic vulnerability, such as ethnic, racial and gender discrimination (UN, 2010). In agriculture, forestry and fisheries, government aid and training programmes must extend to women producers, as well as men. For example, situations where the man of the family takes over land for market crop production that the wife is using for family subsistence should be avoided.

In a business context, implementing the equity concept means that any discrimination of persons or groups on the basis of whatever characteristics must be avoided. This requirement applies to hiring, promotion, job assignment, termination, compensation, working conditions and even harassment, and it pertains to direct as well as indirect forms of discrimination (ILO, 2011). Enterprises are confronted with equity aspects also in their relations with suppliers, contractors, consumers or share-holders. Equity in business relations is a principal pillar of good corporate governance.

In the agriculture and food sector, vulnerable and precarious working conditions are particularly prevalent. The sector employs large numbers of non-salaried family members, in particular women, of workers that have not benefited from professional training, and of seasonal workers, many of them foreigners at the location where they work. The provision of these types of work should firstly be recognized as a substantial benefit of the sector to society. Furthermore, it implies a need and responsibility to pay particular attention to equity at work, on family farms, in the household and in the apportionment of resources between cash crops and subsistence.

S4 EQUITY

Theme Goal

The enterprise pursues a strict equity and non-discrimination policy and pro-actively supports vulnerable groups.

Sub-theme S4.1 Non-Discrimination

Sub-theme objective

A strict equity and non-discrimination policy is pursued towards all stakeholders; non-discrimination and equal opportunities are explicitly mentioned in enterprise hiring policies, employee or personnel policies (whether written or verbal or code of conduct) and adequate means for implementation and evaluation are in place.

Description

Sustainable enterprises do not discriminate against any employee or prospective employee based on race, creed, colour, national or ethnic origin, gender, age, handicap or disability (including HIV status), union or political activity, immigration status, citizenship status, marital status, or sexual orientation in hiring, job allocation, training, advancement, lay-offs or firing.

Examples of positive conditions and practices that fulfill this objective:

» Enterprises have clear policies of non-discrimination and apply those policies consistently to all employees and in all dealings with suppliers.

Unacceptable conditions in relation to this objective:

» As employers, enterprises give preference to one ethnic or racial group over others in hiring, placement, training and advancement.

» As buyers, enterprises give preference to one ethnic or racial group over others in awarding contracts.

» Enterprises pit one ethnic or racial group against another to drive down prices or conditions of work.

Example or Default Indicator

S 4.1.1 Non Discrimination

Does the enterprise discriminate against any employee or prospective employee based on race, creed, colour, national or ethnic origin, gender, age, handicap or disability (including HIV status), union or political activity, immigration status, citizenship status, marital status, or sexual orientation in hiring, job allocation, promotions and firing or in awarding contracts to primary producers for supplies?

Sub-theme S4.2 Gender Equality

Sub-theme objective

There is no gender disparity concerning hiring, remuneration, access to resources, education and career opportunities.

Description

This objective intends to ensure that barriers to the employment of women on an equal basis with men are removed, that women receive equal pay for the same or similar work, and have equal opportunities for training and advancement. In addition, there are special protections for women employees before, during and after pregnancy. Medical benefits are provided for the woman and her child in accordance with national laws and regulations, or in any other manner consistent with national practice. Finally, women are protected in their employment and are guaranteed the right to return to the same position, or an equivalent position, paid at the same rate at the end of her maternity leave.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has no discrimination against women in hiring, remuneration, training, advancement, access to resources or firing.

Unacceptable conditions in relation to this objective:

» Given equal skills, the enterprise favours men over women in hiring, placement, training, pay and advancement, or any other aspect of the operations.

» As buyers, enterprises give preference or pay higher prices to male primary producers in awarding contracts.

» The enterprises fails to provide for the safety of pregnant women employees, does not provide paid maternity leave, fires women who take time off to have a baby or refuses to allow women to return to their previous position or a position with similar wages when they return from maternity leave, and does not allow women to nurse during working hours.

Example or Default Indicator

S 4.2.1 Gender Equality

Does the enterprise discriminate against women in hiring, remuneration, training and advancement, access to resources or firing?

Sub-theme S4.3 Support to Vulnerable People

Sub-theme objective

Vulnerable groups, such as young or elderly employees, women, the disabled, minorities and socially disadvantaged are proactively supported.

Description

Support to vulnerable people focuses on enterprises providing support and making accommodations for employees and primary producer suppliers at different life stages and differing levels of ability and disability. Enterprises can perform important services by providing targeted recruitment for minorities or the socially disadvantaged and language training for people who do not speak the dominant

language, or have not had the benefit of schooling. In addition, if a worker is injured on the job, he is considered a vulnerable employee and the employer provides alternative work at a comparable wage to accommodate the disability.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise has policies and practices that have effectively accommodated varying levels of ability and disability, young workers and aged ones.

» The enterprise provides resources to the local community to support vulnerable people with social and health services, training including languages and cultural events.

Unacceptable conditions in relation to this objective:

» Enterprise fires workers who have been injured on the job, or fails to provide alternative work that these workers are still capable of performing.

» As a buyer, enterprise fails to award contracts to primary producers from minority or disadvantaged groups.

» Enterprise assigns vulnerable workers (such as young or very old workers) to tasks that involve using toxic materials or dangerous equipment, or schedules them on night shifts.

» Enterprise does not provide jobs for the disabled, but does have the capacity to do so.

» Enterprise does not provide work that is appropriate for elderly employees, but does have the capacity to do so.

» Employer hires only athletic young men and fails to rehire them if they have suffered injuries or become older and slower.

Example or Default Indicator

S 4.3.1 Support to Vulnerable People

Does the enterprise accommodate varying levels of ability and disability, young workers and aged ones and provide resources to the community to support vulnerable people, women, minorities and the disadvantaged, with social and health services, training, and cultural events for women, minorities and the disadvantaged?

THEME S5 – HUMAN SAFETY AND HEALTH

Definition of the Theme

Human Health and Safety is the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations (ILO/WHO). Sub-themes included are: Workplace Safety and Health Provisions for Employees; and Public Health.

Relevance of the Theme to sustainability

Occupational safety and health are of paramount importance for the social sustainability of personnel relations, for enterprises on all scales from the smallest holding to the largest factory or plantation, and for national economies. There is growing evidence that improving healthcare, fighting disease and increasing life expectancy are all essential for supporting economic growth and long-term business success. Neither development nor enterprises can be sustained when a high proportion of the population and the workforce suffer from poor health. A clean environment is important to health and well-being. Protecting and promoting human health requires primary health care – especially in rural areas – controlling communicable diseases and preventing health hazards originating in the working environment and from diets (see Product Safety and Quality).

The health of employees has a direct impact on their productivity at all types of work (Nelson and Prescott, 2008). Worldwide, more than 350 000 work-related fatal accidents and 2 million cases of work-related fatal disease occur each year. The number of non-fatal accidents (causing more than four days absence from work) is estimated to be 1 000 times higher (Al Tuwaijri, 2008). Beside the loss of work performance, the enterprise sustains follow-on expenses for administration, recruitment and efforts for re-integration due to loss of knowledge. The sustainability of the workplace should be improved by considering health and safety concerns in the physical and psycho-social work environment, including the organization of work and workplace culture, as well as personal health resources in the workplace. Furthermore, participation to improve the health of workers' families and other members of the community is desirable (Burton, 2010).

In the food and agriculture sectors, the occupational security and health situation is characterized by specific hazards and risks, with high numbers of incidences (Toscano, 1997; EWCS, 2007). Straining physical work, exposure to harmful substances (e.g. chemicals, pesticides and dust), work with machines, equipment and animals all can cause health problems and even death. Many enterprises in the sector are small and

thus, particularly suffer from absences from work and lack of resources to pay for health services or support. Working hours in the sector are often very long, especially in family enterprises and during the harvesting season, which can be critical for health and safety as well (see Labour Rights).

S5 HUMAN SAFETY AND HEALTH

Theme Goal

The work environment is safe, hygienic and healthy and caters to the satisfaction of human needs, such as clean water, food, accommodation and sanitary installations.

Sub-theme S5.1 Workplace Safety and Health Provisions

Sub-theme objective

The enterprise ensures that the workplace is safe, has met all appropriate regulations, and caters to the satisfaction of human needs in the provision of sanitary facilities, safe and ergonomic work environment, clean water, healthy food, and clean accommodation (if offered).

Description

Providing a safe and healthy workplace for all personnel and employees begins by providing workplace facilities that are clean, adequately ventilated, and that are structurally sound and meet or exceed local building codes, as well as the necessary and safe equipment. Health provisions are either in the form of health insurance, workers compensation, or public health services as provided by local law; in addition, enterprises are prepared for medical emergencies. By providing training in health and safety, enterprises empower employees to understand the possible hazards of the workplace, to have thorough familiarity with the materials and machinery they work with and are exposed to, and to understand the ergonomics of the work, so that injuries from repeated motions, lifting or other physical challenges will be reduced. The type of resourcing will vary however with

some small enterprises that do not have many staff having less formal systems or resources for addressing employee' health issues.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise provides effective training in health and safety for 100 percent of employees, including at least a basic health and safety training for those working on specialized equipment.

» The enterprise ensures a safe, clean and healthy workplace for employees by determining if facilities and structures, equipment, practices, and food offered are safe and meet employee needs for healthy lifestyles.

» The enterprise provides health coverage and ensures emergency access to medical care for employees.

Unacceptable conditions in relation to this objective:

» The enterprise has a higher rate of accidents than industry average.

» Buildings are compromised or unsafe OR sanitation facilities, transportation or housing are filthy and unsafe for employees using them.

» Employees do not follow safety protocols, or none exist, for employees when using toxic materials, hazardous materials or inputs.

» The enterprise does not have emergency plan in place to ensure medical care reaches injured or at-risk employees OR employees report that accidents were not dealt with quickly, and injured employees suffered increased injury as a result.

» Health and safety trainings are not offered on-site or off-site for employees at the recommended level by local authorities or regional agencies.

» The enterprise fails to provide legally required level of health coverage, or fails to provide any form of health coverage.

Example or Default Indicators

S 5.1.1 Safety and Health Training

Does the enterprise provide training in health and safety for 100 percent of employees that are understandable by employees, tailored to their workspace and effective?

- **S 5.1.2 Safety of Workplace, Operations and Facilities**
  Does the enterprise maintain a safe, clean and healthy workplace including all grounds and facilities, and all practices?
- **S 5.1.3 Health Coverage and Access to Medical Care**
  Does the enterprise provide adequate health coverage per legal requirements, and ensure timely access to medical care in emergencies for employees?

Sub-theme S5.2 Public Health

Sub-theme objective

The enterprise ensures that operations and business activities do not limit the healthy and safe lifestyles of the local community and contributes to community health resources and services.

Description

The enterprise should ensure that operations and business activities do not limit the healthy and safe lifestyles of the local community by polluting or contaminating water, air and soils. Furthermore, a larger-scale enterprise makes positive contributions to community health resources and services by providing financial support, while a small-scale producer contributes by selling healthy, clean and locally grown food. Operations of any size can contribute culls and edible excess produce to the local emergency food supply. Smaller enterprises will not have the resources to provide financial support to local health services; nevertheless they can serve as centers of health in and of themselves and set an example for others to emulate.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise takes measures to avoid polluting or contaminating the local community and contributes to the health of the local community.

Unacceptable condition in relation to this objective:

» The enterprise pollutes water, air and soils with toxic materials.

» The enterprise expands without consideration for other area residents and their needs.

Example or SAFA Default Indicator

S 5.2.1 Public Health

Does the enterprise take measures to avoid polluting or contaminating the local community and contribute to the health of the local community?

THEME S6 – CULTURAL DIVERSITY

Definition of the Theme

Cultural identity is composed of ethnicity, language and religion and cultural diversity refers to the innumerable forms taken through the process of acculturation, included but not limited to age, sexual orientation, economic status, spiritual belief and political affiliation. Sub-themes included are: Indigenous Knowledge; and Food Sovereignty.

Relevance of the Theme to sustainability

Cultural diversity is a common heritage of vital importance for humankind. It is a concept that defies simple definition, with different meanings depending on context (De Guzman *et al.,* 2007). The term "culture" relates to combinations of ethnicity, language and religion characteristics. Awareness of cultural diversity has become relatively commonplace, as a result of the globalization of exchanges and the greater receptiveness of many societies to one another (UNESCO, 2008). However, greater awareness alone does not guarantee the preservation of cultural diversity. Awareness and preservation are all the more important, since culture is a determining factor for the relevance, failure and success of development interventions. Cultural diversity is an asset that has been considered indispensable for reducing poverty and achieving a sustainable development. Understanding this diversity is a prerequisite for development interventions (UNESCO, 2008).

Workplace diversity as well is related to cultural diversity. Changing demographics and an increasingly diverse marketplace are urgent reasons for an increased interest in managing diversity at work. Many employers have come to realize that a diverse work force is not a burden, but a potential strength (Henderson, 1994). Companies providing culturally competent workplaces may gain a sustainable advantage over competitors that are less aware and active in this regard. Cultural competence should therefore become a core value of enterprises. Diversity management has become important for many organizations, companies and governments, and valuing diversity is essential for an effective management of human resources (Pitts, 2006).

One – but not the only – aspect of cultural diversity that is very important in the food and agriculture sector, also in economic terms, is the issue of intellectual rights emanating from traditional, indigenous knowledge of species and ecosystems. Rural communities often dispose of a wealth of knowledge and have found ways to use genetic resources that can be commercially utilized to develop food, medicinal and other products. Where

genetic resources and associated traditional knowledge are commercially used, this should take place with the prior informed consent of indigenous and local communities. Benefits resulting from the use of genetic resources rightfully held by indigenous and local communities should be shared with those communities (Nagoya Protocol, 2009). The importance of cultural diversity was recognized in the Universal Declaration on Cultural Diversity, adopted in 2001, which aims to "preserve cultural diversity as a living, and thus renewable, treasure that must not be perceived as being unchanging heritage, but as a process guaranteeing the survival of humanity" (UNESCO, 2001). Concerning indigenous knowledge, the above mentioned Nagoya Protocol, adopted in 2010 at the Conference of Parties to the Convention on Biological Diversity (CBD), contains access and benefit sharing requirements for the utilization of traditional and cultural knowledge.

S6 CULTURAL DIVERSITY

Theme Goal

The enterprise respects the intellectual property rights of indigenous communities and the rights of all stakeholders to choose their lifestyle, production and consumption patterns.

Sub-theme S6.1 Indigenous Knowledge

Sub-theme objective

Intellectual property rights related to traditional and cultural knowledge are protected and recognized.

Description

Intellectual property rights related to traditional and cultural knowledge are protected, and recognized. This category is inclusive of a broad range of cultural knowledge, from art, rituals and indigenous customs in general, to knowledge concerning growing and catching methods, techniques, seeds and their uses, medicinal plants and their uses. Communities concerned are remunerated in a

fair and equitable way, based on mutually agreed upon terms, which explicitly provide for continued access and on-going applications of this knowledge for their communities.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise recognizes and respects the universal rights of indigenous communities to protect their knowledge.

» The enterprise provides remuneration to indigenous communities in a fair and equitable manner, based on mutually agreed upon terms.

» In written policies and in practice, the enterprise meets all national and international laws and treaties concerning indigenous knowledge.

Unacceptable conditions in relation to this objective:

» The enterprise has no written documentation of mutually negotiated terms when indigenous knowledge is being exploited by the enterprise.

» Contracts do not meet national and international laws and treaties.

» Contracts are not available in a language spoken by the peoples involved.

» Enterprises have filed for intellectual property rights over said indigenous knowledge without the permission of the indigenous group involved, or without fair and equitable remuneration.

Example or Default Indicator

S 6.1.1 Indigenous Knowledge

Does the enterprise recognize and respect the universal rights of indigenous communities to protect their knowledge and if appropriated and acquired, has the enterprise remunerated indigenous communities in a fair and equitable manner, based on mutually agreed upon terms?

Sub-theme S6.2 Food Sovereignty

Sub-theme objective

The enterprise contributes to, and benefits from, exercising the right to choice and ownership of their production means, specifically in the preservation and use of traditional, heirloom and locally adapted varieties or breeds.

Description

Based on a renewal of traditional agrarian and indigenous wisdom, Food Sovereignty encompasses the need for a more just, local and sustainable food system that affirms the underlying values of democracy, empowerment and self-determination. Food Sovereignty results in a just, ecologically harmonious and local food and agriculture system, which is derived from the right of peoples and communities to define it themselves. Generally, food sovereignty is discussed at a community level and is considered inclusive of all types of ownership and production models in communities of every ethnicity and variety and both rural and urban. This objective, however, applies to the individual enterprise being assessed and it measures whether the operation has choices between different inputs and raw materials and marketing outlets. Access to choice reflects the independence of the enterprise and the ability of the food chain to have control or ownership over their production and supply system.

Examples of positive conditions and practices that fulfill this objective:

» The enterprise sources locally adapted seed varieties or livestock breeds, or traditional or heirloom varieties for at least a majority of their production.

» The enterprise maximizes purchases from local producers, specifically using heirloom or traditional varieties instead of importing, or buying non-traditional varieties, for at least a majority of their raw material needs.

» The enterprise avoids changes in production or purchasing that would eliminate seed saving, or the use of heirloom, traditional or locally adapted varieties or breeds in their own production or that of their suppliers.

» The enterprise avoids changes in production or purchasing that would limit market access and consumers' freedom to choose.

Unacceptable conditions in relation to this objective:

» The enterprise directly eliminates own or other operations' seed saving, or traditional variety use.

» The enterprise is acting as a buyer, and directly limits the ability to choose the traditional varieties or breeds used.

» The operation is acting as a buyer and negotiates a price that undermines supplier's ability to choose the traditional varieties or breeds used.

» The activities of the enterprise have contributed to contamination or interference with other producers' ability to save seed, or use traditional varieties.

Example or Default Indicator

S 6.2.1 Food Sovereignty

Does the enterprise contribute to the food sovereignty of its region by exercising its ability to preserve and use traditional, heirloom and locally adapted varieties or breeds, as well as supporting others in pursuing this goal?

APPENDICES

Appendix A:
SELECTED SUSTAINABILITY TOOLS

Scope of selected sustainability tools as compared to the SAFA landscape

TOOL TYPE/NAME	STEPS OF THE VALUE CHAIN IMPACTS COVERED			SUSTAINABILITY DIMENSIONS COVERED			
	Production	Processing	Retail	Environment	Economy	Governance	Social
							
FootPrint Calculators							
Cool Farm Tool	x			x			
Water/Carbon/ Biodiversity FootPrint tools (e.g. WRI/WBCSD, TEEB/WWF)	x			x			
Directories (meta level)							
UN International Trade Centre Trade for Sustainable Development (T4SD)	x	x	x	x	x	x	x
Ecolabel Index	x	x	x	x	x		x
International References, Norms and Instruments							
OECD Environmental Indicators	x	x	x	x			
International Labour Organization, Core Conventions	x	x	x				x
System Benchmarking and Rating/Platform							
Global Social Compliance Programme (GSCP) Reference Tools (2011 versions)	x	x	x	x		x	x
People 4 Earth/ AgriPlace	x	x	x	x	x	x	x

TOOL TYPE/NAME	STEPS OF THE VALUE CHAIN IMPACTS COVERED			SUSTAINABILITY DIMENSIONS COVERED			
	Production	Processing	Retail	Environment	Economy	Governance	Social
							
Sustainability Standards Transparency Initiative (GIZ, ITC, ISEAL)	x			x	x	x	x
Sustainability Assessment: Impact							
Committee On Sustainability Assessment (COSA)	x			x	x	x	x
Life Cycle Assessment (ISO 14040, ISO 14044)	x	x	x	x			
Response-Inducing Sustainability Evaluation (RISE, version 2.0)	x			x	x		x
Sustainability Monitoring and Assessment RouTine (SMART). FiBL	x	x	x	x	x	x	x
Sustainability Assessment (self)							
Biodiversity Risk and Opportunity Assessment (BROA) Tool	x			x			
Field to Market. Field Print Calculator	x			x			
People 4 Earth	x			x	x	x	x
SAI Platform Sustainability Performance Assessment (SPA; April 2012 draft)	x			x	x1		(x)
Soil and More Foundation Sustainability Flower Quick Assessment	x			x	x		x
Global Food Safety Initiative (GFSI)	x	x	x	x	x	x	x

TOOL TYPE/NAME	STEPS OF THE VALUE CHAIN IMPACTS COVERED			SUSTAINABILITY DIMENSIONS COVERED			
	Production	Processing	Retail	Environment	Economy	Governance	Social
							
ISO 22000 (for food safety)	x	x	x	x	x	x	
ISO 26000 (for corporate social responsibility)	x	x	x	x	x	x	x
Sustainability Assessment: Lifecycle							
Life Cycle Assessment (ISO 14040, ISO 14044)	x	x	x	x			
Social Life Cycle Assessment (S-LCA). UNEP-SETAC 2009	x	x	x	x	x	x	x
Voluntary Sustainability Standards							
The IFOAM Norms for Organic Production and Processing Version 2012	x	x		x		x	x
4C Association, Code of Conduct (version 1.2)	x			x	x	x	x
FLO-Cert Generic Fairtrade Standards (2011 versions)	x	x	x	x	x	x	x
Forest Stewardship Council (FSC) Forest Management Standard	x			x	x	x	x
Programme for Endorsement of Forest Certification (PEFC) Standard for Sustainable Forest Management	x			x	x	x	x
GlobalG.A.P. control points and major musts (version 4.0)	x			x	x	x	x
Proterra Standard V3	x			x	x	x	x

TOOL TYPE/NAME	STEPS OF THE VALUE CHAIN IMPACTS COVERED			SUSTAINABILITY DIMENSIONS COVERED			
	Production	Processing	Retail	Environment	Economy	Governance	Social
							
Roundtable on Sustainable Biofuels, Impact assessment Guidelines (version 2.0; 2011)	x	x		x	x	x	x
Sustainable Agriculture Network, Standards for Sustainable Agriculture (2010)	x			x	x	x	x
Supplier Ethical Data Exchange (SEDEX)	x	x	x	x	x	x	x
Linking Environment And Farming (LEAF)	x	x	x	x			
Sustainability Reporting							
Global Reporting Initiative (GRI) G3.1 Guidelines	x	x	x	x	x	x	x
Sustainability Assessment (corporate)							
SAM Sustainability Investing, Corporate sustainability assessment questionnaire	x	x	x	x	x	x	x
Unilever Sustainable Agriculture Code (2010 version)	x			x		x	x
Wal-Mart Sustainability Index	x	x		x		x	

x1:Farm financial stability and occupational health and safety are not yet considered in SPA (April 2012), but inclusion is intended for future versions.

Explanatory notes: sustainability dimensions are interpreted in accordance with the SAFA thematic scope (for details, see Part 3 of the Guidelines). "x" indicates that at least single, but not necessarily all, aspects of this dimension are taken into account in the approach.

Appendix B:
SAFA PERFORMANCE REPORT CHECKLIST

Description of the enterprise assessed

✓	Enterprise name, location, primary products and services, legal form
	Statement of goals and purpose of SAFA, including role of sustainability in the enterprise, intended audience and intended use of results.
	Description of geography, size, small-scale rationale where applicable and sector specific information.
	Operational structure of the enterprise and countries, including operating companies, subsidiaries and joint ventures with either major operations or that are specifically relevant to the sustainability issues covered in the SAFA.

Mapping the sphere of influence: material, spatial and temporal boundaries

	Defined scope for that SAFA assessment, including a description of the assessed entity and intended reporting cycle.
	Defined physical and spatial system boundaries, in relation with the sphere of influence and impact.
	Is the whole entity covered by SAFA? If not, what steps of the value chain are covered: primary production, processing and/or marketing? Why where some entities included and others left-out?
	Description and justification of cut-off and impact allocation criteria.
	Visual representation of value chain, relationships and boundaries.

Contextualization of Sub-themes and Indicators

	List of relevant SAFA sustainability themes and sub-themes, including declaration and justification of sub-themes deemed not relevant.
	Data sources for consideration in the assessment.
	Detailed ratings for each indicator, using the data about their geographic/environmental, social, political and economic context.
	Identification of any critical areas based on materiality principles for the context of that entity, acknowledging the relevance and disclose on those issues or disclose limitations in data availability.

Indicator metrics, ratings and aggregation of results

	List of tools, metrics and standards for data collection, qualified by type (3rd party verified, primary, secondary, estimate).
	Accuracy Score at indicator, sub-theme and theme levels.
	Documentation of input data and score.
	Listing of customized ratings for intermediate levels.
	Rating at indicator level, aggregation of results at sub-theme and theme levels, including methodology (mean, lowest score).
	A written interpretation of the ratings and weightings.

Final Report

	Written synthesis of all of the above components.
	A visual representation of SAFA results of ratings (polygon(s) over traffic light color bands), showing the enterprise performance for all sustainability dimensions at theme aggregated level.
	Disaggregation of results at sub-themes level. Identification of Gaps, Opportunities and continuous improvement
	List of all Indicators with orange or red scores (hot spots).
	Disclosure of assessment procedure including description of limitations and boundaries.
	Accuracy Score at sub-theme and theme levels with any other limitations.
	Indication on whether the procedure and the interpretation of results will be verified. If yes, what type: internal or external?
	Use of SAFA Results, sharing and learning goals.
	Contact point for questions regarding the Report or its contents.

Appendix C: GLOSSARY

Accuracy score: in SAFA, the accuracy score refers to the data quality of the assessment. It does not impact the rating of *indicators*, and thus the performance of sub-themes or themes. The components of the accuracy score include the timeframe, data type and methodology, all of which play a role in determining the quality of the data used in SAFA and thus, accuracy and reliability of outcomes.

Air quality: the composition of air with respect to quantities of pollution therein; used most frequently in connection with standards of maximum acceptable pollutant concentrations.

Agricultural biodiversity: the variety and variability of animals, plants and microorganisms which are necessary to sustain the functions of the agro-ecosystem, its structure and processes for, and in support of, food production and *food security*.

Areas of high biodiversity value: habitats recognised for important *biodiversity* features by governmental or non-governmental organizations, or through a biodiversity assessment. This includes, but is not restricted to, areas protected by law.

Assessment: the evaluation or estimation of the nature, quality, or ability of someone or something. Also means a process where there is a check of *materiality* issues and iteration, including a critical review and validation of the *indicators*.

Audit: a systematic and functionally independent examination to determine whether activities and related results comply with planned *objectives* (CAC, 1995).

Auditor: individual or group of individuals, belonging to an organisation, or a natural or legal person external to that organisation, acting on behalf of that organization, carrying-out an *assessment* of the sustainability management system in place and determining conformity with the organisation's sustainability *policy* and *programme*, including compliance with the applicable requirements relating to sustainability (modified after EC, 2009).

Benchmark: in SAFA, benchmarks are values or qualitative descriptions of activities, used as the basis by which the *performance* of an enterprise is evaluated within an *indicator* domain to facilitate a rating of sustainability performance. Regional and/or sectoral averages, as well as defined average (standard) and *best practice* values can be used as benchmarks.

Best practice: similar to "leading practices", as defined by GSCP (2010); proactive identification, development and adoption of the latest technology, techniques or practices that contribute to a better sustainability *performance*.

Biodiversity: the diversity within species, between species and of ecosystems, including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part (Convention on Biological Diversity).

Break-even point: in economics and business, specifically cost-accounting, the break-even point is the point at which the income from sale of a *product* or service equals the invested costs, resulting in neither profit nor loss and one has "broken even." A profit or a loss has not been made, although opportunity costs have been "paid," and capital has received the risk-adjusted, expected return. The accounting method of calculating break-even point does not include cost of working capital. The financial method of calculating break-even, called value added break-even analysis, is used to assess the feasibility of a project. This method also includes the opportunity costs of the capital required to develop a project, but not the cost of working capital.

Business to business communication: a type of communication used in the commerce transaction that exists between businesses, such as those involving a manufacturer and wholesaler, or a wholesaler and a retailer. Business to business refers to business that is conducted between companies, rather than between a company and individual consumers. This is in contrast to *business to consumer* (B2C) and business to government (B2G). A typical supply chain involves multiple business to business transactions, as companies purchase components and other raw materials for use in its manufacturing processes. The finished product can then be sold to individuals via business to consumer transactions.

Business to consumer communication: the type of communication existing when business or transactions are conducted directly between a company and consumers who are the end-users of its *products* or services. Business to consumer as a business model differs significantly from the business to business model, which refers to commerce between two or more businesses.

Capacity development: process whereby people, *organizations* and society as a whole unleash, strengthen, create, adapt and maintain knowledge and skills over time.

Certification: procedure by which officially recognized *certification bodies*, provide written or equivalent assurance that foods or agricultural, fisheries and forestry control systems conform to requirements. *Certification* is based on a range of *inspection* activities which may include continuous on-line inspection, auditing of quality assurance systems and examination of finished *products* (CAC, 2007).

Certification body: a body, which is responsible for verifying that a *product* is produced, processed, prepared, handled, and imported according to a set of standards or Codex Guidelines (CAC, 2007).

Child labour: often defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development. It refers to work that is mentally, physically, socially or morally dangerous and harmful to children; and interferes with their schooling by depriving them of the opportunity to attend school; obliging them to leave school prematurely; or requiring them to attempt to combine school attendance with excessively long and heavy work (ILO/IPEC, 2013).

Civic responsibility: refers to all those actions and attitudes associated with democratic *governance* and social participation of citizens. Civic responsibility usually means active participation in the public life of a community in an informed, committed, and constructive manner, with a focus on the common good.

Climate change adaptation: adaptation to *climate change* refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Various types of adaptation can be distinguished, including anticipatory and reactive adaptation, private and public adaptation, and autonomous and planned adaptation (UNFCCC, 2007).

Climate change mitigation: intervention or policies to reduce the emissions or enhance the sinks of *greenhouse gases*. The current international legal mechanism for countries to reduce their emissions is the United Nations Framework Convention on Climate Change (UNFCCC, 2007).

Code of conduct: principles, values, standards, or rules of behaviour that guide the decisions, procedures and systems of an organization in a way that (a) contributes to the welfare of its key stakeholders, and (b) respects the rights of all constituents affected by its operations (IFA, 2007).

Community investment: refers to all forms of investments through which the enterprise contributes to *sustainable development* of a community, making an efficient use of human and ecological resources.

Conflict of interest: a situation in which a person has a duty to more than one person or organization, which results in their inability to do justice to the interests of either party. This includes for example when an individual's personal interests or concerns are inconsistent with the best interests of a customer, or when a public official's personal interests are contrary to his/her loyalty to public business.

Conflict resolution: the methods and process of dialogue building which promote the peaceful ending of social conflict in any setting, including between employees, businesses, or even between countries. The broader term "conflict management" involves a kind of proactive-reactive continuum. The proactive end of the spectrum involves fostering productive communication and collaboration among diverse interests, addressing the underlying causes of conflicts in order to prevent conflicts from recurring, developing trust and understanding in order to prevent conflicts. The reactive end of the spectrum includes approaches to managing conflicts that vary, by order of increasing collaborative consensus building level: negotiated rule-making; arbitration; mediation; facilitation; conciliation; and negotiation. The reactive approach of conflict management is used after the conflict has erupted and is referred to as conflict resolution.

Conformity assessment: any activity concerned with determining directly or indirectly that requirements relevant to the *assessment* are fulfilled. According to ISO, three types of *conformity* assessment are distinguished. a) First-party *assessment*: this is the technical term used when conformity assessment to a standard, specification or regulation is carried out by the supplier organization itself. In other words, this is *self-assessment*. This is known as a supplier's declaration of conformity. b) Second-party assessment: this indicates that the conformity assessment is carried out by a customer of the supplier organization. For example, the supplier invites a potential customer to verify that the products it is offering conform to relevant product standards. c) Third-party assessment: in this case, conformity assessment is performed by a body that is independent of both supplier and customer organizations (UNCTAD, FAO and IFOAM, 2012).

Consumer advocacy: refers to actions taken by individuals or groups to promote and protect the interests of the buying public. Historically, consumer advocates have assumed a somewhat adversarial role in exposing unfair business practices or unsafe products that threaten the welfare of the general public.

CSR reporting: Corporate Social Responsibility (CSR) is the most common type of sustainability reporting. Regular communication of information on economic, social, environmental and *governance performance* to shareholders, *stakeholders* and the general public. Other types of sustainability reporting include CSV (Creating Shared Values) reporting and Triple Bottom Line (TBL) reporting.

Cut-off criteria: specification of the amount of material or energy flow, or the level of environmental significance, associated with unit processes or *product* system to be excluded from a study (ISO, 2009).

Dietary reference intake: Dietary Reference Intakes (DRIs) are reference values that are quantitative estimates of nutrient intakes to be used for planning and assessing diets for healthy people. They include both recommended intakes and upper intakes levels as reference values.

Due diligence: reasonable care taken by a person or an entity to avoid harm to other persons or properties, especially in buying and selling something. Due diligence is an integral part of business decision-making and risk management systems that consists of identification, prevention and mitigation of the actual and potential adverse *impacts* of an enterprise's activities.

Eco-efficiency: refers to maximizing the efficiency of resource use and minimizing pollution during the entire *production* process across economic sectors.

Ecosystem diversity: the variety of habitats, living communities and ecological processes in the living world.

Employment relationship: the legal link between employers and employees. It exists when a person performs work or services under certain conditions in return for remuneration. It is through the employment relationship, however defined, that reciprocal rights and obligations are created between the employee and the employer. It has been, and continues to be, the main vehicle through which workers gain access to the rights and benefits associated with employment in the areas of labour law and social security. The existence of an employment relationship is the condition that determines the application of the labour and social security law provisions addressed to employees. It is the key point of reference for determining the nature and extent of employers' rights and obligations towards their workers (ILO).

Empowerment: empowerment takes place when people, especially poor or disadvantaged people, are enabled to take more control over their lives, and secure a better *livelihood* with ownership and control of productive assets as a key element. The individual's capacity to make effective choices is conditioned by: (i) ability to make meaningful choices, recognizing the existence of options, and (ii) the opportunities that exist in the person's formal and informal environment (UNTERM, 2010).

Energy use: The amount of energy that is consumed in a certain period (usually one year). This includes fossil fuels burned by machines (such as cars), as well as electricity generated from nuclear power, geothermal power, hydropower, and fossil fuels. No matter what its source, energy use *per capita* is measured in equivalent amounts of oil.

Equal opportunities: principle of *non-discrimination* which emphasizes that opportunities in education, employment, advancement, benefits and resource distribution, and other areas should be freely available to all citizens irrespective of their age, race, sex, religion, political association, ethnic origin, or any other individual or group characteristic unrelated to ability, *performance*, and qualification (Business Dictionary).

Equivalence: the acceptance that different standards or technical regulations on the same subject fulfill common *objectives* (UNCTAD, FAO and IFOAM, 2013).

Externality: an externality is a cost or benefit which results from an activity or transaction and which affects an otherwise uninvolved party who did not choose to incur that cost or benefit.

Food and agriculture systems: systems that serve the *production, processing* and *marketing* of goods that originate from agriculture, forestry or fisheries.

Fair trade: fair trade is a trading partnership, based on dialogue, *transparency* and respect, which seeks greater equity in international trade. It contributes to *sustainable development* by offering better trading conditions to, and securing the rights of, marginalized producers and workers.

Family farming: family farming (also family agriculture) is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant on family labour, including both women's and men's. The family and the farm are linked, co-evolve and combine economic, environmental, social and cultural functions (FAO, 2013).

Food quality: food quality encompasses the basic composition of foods and aspects concerning *food safety*. Consumers have the right to a good quality and safe food supply, and government and food industry actions are needed to ensure this. Effective food quality and safety control *programmes* are essential and may comprise a variety of measures, such as laws, regulations and standards, together with systems for effective *inspection* and compliance monitoring including laboratory analysis (FAOTERM).

Food safety: assurance that food will not cause harm to the consumer when it is prepared and/or is eaten according to its intended use (CAC, 2003).

Food security: food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. The pillars of food security are availability, access, utilisation and stability (FAO, 1996).

Food sovereignty: the right of peoples to healthy and culturally appropriate food produced through ecologically sound and *sustainable* methods, and their right to define their own *food and agriculture systems*.

Footprint: a popular way of describing how human activities can impose different types of burden or impact on the global sustainability. Humankind leaves "footprints" for future generations to cope with. Reducing such footprints is one of the goals of a sustainability strategy. A company footprint is the sum of the footprints of all products or services produced by a company. A product, in most cases, is made up of contributions from a chain of suppliers. It starts with raw material acquisition, and then moves on to the company's facilities (buildings [construction, furniture, heating, electricity], administration [office equipment and machines, etc.], process facilities [transportation, travel etc.], production processes and the product chain distribution, customers [downstream producers, distributors, retailers, etc.], consumers, disposal/recycling). (UNEP/SETAC, 2009b).

Footprint calculator: the ecological footprint calculators have a number of functions and roles. Each of the calculators may help to understand what is to live and work more sustainably by setting targets for achieving ecological footprint savings - both directly through one's own behaviour and indirectly through other peoples' or organizations' behaviour that one can influence. As measurement tools, the calculators also help to compare the *impacts* that different activities or everyday decisions might have, whether they take place at home, in school or office, or in managing an event. There are many types of footprint calculators, such as the Cool Farm Tool (CFT) used in agriculture to calculate farm-level *greenhouse gas emissions*. This tool identifies hotspots and makes it easy for farmers to test alternative management scenarios and identifies those that will have a positive impact on the total net greenhouse gas emissions. Unlike many other agricultural greenhouse gas calculators, the CFT includes calculations of soil carbon sequestration, which is a key feature of agriculture that has both mitigation and adaptation benefits. Another international footprint calculator is the FAO EX-ante Appraisal Carbon-balance Tool (EX-ACT), aiming at providing ex-ante estimations of the impact of agriculture and forestry development projects on GHG emissions and carbon sequestration, indicating its effects on the carbon balance.

Forced labour: forced labour is all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily. "All work or service" includes all types of work, service and employment, regardless of the industry, sector or occupation within which it is found, and encompasses legal and formal employment as well as illegal and informal employment. "Any person" refers to adults as well as children, regardless of their nationality, and it is considered irrelevant whether the person is a national of the country in which the forced labour

case has been identified. "Menace of any penalty "can refer to criminal sanctions as well as various forms of coercion such as threats, violence, retention of identity documents, confinement, or non-payment of wages. The penalty may also take the form of a loss of rights or privileges. "Voluntary" refers to workers' consent to enter into employment and to their freedom to leave the employment at any time, with reasonable notice in accordance with national law or collective agreements. In essence, persons are in a forced labour situation if they enter work or service against their freedom of choice, and cannot leave it without penalty or the threat of penalty. This does not have to be physical punishment or constraint; it can also take other forms, such as the loss of rights or privileges (ILO Convention, 1930).

Forest: land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*. It does not include land that is predominantly under agricultural and urban land use (FAO, 2012c).

Freedom of association and right to bargaining: freedom of association ensures that workers and employers can associate to efficiently negotiate work relations. The ability of workers, producers, or any persons extended these rights to associate with colleagues or fellow producers, unions or other advocacy organizations, and discuss their terms ensure that employers and workers have an equal voice in negotiations and that the outcome will be fair and equitable. Collective bargaining allows both sides to negotiate a fair employment relationship and prevents costly labour disputes. Indeed, some research has indicated that countries with highly coordinated collective bargaining tend to have less inequality in wages, lower and less persistent unemployment, and fewer and shorter strikes than countries where collective bargaining is less established (ILO).

Full-cost accounting: the collection and presentation of information about the direct and indirect economic, environmental and social costs of operations, or triple bottom line.

Gender: social, economic and cultural roles and relations between women and men. *Gender* takes into account the different responsibilities of women and men in a culture or location, and in different population groups (FAO, 1997).

Gender equality: when women and men enjoy equal rights, opportunities and entitlements in civil and political life.

Generic: characteristic of, or relating to, a class or group of things (Oxford Dictionary). The SAFA Guidelines provide principles, processes and themes that should apply to (almost) all sustainability *assessments* in the food and agriculture sector.

Genetic diversity: the combination of different genes found within a population of a single species resulting in different characteristics, and the pattern of variation found within different populations of the same species.

Goal: the higher order objective to which a development intervention is intended to contribute.

Good corporate governance: the political system of an enterprise. It defines the rights of *stakeholders*, provides for the separation of powers between management and supervisory board, and seeks to insure responsible leadership in all dimensions of the organization (Maak and Ulrich, 2007).

Governance: the process of decision-making and the process by which decisions are implemented (UNESCAP, 2009).

Green economy: an economy that results in improved human well-being and reduced inequalities over the long term, while not exposing future generations to significant environmental risks and ecological scarcities (UNEP, 2011).

Greenhouse gas: gaseous components of the atmosphere contributing to the greenhouse effect. *Greenhouse gases* include carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, perfluorocarbons, sulphur hexafluoride, chlorofluorocarbons and hydrochlorofluorocarbons.

Greening the Economy with Agriculture (GEA): refers to ensuring the right to adequate food, as well as food and nutrition security, and contributing to the quality of rural *livelihoods*, while efficiently managing natural resources and improving resilience and equity throughout the food supply chain, taking into account countries' individual circumstances (FAO Council, 2011).

Grievance procedures: grievance procedures are a means of dispute resolution that can be used by a company to address complaints by employees, suppliers, customers, and/or competitors. A grievance procedure provides a hierarchical structure for presenting and settling workplace disputes. The procedure typically defines the type of grievance it covers, the stages through which the parties proceed in attempting to resolve matters, individuals responsible at each stage, the documentation required, and the time limits by which the grievance must be presented and dealt with at each stage. The best-known application of grievance procedures is as a formal process outlined in labour union contracts. Grievance procedures do not necessarily have to be so formal and elaborate, and in fact, overly formal grievance procedures often discourage the airing of disputes in a timely manner. In small businesses, the procedures may consist of a few lines in an employee manual or the designation of a single ombudsman to deal with problems as they develop. Peer review of employee concerns is another popular way to address grievances. On the other hand, some larger companies may create

an entire department dedicated to fielding complaints from employees or customers. Whatever form they may take, grievance procedures are intended to allow companies to hear and resolve complaints in a timely and cost-effective manner, before they result in litigation (Legal Dictionary).

Harmonization: the process by which standards, technical regulations and *conformity assessment* on the same subject approved by different bodies establishes interchangeability of products and processes. The process aims at the establishment of identical *standards*, technical regulations and conformity assessment requirements (UNCTAD, FAO and IFOAM, 2007).

Holistic audit: holistic audit occurs when all areas of sustainability in the dimensions for environment, social, economic and *governance* that pertain to the enterprise are monitored internally in an appropriate manner, and wherever possible are reviewed according to recognized sustainability reporting systems. Holistic auditing is evidence of sustainability values being integrated into organizational governance and culture.

Impact: primary and secondary long-term effects directly or indirectly produced by an intervention (OECD, 2002).

Indicator: quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess *performance* (adapted after OECD, 2002). An indicator provides evidence that a condition exists or certain results have or have not been achieved.

Indigenous: signifies someone who is intimately connected with the land where she/he lives, who has not arrived by immigration or is not in passage. The idea "indigenous" is necessarily relative. It often expresses a cultural or property claim (FAO, 2003).

Indigenous knowledge: the local knowledge that is unique to a given culture or society. It contrasts with the international knowledge system generated by universities, research *institutions* and private firms. It is the basis for local-level decision making in agriculture, health care, food preparation, education, natural-resource management, and a host of other activities in rural communities. Indigenous information systems are dynamic, and are continually influenced by internal creativity and experimentation as well as by contact with external systems (WB, 1995 modified).

Inspection: the examination of food or systems for control of food, raw materials, *processing*, and distribution including in-process and finished *product* testing, in order to verify that they conform to requirements (CAC, 2007).

Institution: a structure of social order governing the behaviour of a set of individuals and that shape human interactions by serving collectively valued *goals*. The term includes formal *institutions* (e.g. public institutions, non-governmental and private organizations, training and educational institutions such as universities and research institutes) and informal institutions (e.g. village committees, community groups, farmer groups).

Internal investment: internal investment refers to how much the enterprise has invested into activities and practices to improve and monitor its social, economic, environmental and *governance* performance: such as improvement of employees salaries and benefits, investment in research and development, improvement of *production* efficiency, the implementation of practices that preserve and regenerate natural resources, the use of renewable energy, the adoption of a monitoring and evaluation system of sustainability *performance*.

Land degradation: the reduction in the capacity of the land to provide ecosystem goods and services and assure its functions over a period of time for its beneficiaries. Reduction or loss, in arid, semi-arid, and dry sub-humid areas, of the biological or economic productivity and complexity of rain-fed cropland, irrigated cropland, or range, pasture, forest, and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns, such as: (i) soil erosion caused by wind and/or water; (ii) deterioration of the physical, chemical, and biological or economic properties of soil; and (iii) long-term loss of natural vegetation.

Legitimacy: the degree to which procedures for making and enforcing laws are acceptable to the people. A legitimate system is legal, but more important, citizens believe in its appropriateness and adhere to its rules.

Life cycle assessment: Life Cycle Assessment (LCA) is an objective process to evaluate the environmental burdens associated with a *product*, process, or activity by identifying energy and materials used and wastes released to the environment. LCA addresses the environmental aspects and potential impacts throughout a product's life cycle. LCA includes all costs associated with the life cycle of a *product* that are directly covered by any one or more of the actors in the product life cycle (e.g. supplier, manufacturer, user or consumer, also called cradle-to-grave) with complementary inclusion of externalities that are anticipated to be internalized in the decision-relevant future.

Liquidity: the ability of the market in a particular security to absorb a reasonable amount of buying or selling at reasonable price changes.

Livelihood: capabilities, assets (both material and social resources) and activities required for a means of living. A livelihood is *sustainable* when it can cope with and recover from stresses and shocks, and maintain or enhance its capabilities or assets while not undermining the natural resource base (Chambers and Conway, 1991).

Living wage: a wage ensuring for a person and his/her family an existence worthy of human dignity, and supplemented by other means of social protection (UN 1948, Article 23.3). It ensures a standard of living adequate for the health and well-being, including food, clothing, housing, medical care, necessary social services and the right to security (UN, 1948, Article 25.1).

Local procurement: the commitment and effective accomplishment of the enterprise to benefit local economies through procurement from local suppliers.

Marketing: is holding for sale or displaying for sale, offering for sale, selling, delivering or placing on the market in any other form (CAC, 1999).

Materiality: materiality is a core principle of all kinds of reporting with different approaches and definitions. The materiality focus of sustainability reports is broader than the traditional measures of financial materiality. SAFA adapts the International Integrated Reporting Council (IRRC) definition framework which considers the commonality of materiality definitions from various reporting frameworks. It builds on the concept "that material matters are those that are of such relevance and importance that they could substantively influence the assessments of the intended report users."

Mechanization: mechanization can be defined as the economic application of engineering technology to enhance the effectiveness and productivity of human labour, hand tools, draft animals, mechanically powered boats or small vessels.

Metric: unit of measurement that is quantitative; often, the basis for *indicators*.

Mission statement: a written declaration of a company or organization's core purpose and focus which normally remain unchanged, whereas business strategies and practices may frequently be altered to adapt to the changing circumstances.

Non-discrimination: one of the fundamental principles of international human rights law. Discrimination consists in any distinction, exclusion or restriction made on the basis of race, colour, sex, age, language, religion, political or other opinion, national or social origin, property, birth or other status, or any other ground, which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by an individual or group of their rights.

Objective: the aims of an action, or what is intended to be achieved. Any objective will include explicit statements against which progress can be measured, and will identify which outcomes are truly important and the way that they interrelate.

Organization: a well structured body of people with a particular purpose, especially a business, society, association, etc. (Oxford Dictionary).

Payment for ecosystem services: a voluntary contractual transaction between a buyer and a seller for an ecosystem service or a management practice likely to secure that service. A PES scheme can be put in place when: (a) the demand for at least one ecosystem service is clear and financially valuable to one or more 'buyers'; (b) the provision of ecosystem services is threatened, but the adoption of specific land use/management practices has the potential to address the supply constraints; (c) a trusted intermediary is available to assist both parties in developing the negotiation and provide expertise in the PES design; (d) clear criteria are able to be established to ensure compliance of the contractual agreement by both parties; (e) land tenure and usage rights are clear; and (f) there is a cross-sectoral coherence between existing policies and laws and PES requirements (FAO, 2011c).

Performance: degree to which an intervention or an entity operates according to specific criteria, *standards* and guidelines, or achieves results in accordance with stated *goals* or *plans* (OECD, 2002).

Performance-based indicator: performance based indicators are focused on the results of compliance with an *objective* and can measure the *performance* of an operation, identify trends and communicate results. Also called results-oriented or outcome *indicators*.

Performance report: a detailed statement that measures the results of some activity in terms of its success over a specific time frame. For example, an annual performance report might be produced for each employee of a business, or such a report might help management assess the success of a project or product and how well budgetary constraints were adhered to. A complete performance report includes boundaries, hot spot issues and data quality. In the SAFA context, it refers to the final output of a SAFA *assessment*, which contains both a descriptive and an analytical review of the sustainability of the assessed entities, based on the goals and objectives of SAFA themes.

Plan: amplification of the *strategy* showing the precise means by which *objectives* will be reached; the *policy* instruments to be employed; the financial and human resources required; and the time frame for implementation (FAO, 1998).

Policy: the course of action for an undertaking adopted by a government, a person or some other party. The instruments that exist to support *policy* and the tools used to achieve *policy objectives* comprise some or all of the following societal instruments; economic or market-based instruments; command and control instruments; direct government involvement; and institutional and organizational arrangements. It is to be mentioned that, although law may be used as a policy instrument, there are cases where law may impose constraints on what policies can be adopted (FAO, 1998).

Practice-based indicator: these indicators are focused on prescribing the necessary tools and systems required to be in place, *best practices*. They are process rather than outcome-oriented. They assume that having (water or health and safety) management systems in place leads to better management of environmental or health and safety issues. Also called prescriptive or process *indicators*.

Processing: in general, it refers to a series of mechanical or chemical operations on (something) in order to change or preserve it.

Product: goods or services offered to members of the public either by sales or otherwise. (ISO 26000-WD4.2 (2008). For the purpose of SAFA, goods based on materials from agricultural, forestry or fisheries activities during the *production, processing* and *marketing* of food, beverages, feeds, fibres and agricultural commodities.

Product information: all food *products* should be accompanied by or bear adequate information to enable the next person in the food chain to handle, display, store and prepare and use the product safely and correctly. Complete product information (i.e. ingredients, processing inputs) should be available at the enterprise level and across the supply chain due to tracking and traceability systems (FAO, 1998).

Profitability: refers to the financial resources that the enterprise has allocated and applied to strengthen its capacity to generate and increase profits over the long term. Through its investments and business activities, the enterprise should have the capacity to generate a positive net income.

Programme: descriptive notice of series of events, including an indication of the intended proceedings. The term is often used for an undertaking structured around a defined *objective*, usually consisting of a number of projects.

Preparation: the operations of slaughtering, *processing*, preserving and packaging of food and agricultural products and also alterations made to the labelling concerning the presentation of the *production* method (CAC, 1999).

Production: the operations undertaken to supply food and agricultural products in the state in which they occur on the farm, including initial packaging and labelling of the *product* (CAC, 1999).

Public health: refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health is concerned with the total system and not only the eradication of a particular disease. The three main public health functions are: the *assessment* and monitoring of the health of communities and populations at risk to identify health problems and priorities; the formulation of public policies designed to solve identified local and national health problems and priorities; to assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services. In the SAFA context, it refers to all the healthy and safe lifestyles of the local community in which an enterprise operates (WHO Glossary).

Qualitative indicator: qualitative *indicators* are nominative; they provide information on a particular issue using words. For instance, text describing the measures taken by an enterprise to manage stress (UNCTAD, FAO and IFOAM, 2012).

Quantitative indicator: a quantitative *indicator* is a description of the issue assessed using numbers; for example number of accidents by unit process (UNCTAD, FAO and IFOAM, 2012).

Rare species: species listed as vulnerable, endangered or critically endangered on the IUCN[5] Red List, or found to be vulnerable or endangered by scientific sources or a field study.

Recognition: arrangement (either unilateral, bilateral, or multilateral) for the use or acceptance of results of *conformity assessments* (UNCTAD, FAO and IFOAM, 2012).

Regional: regions can be defined based on homogeneity and functionality, both in relation with the activities whose sustainability is assessed. There is no single definition of the perimeter (in km) that can be used for distinguishing regional from supra-regional.

Renewable energy: energy derived from natural processes, such as sunlight and wind, replenished at a higher rate than they are consumed; for example solar, wind, geothermal, hydro, and biomass (International Energy Agency Glossary).

Resilience: the capacity of a natural system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures.

5 International Union for Conservation of Nature and Natural Resources: www.iucnredlist.org

Resource appropriation: refers to *stakeholders*' pre-existing access to land, water and resources. Any sustainable enterprise should map this to the satisfaction of all affected stakeholders and agree to take no action to reduce this access until it has fully informed stakeholders, negotiated on equal terms and provided for mutually agreeable compensation, sufficient to allow *sustainable livelihoods*.

Responsibility: within the human-rights context exists a distinction is made between responsibilities and obligations. While only states have legal human rights obligations, all members of society (such as individuals, local communities, non-governmental *organizations*, civil society organizations, as well as private sector) have responsibilities.

Responsible buyer: responsible buyers are the ones who recognize and support suppliers' (particularly primary producers) rights to fair pricing and fair contracts and their rights to freedom of association and to collective bargaining for all contracts and agreements. For instance, buyers must pay primary producers prices for their products that reflect the real cost of the entire process of sustaining a regenerative ecological system, including supporting a right *livelihood* for primary producers, their families and workers as well as covering the buyers' costs based on *full-cost accounting*.

Rights: rights are defined by the legal framework and provisions under a given regime. Different societies have different attitudes and so the nature of these rights varies, notwithstanding that there are some rights that are fairly universally acknowledged under declarations such as the Universal Declaration of Human Rights (FAO, 2003).

Right to quality of life: all primary producers, small-scale producers and employees enjoy the right of quality of life when they enjoy a *livelihood* that provides a culturally appropriate and nutritionally adequate diet and allows time for family, rest and culture.

Risk management: the process, distinct from risk *assessment*, of weighing policy alternatives, in consultation with all interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of *fair trade* practices, and, if needed, selecting appropriate prevention and control options (CAC, 2006).

Scoring system: scoring may use quantitative or qualitative scales, according to the availability of information and the subcategory or *impact* category under consideration. Scoring systems usually seek to standardize the scores for purpose of comparison (UNCTAD, FAO and IFOAM, 2012).

Secondary data: data gathered by other researchers or collected for other purpose than the one being currently considered or, often a mix of the two.

Site: distinct geographic location under the management control of an organisation covering activities, *products* and services, including all infrastructure, equipment and materials (EC, 2009).

Social auditing: social auditing provides an *assessment* of the *impact* of an organization's non-financial *objectives*; a means of assessing and demonstrating an organization's social, economic and environmental benefits and limitations; a way of measuring the extent to which an organization is living up to the values and objectives to which it has committed itself. A social audit is typically undertaken by the organization concerned and by those directly involved with. A person or panel of people external to the organization may be engaged to verify the *audit*'s accuracy (UNTERM).

Soil quality: the terms soil quality (favoured by scientists) and soil health (favoured by farmers) tend to be used interchangeably. Characterization of soil quality by scientists focuses on analytical/quantitative properties of soil with a separately defined quantitative link to the functions of soil quality. Characterization of soil health by farmers focuses on descriptive/qualitative properties of soil with a direct value judgment (unhealthy to healthy) integrated into the options for a given property; in addition, interwoven into the properties of soil per se are value-based descriptive properties of plant, water, air, and animal/human systems considered by farmers to be an integral part of soil health characterization.

Soil degradation: reduction in the capacity of a soil to provide ecosystem goods and services, and to support agricultural and forestry production. Soil degradation can be caused by a variety of processes.

Species diversity: *biodiversity* at the species level, often combining aspects of species richness, their relative abundance, and their dissimilarity (TEEB).

Sphere of influence: geographical area where an enterprise can show its power and influence in the decisions with other enterprises/organizations/groups.

Stability of market: stability of market is ensured by all actions and mechanisms put in place by the enterprise to ensure a diversified and consolidated income structure from its *product* sales or from the services provided and when stable business relationships are maintained with a sufficient number of buyers and alternative *marketing* channels are accessible.

Stability of production: *production* (quantity and quality) is considered to be stable when it is sufficiently resilient to withstand environmental, social and economic shocks.

Stability of supply: supply is considered to be stable when all measures have been taken by the enterprise to reduce the risk to have input supply shortages, including maintaining ongoing business relationships with suppliers.

Stakeholder: A large group of individuals and groups of individuals (including governmental and non-governmental institutions, traditional communities, universities, research *institutions*, development agencies and banks, donors, etc.) with an interest or claim (whether stated or implied) in any activities or decisions of an organization, having the potential of being impacted by or having an impact on a given project and its *objectives* (ISO, 2008).

Stakeholder dialogue: a proper stakeholder dialogue occurs when the enterprise pro-actively identifies stakeholders, which include all those affected by the activities of the enterprise (including any stakeholders unable to claim their rights), and ensures that all are informed, engaged in critical decision making, and that their input is duly considered.

Standard: a document approved by a recognized body that provides for common and repeated use, rules, guidelines or characteristics for *products* or related processes and *production* methods, with which compliance is not mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method. Note: the recognized body can be any relevant constituency (UNCTAD, FAO and IFOAM, 2007).

Strategy: in general, an elaborate and systematic plan of action. A strategy is a long term *plan* of action designed to achieve a particular goal.

Supply chain: the entire network of entities, directly or indirectly interlinked and interdependent in serving the same consumer or customer. Supply chain activities transform natural resources, raw materials and components into a finished *product* that is delivered to the end customer. It comprises of vendors that supply raw material, producers who convert the material into products, warehouses that store, distribution centers that deliver to the retailers, and retailers who bring the product to the ultimate user. In sophisticated supply chain systems, used products may re-enter the supply chain at any point where residual value is recyclable. Supply chains underlie *value chains* because, without them, no producer has the ability to give customers what they want, when and where they want, at the price they want. Producers compete with each other only through their supply chains, and no degree of improvement at the producer's end can make up for the deficiencies in a supply chain which reduce the producer's ability to compete.

Sustainable development goal: one of the main outcomes of the Rio+20 Conference was the agreement by member States to launch a process to develop a set of Sustainable Development Goals (SDGs), which will build upon the Millennium Development Goals and converge with the post 2015 development agenda. It was decided to establish an "inclusive and transparent intergovernmental process open to all *stakeholders*, with a view to developing global sustainable development goals to be agreed by the General

Assembly". In the Rio+20 outcome document, member States agreed that sustainable development goals (SDGs) must: be based on Agenda 21 and the Johannesburg Plan of Implementation; fully respect all the Rio Principles; be consistent with international law; build upon commitments already made; contribute to the full implementation of the outcomes of all major summits in the economic, social and environmental fields; focus on priority areas for the achievement of *sustainable development*, being guided by the outcome document; address and incorporate in a balanced way all three dimensions of sustainable development and their interlinkages; be coherent with and integrated into the United Nations development agenda beyond 2015; not divert focus or effort from the achievement of the Millennium Development Goals; and include active involvement of all relevant stakeholders, as appropriate, in the process. It was further agreed that SDGs must be: action-oriented; concise; easy to communicate; limited in number; aspirational; global in nature; universally applicable to all countries while taking into account different national realities, capacities and levels of development and respecting national policies and priorities (UN-SD Platform).

Sustainability management: environmental and social management and corporate *governance,* in conjunction with financial management. Processes or structures that an organisation uses to meet its sustainability *goals* and *objectives* while transforming inputs into a *product* or service (modified after UNEPFI, 2006).

Sustainability management plan: a formal, governance body endorsed, sustainability *plan* for the enterprise which provides a holistic view of sustainability which covers each of the environmental, economic, social and *governance* dimensions, including in the plan references to mission and demonstration of progress against the plan. Sustainability plans are a relatively recent phenomenon used by an organization to provide good governance guidance for its sustainability efforts and to assist in incorporating the values and aspirations for sustainability to be formally included in business planning. The business planning cycle enables governance bodies to hold management accountable for implementing the direction and targets set for the organization.

Sustainability reporting: a sustainability report enables companies and organizations to report sustainability information in a way that is similar to financial reporting. Systematic sustainability reporting gives comparable data, with agreed disclosures and *metrics*. This tool gives information about economic, environmental, social and governance *performance*. For companies and organizations, sustainability – the capacity to endure, or be maintained – is based on performance in these four key areas. An increasing number of companies and organizations want to make their operations sustainable. Establishing a sustainability reporting process helps them to set goals, measure performance,

and manage change. A sustainability report is the key platform for communicating positive and negative sustainability impacts. To produce a regular sustainability report, organizations set up a reporting cycle – a program of data collection, communication, and responses. This means that their sustainability performance is monitored on an ongoing basis. Data can be provided regularly to senior decision makers to shape company *strategy* and *policy*, and improve performance (GRI).

Sustainable: the capacity to sustain, or maintain. There are numerous definitions of sustainability but all converge on the need to reconcile environmental, social and economic demands for present and future generations.

Sustainable agriculture and rural development: management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such *sustainable development* (in the agriculture, forestry, and fisheries sectors) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable (FAO, 1989).

Sustainable development: development processes that protect the natural resource base and ecosystem functions, enhance economic *resilience* and promote human rights and well-being in a manner that preserves future generations' ability to secure their needs.

Sustainable forest management: ensuring that the goods and services derived from the forest meet present-day needs while at the same time securing their continued availability and contribution to long-term development (FAO, 2013).

Target-based indicator: these indicators focus on whether the operation has *plans* or *policies* with targets, or a definition of intentions.

Technical regulation: a document which lays down product characteristics or their related processes and *production* methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method. Note: technical regulations can refer to, or be based on, *standards* (UNCTAD, FAO and IFOAM, 2012).

Tenure: tenure is the relationship, whether legally or customary defined, among people as individuals or groups, with respect to land and associated natural resources. Rules of tenure define how property rights in land are to be allocated within societies. Land tenure system determines who can use what resources for how long, and under what conditions (FAO, 2003).

Threshold: Limit below which a stimulus ceases to be perceptible or signal, indicating that a critical state of a resource has been reached. In ICAM, thresholds are used (e.g. in fisheries) as an early warning when a resource is approaching a target reference point or a limit reference point, suggesting that a certain type of action (usually agreed beforehand) needs to be taken. Thresholds therefore add precaution to natural resource management, especially for resources or situations (e.g. uncertainty of available information, inherent inertia of the management system) involving high risk (FAO, 2008).

Trade-off: the value of something that has to be given up in order to get something else that is desired (e.g. the environmental cost incurred to obtain economic development). Sustainability can be evaluated by the sum of the various social, economic and natural resources where the degrees of use, exchange and trading among resources will vary according to the values given to each. Trade-off patterns are therefore determined by the different properties of a system and their importance to different groups. The understanding of social dynamics and resource-use systems and the evaluation of related trade-offs, in terms of equity, productivity, resilience and environmental stability, are useful to envision alternative development scenarios (FAO, 2008).

Transparency: transparency refers to open access by the public to timely and reliable information on the decisions and *performance* of entities. In the context of the private market, it means open access to information regarding the mechanisms for implementation of standards, regulations and agreements as well as individual decisions undertaken within the enterprise.

Triple bottom line: a business approach to *full-cost accounting* that refers to three pillars: people (social), planet (environmental) and profit (economic).

Value chain: a mechanism that allows producers, processors, buyers, and sellers – separated by time and space – to gradually add value to *products* and services, as they pass from one link in the chain to the next until reaching the final consumer. The main actors in a value chain are suppliers, producers, processors, marketers and buyers. They are supported by a range of private and public technical, business and financial service providers. In a value chain, the various business activities in the different segments become connected and to some degree coordinated (UNIDO, 2011).

Value creation: refers to the contribution of the enterprise to the local economy through the employment of local professionals and technicians. It is a significant component of *sustainable development*, and might benefit the long-term business viability of the enterprise. Local employment and sustainable economic development are two interrelated variables.

Voluntary sustainable standard: any non-obligatory set of requirements explicitly designed to promote the objectives of *sustainable development*, relating to environmental, social, ethical and *food safety* issues in the production and processing phases. Often third party-assessed through *certification*.

Vulnerable people: ethnic minorities, migrants, disabled, homeless, refugees, long-term unemployed, female-headed households, teenage mothers and other minority groups that experience a higher risk of poverty and socio-economic exclusion than the general population.

Water quality: chemical, physical and biological characteristics of water in respect to its suitability for a particular purpose or process. Water quality refers to a range of variables which limit water use: for example, limits on the concentrations of toxic substances for drinking water use, or restrictions on temperature and pH ranges for water supporting invertebrate communities.

Water withdrawal: gross amount of water extracted from the resources for a given use. It includes conveyance losses, consumptive use and return flow (FAO, 2000).

Well-being: the state of being or doing well in life; healthy, or prosperous condition; moral or physical welfare (of a person or community).

Workplace safety and health provisions for employees: workplace safety is the practice of an employer using preventative measures to prevent hazards to the employees' health and personal safety according to government standards. This practice includes creating plans and procedures for employees and managers in the workplace. In addition, workplace safety involves creating policies and keeping emergency materials available for employee and manager use while at a work site.

Appendix D: **REFERENCES**

4C Association. 2009. *The 4C Code of Conduct. Common Code for the Coffee Community Association* (available at http://www.4c-coffeeassociation.org/uploads/media/4CDoc_001a_Code_of_Conduct_v1.3_en.pdf)

AccountAbility. 2008. *AA100 AccountAbility Principles Standard 2008.* AccountAbility, New York (available at www.accountability.org/about-us/publications/aa1000.html).

Al-Tuwaijri, S., Fedotov, I., Feitshans, I., Gifford, M., Gold, D., Machida, S., Nahmias, M., Niu, S. & Sandi G. 2008. *Beyond Death and Injuries: The Ilo's Role in Promoting Safe and Healthy Jobs. XVIII World Congress on Safety and Health at Work,* June 2008, Seoul, Korea – Introductory report. International Labour Organization, Geneva. (available at http://www.ilo.org/global/publications/WCMS_094524/lang--en/index.htm)

Bellarby, J., Foereid, B., Hastings, A. & Smith, P. 2008. *Cool Farming: Climate Change Impacts of Agriculture and Mitigation Potential* . Greenpeace International. (available at www.greenpeace.org/international/en/publications/reports/cool-farming-full-report).

Beuchelt, T. & Zeller, M. 2011. Profits and Poverty: Certification's Troubled Link for Nicaragua's Organic and Fairtrade Coffee Producers. *Ecological Economics* 70: 1316-1324. (available at http://comerciojusto.org/wp-content/uploads/2013/05/Coffee-profits-poverty.pdf)

BGR. 2006. *Deutsche Bundesanstalt für Geowissenschaften und Rohstoffe. Jahresbericht 2006* (in German). Hanover, Germany.

Blackman, A. & Rivera, J. 2011. *Producer-Level Benefits of Sustainability Certification.* Conservation Biology 25: 1176-1185. (available at http://onlinelibrary.wiley.com/doi/10.1111/j.1523-1739.2011.01774.x/abstract)

Blumenthal, U. & Peasey, A. 2002. *Critical Review of Epidemiological Evidence of the Health Effects of Wastewater and Excreta Use in Agriculture.* London School of Hygiene and Tropical Medicine. WHO. (available at http://www.who.int/water_sanitation_health/wastewater/whocriticalrev.pdf)

Boxall, A., Kolpin, B., Soerensen, B. & Tolls, J. 2003. Are Veterinary Medicines Causing Environmental Risks? *Environmental Science and Technology,* 37(15): 286A-294A . UK.

British Heart Foundation (BHF). 2008. *Protecting children from unhealthy food marketing.*. London (available at www.childrensfoodcampaign.net/BHFnonbroadcastreport.pdf).

Buchanan, James; Wm. Craig Stubblebine. 1962. Externality. *Economica,* New Series, 29 (116): 371–384. The London School of Economics and Political Science. (available at http://napa.vn:8080/uris/uploads/2/Externality%20-%20Buchanan%20J%20M%20economica%201962.pdf)

Burton, J. 2010. *WHO Healthy Workplace Framework and Model: Background and Supporting Literature And Practices*. World Health Organization. Geneva. (available at www.who.int/occupational_health/healthy_workplaces_background_original.pdf).

Business Leaders Initiative on Human Rights (BLIHR). 2009. *Policy Report 4*. (available at http://respect.se/assets/BLIHR-4-Final-report.pdf).

Business Social Compliance Initiative (BSCI). 2009. Code of Conduct.. Version 3. Foreign Trade Initiative. Brussels (available at www.bsci-intl.org/resources/code-of-conduct).

Campbell, C. 1992. Contaminants in the Food System: The Consumers' Response. In *Proc. Nutr. Soc. Aust*. 17: 33-35. W.Australia. (available at http://apjcn.nhri.org.tw/server/apjcn/ProcNutSoc/1990-1999/1992/1992%2033-35.pdf).

Carney, D., Drinkwater, M., Rusinow, T., Neejes, K., Wanmali, S. & Singh, N. 1999. *Livelihoods Approaches Compared*. Department for International Development (DIFID). (available at http://www.eldis.org/vfile/upload/1/document/0812/lacv3.pdf).

Chambers, R. & Conway, G. 1991. *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. IDS Discussion Paper 296*. (available at http://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/775/Dp296.pdf?sequence=1).

Codex Alimentarius Commission (CAC). 1999. *Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods*. GL 32. (available at www.codexalimentarius.net/download/standards/360/cxg_032e.pdf).

Codex Alimentarius Commission (CAC). 2007. *Food Import and Export Inspection and Certification Systems (Codex Alimentarius)*. Third Edition. Joint FAO/WHO Food Standards Programme. (available at http://www.fao.org/docrep/010/a1391e/a1391e00.htm).

Codex Alimentarius Commission (CAC). 2009. *Guidelines for Organically Produced Foods*. Second Edition. Joint FAO/WHO Food Standards Programme. GL 32 – 1999, Rev. 1 – 2001. (available at http://www.fao.org/docs/eims/upload/230124/CXG_032e.pdf)

Codex Alimentarius Commission (CAC). 1995. *Principles for Food Import and Export Inspection and Certification*. GL 20 (available at www.codexalimentarius.net/download/standards/37/CXG_020e.pdf).

Commission on Sustainable Development. 2001. *Indicators of Sustainable Development: Guidelines and Methodologies*. Second Edition. UN, NY, September 2001. (available at http://www.un.org/esa/sustdev/natlinfo/indicators/guidelines.pdf)

Convention on Biological Diversity (CBD). 2010. *Global Biodiversity Outlook 3*. Secretariat of the Convention on Biological Diversity. Montreal. (available at http://www.cbd.int/doc/publications/gbo/gbo3-final-en.pdf)

Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J., Raskin, R.G., Sutton, P. & van den Belt, M. 1997. The Value of the World's Ecosystem Services and Natural Capital. *Nature* 387: 253-260. (available at http://www.esd.ornl.gov/benefits_conference/nature_paper.pdf)

Crews, T.W. & Peoples, M.B. 2004. Legume Versus Fertilizer Sources of Nitrogen: Ecological Tradeoffs and Human Needs. *Agriculture, Ecosystems and Environment*, 102: 279-297. (available at http://s3.amazonaws.com/zanran_storage/www.prescott.edu/ContentPages/15891389.pdf)

Daly, H.E. 1990. Toward Some Operational Principles of Sustainable Development. *Ecological Economics* 2: 1-6.

De Guzman, M., Hill-Menson, T. & Greve, V.L. 2007. Promoting Cultural Understanding and Developing Cultural Competence. *University of Nebraska-Lincoln Extention*, HE Form 575. Participant Manual (available at www.extension.unl.edu/c/document_library/get_file?folderId=221677&name=DLFE-3223.pdf)

Delhaize Group. 2011. Our Journey to Sustainability. Progress Report 2011. Brussels. (available at http://www.delhaizegroup.com/en/Home/2011sustainabilityreport.pdf)

DFID. 1999. *Sustainable livelihoods guidance sheets*. Framework. London (available at www.eldis.org/vfile/upload/1/document/0901/section2.pdf).

Dixon, J., Taniguchi, K., Tanyeri-Abur, A., & Wattenbach, H. 2004. Framework for Analysing Impacts of Globalization on Smallholders. *Smallholders, Globalization And Policy Analysis. Agricultural Management, Marketing and Finance Service*. Occasional Paper 5. FAO. Rome. (available at http://www.fao.org/docrep/007/y5784e/y5784e02.htm)

Doane, D. & MacGillivray, A. 2001. *Economic Sustainability. The Business of Staying in Business*. R&D report. The SIGMA Project. (available at http://projectsigma.co.uk/RnDStreams/RD_economic_sustain.pdf).

ECOSOC. 2000. *Integrated Planning and Management of Land Resources. Report of the Secretary-General*. Commission on Sustainable Development – VIII Session. UN DESA. (available at www.un.org/documents/ecosoc/cn17/2000/ecn172000-6.htm).

Ehm, F. 2010. *The Rule of Law: Concept, Guiding Principle and Framework. Unidem Campus Trieste Seminar. Report to the European Commission for Democracy through Law* (Venice Commission) (available at www.venice.coe.int/docs/2010/CDL-UDT(2010)022-e.pdf).

Elferink, E., Kuneman, G., Visser, A. & van der Wal, E. 2012. Sustainability Performance Assessment of Farming Practices. Guidelines for Developers of Quantitative Monitoring Tools. Version 1.0 . SAI Platform. (available at http://www.saiplatform.org/uploads/Modules/Library/spa_version_1.0_may_2012.pdf).

European Foundation for the Improvement of Living and Working Conditions . 2007. *Fourth European Working Conditions Survey*. European Union. Dublin. (available at www.eurofound.europa.eu/pubdocs/2006/98/en/2/ef0698en.pdf).

European Union. 2008. *European Parliament and of the Council on Food Additives. Official Journal of the European Union,* Regulation (EC) No. 1333/2008. Eur-Lex. (available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:354:0016:0033:en:PDF)

European Union. 2009. The *European Parliament and the Council on the Voluntary Participation by Organisations in a Community Eco-Management and Audit Scheme* (EMAS). *Official Journal of the European Union,* Regulation (EC) No 1221/2009. Eur-Lex. (available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:342:0001:01:EN:HTML).

European Union. 2010a. *Agriculture and Climate Change*. European Commission (available at http://ec.europa.eu/agriculture/climate-change/)

European Union. 2010b. *European Regional Development Fund 2007-2013*. Europa, EU legislation. (available at http://europa.eu/legislation_summaries/agriculture/general_framework/g24234_en.htm).

Fairtrade International. 2011a. *Generic Fairtrade. Trader Standard*. Fairtrade Labelling Organizations International, e.V., Bonn. (available at http://www.fairtrade.net/trade_standards0.html).

Fairtrade International. 2011b. *Generic Fairtrade Standard for Contract Production*. Fairtrade Labelling Organizations International e.V. Bonn. (available at http://www.fairtrade.net/contract-production-standards.html).

Fairtrade International. 2011c. *Generic Fairtrade Standard for Hired Labour*. Fairtrade Labelling Organizations International e.V.. Bonn. (available at http://www.fairtrade.net/hired-labour-standards.html).

Fairtrade International. 2011d. *Generic Fairtrade Standard for Small Producer Organizations*. Fairtrade Labelling Organizations International e.V. Bonn. (available at http://www.fairtrade.net/small-producer-standards.html).

Falkenmark M. 1997. Meeting Water Requirements of an Expanding World Population. In *On the Edge of the Malthusian Precipice? Philos. Trans. R. Soc. Lond. B. Biol. Sci.,* 352(1356): 929-936. (available at http://rstb.royalsocietypublishing.org/content/352/1356/929)

FAO Council. 2012. *Greening the Economy with Agriculture* (available at www.fao.org/docrep/015/i2745e/i2745e00.pdf)

FAO. 1983. *World Soil Charter***.** In *Keeping the Land Alive. Soil Erosion: Its Causes and Cures*. Nat. Res. Dept. Rome. (available at www.fao.org/docrep/T0389E/T0389E0b.htm).

FAO. 1989. *Sustainable Development and Natural Resources Management. Twenty-Fifth Conference,* Paper C 89/2 - Sup. 2. Rome.

FAO. 1995. *Sustainability Issues in Agricultural and Rural Development Policies. Trainer's Manual,* Vol. 1. Rome.

FAO. 1996. *Rome Declaration on World Food Security* and *World Food Summit Plan of Action. World Food Summit* 13-17 November 1996. Rome. (available at http://www.fao.org/docrep/003/w3613e/w3613e00.HTM)

FAO. 1997. *Gender: the Key to Sustainability and Food Security*. SD Dimensions. Sustainable Development Dept. (available at http://www.fao.org/sd/wpdirect/wpdoe001.htm).

FAO. 1998. *Integrated Coastal Area Management and Agriculture, Forestry and Fisheries. FAO Guidelines*. Rome. (available at http://www.fao.org/docrep/w8440e/w8440e00.HTM)

FAO. 2001. *Lecture Notes of the Major Soils of the World*. Natural Resources Management and Environment Dept. Rome. (available at http://www.fao.org/docrep/003/y1899e/y1899e00.HTM)

FAO. 2003. *Multilingual Land Tenure Thesaurus*. SD Dimensions. Sustainable Development Dept. Rome. (available at http://www.fao.org/sd/2003/in0602_en.htm)

FAO. 2004. *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*. Rome (available at http://www.fao.org/docrep/meeting/009/y9825e/y9825e00.HTM)

FAO. 2006a. *Livestock's Long Shadow. Environmental Issues And Options*. Agriculture and Consumer Protection Dept. Rome (available at http://www.fao.org/docrep/010/a0701e/a0701e00.HTM)

FAO. 2006b. *Food Security. FAO Policy Brief*, Issue 2. FAO Agriculture and Development Economics Division. Rome (available at ftp://ftp.fao.org/es/esa/policybriefs/pb_02.pdf)

FAO. 2010a. *The State of Food Insecurity in the World: Addressing Food Insecurity in Protracted Crises. 2010 Report*. Rome (available at http://www.fao.org/docrep/013/i1683e/i1683e.pdf)

FAO. 2010b. *The State of World Fisheries and Aquaculture*. Fisheries and Aquaculture Dept. Rome (available at www.fao.org/docrep/013/i1820e/i1820e00.htm

FAO. 2010c. *Global Forest Resources Assessment 2010. FAO Forestry Paper N. 163*. FAO Forestry Department. Rome (available at www.fao.org/docrep/013/i1757e/i1757e.pdf).

FAO. 2011a. *The State of the World's Land and Water Resources for Food and Agriculture. Managing systems at risk*. FAO and Earthscan (available at http://www.fao.org/nr/solaw/solaw-home/en/).

FAO. 2011b. *Payments for Ecosystem Services And Food Security*. Natural Resources Management and Environment Dept. Rome. (available at http://www.fao.org/docrep/014/i2100e/i2100e.pdf)

FAO. 2012a. *Greening the Economy with Agriculture*. Extract from the FAO Council document CL 143/18: Status of preparation of FAO contributions to the 2012 United Nations Conference on Sustainable Development: Governance for Greening the Economy with Agriculture (GEA). (available at http://www.fao.org/docrep/015/i2745e/i2745e00.pdf).

FAO. 2012b. *FRA 2015 Terms and Definitions. Forest Resources Assessment Working Paper 180*. FAO Forestry Department. (available at www.fao.org/docrep/017/ap862e/ap862e00.pdf)

FAO. 2012c. *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (available at http://www.fao.org/nr/tenure/voluntary-Guidelines/en/)

FAO. 2012d. Global Forest Land-use Change 1990-2005. Fao Forestry Paper 169. (available at http://www.fao.org/docrep/017/i3110e/i3110e.pdf)

FAO. 2013. Food Wastage Footprint. Impacts on Natural resources. Summary Report. Natural Resource Dept. (available at http://www.fao.org/docrep/018/i3347e/i3347e.pdf)

FAO/WHO. 2003a. *Expert Report on Diet, Nutrition and Prevention of Chronic Diseases*. Global Strategy on Diet, Physical Activity and Health. (available at http://www.who.int/dietphysicalactivity/en/).

FAO/WHO. 2003b. *Recommended International Code of Practice General Principles of Food Hygiene*. Cac/rcp 1-1969, Rev. 4-2003. Codex Committee on Food Hygiene. (available at www.mhlw.go.jp/english/topics/importedfoods/guideline/dl/04.pdf).

FAOSTAT. 2010/2011/2012. *FAOSTAT-Agriculture Database* (available at http://faostat.fao.org/default.aspx).

FAWC. 1979. *The five Freedoms. Farm Animal Welfare Council of Great Britain* (available at http://www.fawc.org.uk/freedoms.htm).

FOAG. 2009. *Swiss Agriculture on the Move: The New Agriculture Act. Ten Years On*. Federal Office of Agriculture of Switzerland (available at www.blw.admin.ch/aktuell/index.html?lang=en&download=NHzLpZeg7t,lnp6I0NTU042l2Z6ln1ad1IZn4Z2qZpnO2Yuq2Z6gpJCEdIJ9gGym162epYbg2c_JjKbNoKSn6A--).

Folke, C., Carpenter, S., Elmqvist, T., Gunderson, L., Holling, CS. & Walker, B. 2002. *Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations. Royal Swedish Academy of Sciences Ambio* 31: 437-440. (available at http://www.bioone.org/doi/abs/10.1579/0044-7447-31.5.437)

Food SCP Round Table. 2012. *Envifood Protocol. Environmental Assessment of Food and Drink Protocol*. European Food Sustainable Consumption & Production (SCP) Round Table. (available at http://www.food-scp.eu/files/consultation4/ENVIFOOD_Protocol_November_2012.pdf)

Freeman, R.E. 1984. *Strategic Management. A Stakeholder Approach. Cambridge University Press*, Boston.

FSC. 1996. *FSC International Standard. FSC Principles and Criteria for Forest Stewardship*. Forest Stewardship Council A.C., Bonn, Germany (available at https://ic.fsc.org/principles-and-criteria.34.htm).

G100. 2003. *Sustainability: A Guide To Triple Bottom Line Reporting*. Group of 100 Incorporated. Melbourne, Australia (available at www.group100.com.au/publications/G100_guide-tbl-reporting2003.pdf).

GA. 2012. Accelerating Progress Towards the Millennium Development Goals: Options for Sustained and Inclusive Growth and Issues for Advancing the United Nations Development Agenda Beyond 2015. *Annual report of the Secretary-General*. A/67/257. *Sixty-seventh session of the General Assembly*. (available at http://www.un.org/en/development/desa/policy/untaskteam_undf/sgreport.pdf.

Gesellschaft für angewandte Wirtschaftsethik (GfaW). 2012. *Certified Sustainable Economics. Standard for Certification of Sustainable Business Management*. Version 01/2012. Bad Sooden-Allendorf, Germany (available at http://angewandte-wirtschaftsethik.org/wp-content/uploads/2011/09/en-final-Certified-Sustainable-Economics-Standard.pdf).

GlobalG.A.P. 2011a. *Control Points and Compliance Criteria. Integrated Farm Assurance. All Farm Base*. Version 4.0. FoodPlus GmbH, Cologne. (available at http://www1.globalgap.org/northamerica/upload/Standards/IFA/v4_0-1/120206_gg_ifa_cpcc_af_eng_v4_0-1.pdf).

GlobalG.A.P. 2011b. *Control Points and Compliance Criteria. Integrated Farm Assurance. Crops Base*. Version 4.0. FoodPlus GmbH, Cologne (available at http://www1.globalgap.org/northamerica/upload/Standards/IFA/v4_0-1/120206_gg_ifa_cpcc_cb_eng_v4_0-1.pdf).

GlobalG.A.P. 2011c. *Control Points and Compliance Criteria. Integrated Farm Assurance. Livestock Base*. Version 4.0. FoodPlus GmbH, Cologne (available at http://www1.globalgap.org/northamerica/upload/Standards/IFA/v4_0-1/120206_gg_ifa_cpcc_lb_eng_v4_0-1.pdf).

Grenz, J., Thalmann, C., Schoch, M. & Stämpfli, A. 2011. *RISE 2.0 Field Manual*. Bern University of Applied Sciences, Zollikofen, Switzerland.

GRI. 2011a. *Sustainability Reporting Guidelines*. Version 3.1. Global Reporting Initiative, Amsterdam (available at https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf).

GRI. 2011b. *Sustainability Reporting Guidelines*. Version 3.1. Food Processing Sector Supplement. Global Reporting Initiative, Amsterdam (available at https://www.globalreporting.org/resourcelibrary/FPSS-Complete.pdf).

GSCP. 2010. *Reference Tools of the Global Social Compliance Programme*. Issy-les-Moulineaux, France (available at www.gscpnet.com/working-plan.html).

GWP. 2000. Towards Water Security: a Framework for Action. Global Water Partnership, Stockholm (available at http://www.gwp.org/Global/GWP-SAm_Files/Publicaciones/Marco%20para%20la%20Accion/Framework-for-action-Exec-Summary.pdf)

Haanaes, K., Arthur, S., Balagopal, B., Kong, M.T., Reeves, M., Velken, I., Hopkins, M.S. & Kruschwitz, N. 2011. *Sustainability: the 'Embracers' Seize Advantage. Findings from the 2010 Sustainability & Innovation Global Executive Study and Research Project*. MIT Sloan Management Review and The Boston Consulting Group (available at http://c0426007.cdn2.cloudfiles.rackspacecloud.com/MIT-SMR-BCG-sustainability-the-embracers-seize-advantage-2011.pdf).

Helmholtz-Zentrum. 2007. *Antibiotika und Antibiotikaresistenzen (in German)*. FLUGS-Fachinformationsdienst. Helmholtz-Zentrum, München. (available at http://www.helmholtz-muenchen.de/fileadmin/FLUGS/PDF/Themen/Krankheitsbilder/Antibiotika.End.pdf)

Henderson, G. 1994. *Cultural diversity in the workplace: issues and strategies*. Praeger Publishers, Westport (CT).

Hill, C. & Jones. G. 2007. *Strategic Management Theory: an Integrated Approach*. Houghton Mifflin Company, Boston.

HLPE. 2011. *Land Tenure and International Investments in Agriculture. A report by the High Level Panel of Experts on Food Security and Nutrition*. Committee on World Food Security, Rome (available at www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE-Land-tenure-and-international-investments-in-agriculture-2011.pdf).

Holling, C.S. & Meffe, G.K. 1996. *Command and Control and the Pathology of Natural Resource Management*. Conservation Biology, 10(2): 328-337. (available at http://www.ecology.ethz.ch/education/Ecosystem_Files/Holling_and_Meffe__1996__Pathology_of_Natural_Resource_Management.pdf)

Human Rights Council. 2008. *Promotion And Protection Of All Human Rights, Civil, Political, Economic, Social And Cultural Rights, Including The Right To Development*. Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie. Human Rights Council VIII Session, Agenda item 3. A/HRC/8/5. (available at http://www.reports-and-materials.org/Ruggie-report-7-Apr-2008.pdf)

Hussein, K. 2002. *Livelihood Approaches Compared: A Multi-Agency Review of Current Practice*. Commissioned by the UK Department for International Development's (DFID's) Sustainable Livelihoods Support Office (SLSO). London. (available at www.eldis.org/vfile/upload/1/document/0812/LAC.pdf).

IFAD. 2007. *Lack of Investment in Agriculture Is Driving Massive Migration from Rural Areas*. Governing Council meeting 14-15 February 2007. IFAD/15/07. Rome (available at www.ifad.org/media/press/2007/15.htm).

ILO. 1951. *Equal Remuneration Convention. C100*. Geneva (available at www.ilo.org/ilolex/cgi-lex/convde.pl?C100)

ILO. 1958. *Discrimination (Employment and Occupation) Convention. C111*. Geneva (available at www.ilo.org/ilolex/cgi-lex/convde.pl?C111)

ILO. 1998. *ILO Declaration on Fundamental Principles and Rights at Work*. Geneva (available at www.ilo.org/declaration/lang--en/index.htm).

ILO. 2006. *Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy*. 204th Session of the Governing Body of the International Labour Office. (amended at its 279th (2000) and 295th Session (2006). (available at http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/@multi/documents/publication/wcms_094386.pdf)

ILO. 2011. *Equality at work: The Continuing Challenge*. Global Report under the follow-up to the ILO Declaration on Fundamental Principles and Rights at Work. Report of the Director-General. International Labour Conference, 100th session. Report 1 (B). Geneva (available at www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_166583.pdf).

ILO. 2012. *Boosting Local Economies*. Geneva. Sustainable Enterprise Programme. (available at www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---led/documents/publication/wcms_175521.pdf).

ILO/IPEC. International Programme on the Elimination of Child Labour (IPEC). (available at http://www.ilo.org/ipec/lang--en/index.htm#a3)

Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: Synthesis Report*. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva (available at http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm)

International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD). (2008) Agriculture at a Crossroads: The Synthesis Report. Washington, DC, USA: International Assessment of Agricultural Knowledge, Science and Technology for Development. (available at: www.agassessment.org/)

International Energy Agency (IEA). 2009. *World Energy Outlook. Executive Summary*. OECD/IEA. Paris (available at www.iea.org/textbase/npsum/weo2009sum.pdf).

International Foundation for Organic Agriculture Movements (IFOAM). 2006. The IFOAM Basic Standards for Organic Production and Processing. In *The IFOAM Norms for Organic Production and Processing (version 2005)*. Bonn. (available at http://www.ifoam.org/sites/default/files/page/files/norms_eng_v4_20090113.pdf).

International Institute for Sustainable Development (IISD). 2009. *Bellagio STAMP: SusTainability Assessment and Measurement Principles*. 3rd OECD World Forum, Charting Progress, Building Visions, Improving Life. Winnipeg. (available at http://www.iisd.org/measure/principles/progress/bellagiostamp/)

International Task Force on Harmonization and Equivalence in Organic Agriculture (ITF) and The Global Organic Market Access (GOMA) Project. 2012. *Organic Equivalence Tools. International Requirements for Organic Certification Bodies (IROCB) and Guide for Assessing Equivalence of Organic Standards and Technical Regulations (EquiTool)*. Version 2. An initiative of the FAO, IFOAM and UNCTAD. (available at http://www.fao.org/docrep/015/an905e/an905e00.pdf

International Water Management Institute (IWMI). 2007. *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*. Earthscan, London and International Water Management Institute, Colombo. (summary available at http://www.iwmi.cgiar.org/Assessment/files_new/synthesis/Summary_SynthesisBook.pdf)

ISEAL Alliance. 2010. *Assessing the Impacts of Social and Environmental Standards Systems*. ISEAL Code of Good Practice, version 1.0. London. (available at www.isealalliance.org/resources/p041-impacts-code-of-good-practice).

Isenring, R. 2010. *Pesticides and the Loss of Bbiodiversity. How Intensive Pesticide Use Affects Wildlife Populations and Species Diversity*. Pesticide Action Network Europe. London (available at http://www.pan-europe.info/Resources/Briefings/Pesticides_and_the_loss_of_biodiversity.pdf).

ISO. 2006a. *Environmental Management – Life Cycle Assessment – Principles and Framework*. ISO 14040:2006. (available at http://www.iso.org/iso/catalogue_detail.htm?csnumber=37456)

ISO. 2006b. *Environmental Labels and Declarations – Type Iii Environmental Declarations – Principles and Procedures*. ISO 14025:2006. Geneva. (available at http://www.iso.org/iso/catalogue_detail?csnumber=38131)

Jörissen, J., Kopfmüller, J. & Brandl, V. 1999. *Ein Integratives Konzept Nachhaltiger Entwicklung* (in German). Wissenschaftliche Berichte FZKA 6393. Forschungszentrum Karlsruhe, Germany. (available at http://www.itas.fzk.de/deu/Itaslit/joua99a.pdf)

Loew, T. & Braun, S. 2006. *Organisatorische Umsetzung von CSR. Vom Umweltmanagement zur Sustainable Corporate Governance*. (in German). Institute 4 Sustainability, Berlin and future e.V., München. (available at http://www.4sustainability.de/fileadmin/redakteur/bilder/Publikationen/Loew_Braun_2006_Organisatorische_Umsetzung_von_CSR.pdf).

Maak, T. & Ulrich, P. 2007. *Integre Unternehmensführung. Ethisches Orientierungswissen für die Wirtschaftspraxis* (in German). Schäefer Poeschel. Stuttgart.

Marine Stewardship Council (MSC). 2010. *MSC Fisheries Standard. Principles and Criteria for Sustainable Fishing*. Version 1.1. (available at http://www.msc.org/documents/scheme-documents/msc-standards/MSC_environmental_standard_for_sustainable_fishing.pdf/view).

McCann, K.S. 2000. *The Diversity-Stability Debate. Nature*, 405: 228-233. (available at http://www.nature.com/nature/journal/v405/n6783/full/405228a0.html)

McInroy, N. & Longlands, S. 2010. *Productive Local Economies: Creating Resilient Places*. Centre for Local Economic Strategies (CLES). Manchester. (available at www.cles.org.uk/wp-content/uploads/2011/01/Resilience-for-web1.pdf).

Millennium Ecosystem Assessment (MEA). 2005. *Ecosystems and Human Well-being: Synthesis*. (available at www.maweb.org/en/index.aspx).

Nelson, J. & Prescott, D. 2008. *Business and the Millennium Development Goals: A Framework for Action* (2nd edition). International Business Leaders Forum. (available at http://mapeo-rse.info/sites/default/files/Business_and_the_Millennium_Development_Goals.pdf).

Norberg-Hodge, H. 2002. *Think Global... Eat Local. The Ecologist* (UK) 32(7): 28-31 (available at www.rightlivelihood.org/fileadmin/Files/PDF/Literature_Recipients/Ladakh/Norberg-Hodge_-_Think_Globally.pdf).

OECD LEED Programme. 2010. *Local Development Benefits from Staging Global Events: Achieving the Local Development Legacy From 2012*. A peer review of the olympic and paralympic legacy for east london proposed by the department of communities and local government, UK. (available at www.oecd.org/dataoecd/57/61/46207013.pdf).

OECD. 2002. *Glossary Of Key Terms in Evaluation and Results Based Management*. Paris. (available at http://www.oecd.org/dac/evaluation/glossaryofkeytermsinevaluationandresultsbasedmanagement.htm)

OECD. 2003. *OECD Environmental Indicators. Development, measurement and use*. Reference paper. OECD Environment Directorate. Environmental Performance and Information Division. Paris (available at http://www.oecd.org/environment/indicators-modelling-outlooks/24993546.pdf).

OECD. 2004. *Principles of Good Corporate Governance*. Paris. (available at http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf)

OECD. 2011a. *Guidelines for Multinational Enterprises*. OECD Publishing. (available at http://www.oecd.org/daf/inv/mne/48004323.pdf)

OECD. 2011b. *OECD Guidelines for Multinational Enterprises*. 2011 Edition. (available at http://www.oecd.org/daf/inv/mne/48004323.pdf).

OECD/IEA. 2008. *Towards a Sustainable Energy Future. In Support of the G8 Plan Of Action. Iea Programme of Work on Climate Change, Clean Energy and Sustainable Development*. International Energy Agency, Paris (available at http://ccs101.ca/assets/Documents/g8_towards_sustainable_future.pdf).

OHCHR. 1966a. *International Covenant on Economic, Social and Cultural Rights*. Geneva. (available at http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx)

OHCHR. 1966b. *International Covenant on Civil and Political Rights*. Geneva. (available at http://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx

Oldeman, L.R., Hakkeling, R.T.A.& Sombrock W.G. 1990. *World Map of the Status of Human-Induced Soil Degradation*. An Explanatory Note. ISRIC and UNEP. Wageningen, the Netherlands. (available at http://www.isric.org/sites/default/files/ExplanNote_1.pdf)

PENN Behavioral Health Coporate Services. 2008. *Developing Cultural Competency at Work: How Organizations Can Benefit from Opportunities Provided by a Multi-Cultural Staff.* University of Pennsylvania, Philadephia (PA) (available at www.pennbehavioralhealth.org/documents/cultural_competency.pdf).

Pfister, S., Koehler, A. & Hellweg, S. 2009. *Assessing the Environmental Impacts of Freshwater Consumption in LCA*. Environ. Sci. Technol., 43: 4098-4104. (available at http://www.pe-international.com/uploads/media/Water_Footprint_Freshwater_Consumption_in_Life_Cycle_Assessment.pdf)

Pimm, S.L. & Raven, P. 2000. *Extinction by Numbers. Nature* Volume 403: 843-845. MacMillian Magazines Ltd. (available at : www.researchgate.net)

Pinter, L., Hardi, P., Martinuzzi, A. & Hall, J. 2011. *Bellaggio STAMP: Principles for Sustainability Assessment and Measurement. Ecological Indicators* 17: 20-28. (available at http://disciplinas.stoa.usp.br/pluginfile.php/106018/mod_resource/content/1/texto_3.pdf)

Pitts, D. 2006. *Implementation of Diversity Management Programs in Public Organizations: Lessons from Policy Implementation Research*. Georgia State University, Department of Public Administration and Urban Studies Fiscal Research Center. Andrew Young School of Policy Studies Research Paper Series. Working Paper 6-17. Atlanta (GA) (available at http://aysps.gsu.edu/pitts_implementationdiversity.pdf).

Porter, T. 2008. *Managerial Applications of Corporate Social Responsibility and Systems Thinking for Achieving Sustainability Outcomes. Systems Research and Behavioral Science*, 25: 397-411. Online at Wiley InterScience. (available at http://onlinelibrary.wiley.com/doi/10.1002/sres.902/pdf)

Principles for Responsible Investment (PRI). (available at www.unpri.org)

Robles, M., Torero, M. & von Braun, J. 2009. *When Speculation Matters. IFPRI issue brief* 57. International Food Policy Research Institute (IFPRI). Washington, DC. (available at www.ifpri.org/sites/default/files/publications/ib57.pdf).

Rockström *et al.***.** 2009. *A Safe Operating Space for Humanity. Nature* 461: 472-475. (available at http://www.nature.com/nature/journal/v461/n7263/full/461472a.html)

Roundtable on Sustainable Biofuels (RSB). 2010. *RSB Principles & Criteria for Sustainable Biofuel Production.* Version 2.0. Lausanne. (available at http://rsb.org/pdfs/standards/11-03-08-RSB-PCs-Version-2.pdf).

Roundtable on Sustainable Biofuels (RSB). 2011a. *RSB Conservation Impact Assessment Guidelines.* Lausanne. (available at http://rsb.org/pdfs/guidelines/11-02-21-RSB-GUI-01-007-01-(RSB-Conservation-Impact-Assessment-Guidelines).pdf).

RSB. 2011b. *RSB Social Impact Assessment (SIA) Guidelines.* Roundtable on Sustainable Biofuels, Lausanne , Switzerland (available at http://rsb.epfl.ch).

Sainsbury. Sustainability Plan 20 to 20. http://www.j-Sainsbury.co.uk/media/373272/sainsbury_s_20_by_20_sustainability_plan.pdf

SAM Research AG. 2011. SAM Research Corporate Sustainability Assessment Questionnaire. DJSI 2012 – Test Companies. Zürich. (available at http://www.sustainability-indices.com/images/sample-questionnaire_tcm1071-337498.pdf).

Schaltegger, S. & Wagner, M. 2003. *Managing and Measuring the Business Case for Sustainability. Capturing the Relationship between Sustainability Performance, Business Competitiveness and Economic Performance.* Greenleaf Publishing. (available at www.greenleaf-publishing.com/content/pdfs/bcsintro.pdf).

Seuring, S. & Muller, M. 2008. *From a Literature Review to a Conceptual Framework for Sustainable Supply Chain Management. Journal of Cleaner Production,* 16: 1699-1710. Elsevier ltd.

Social Accountability International (SAI). 2008. *SA 8000 Standard:2008.* SA 8000. NY. (available at http://www.sa-intl.org/_data/n_0001/resources/live/2008StdEnglishFinal.pdf)

Stoob, K., Schmitt, H. & Wanner, M. 2005. *Antibiotikaeinsatz in der Landwirtschaft – Folgen für die Umwelt* (in German). EAWAG News 59d. EAWAG, Dübendorf, Switzerland.

Sustainable Agriculture Network (SAN). 2010a. *Standard for Sustainable Cattle Production Systems*. San José, Costa Rica (available at http://sanstandards.org/sitio/sections/display/3).

Sustainable Agriculture Network (SAN). 2010b. *Sustainable Agriculture Standard*. San José, Costa Rica (available at http://sanstandards.org/sitio/sections/display/3).

Sustainable Agriculture Network (SAN). 2011a. *Group Certification Standard (version 2)*. San José, Costa Rica (available at http://sanstandards.org/sitio/subsections/display/10).

Sustainable Agriculture Network (SAN). 2011b. *SAN Climate Module. Criteria for mitigation and adaptation to climate change*. Sustainable Agriculture Network. San José, Costa Rica (available at http://clima.sanstandards.org/)

Taylor, M.B., Zandvliet, L. & Forouhar, M. 2009. *Due Diligence For Human Rights: A Risk-Based Approach*. Working Paper No. 53. Corporate Social Responsibility Initiative. J.F. Kennedy School of Government. Harvard University. (available at www.hks.harvard.edu/m-rcbg/CSRI/publications/workingpaper_53_taylor_etal.pdf).

Tesco. 2012. Annual Report and Financial Statements 2012. http://www.tescoplc.com/files/reports/ar2012/files/pdf/tesco_annual_report_2012.pdf

The Economics of Ecosystems & Biodiversity (TEEB). 2009. *The Economics of Ecosystems and Biodiversity for National and International Policy Makers. Sum-mary: Responding to the Value of Nature.* (available at http://www.teebweb.org/wp-content/uploads/Study%20and%20Reports/Reports/National%20and%20International%20Policy%20Making/Executive%20Summary/National%20Executive%20Summary_%20English.pdf).

The European Commission DG SANCO and European Advisory Service. 2004. *The Introduction of Mandatory Nutrition Labeling in the European Union*. Impact assessment undertaken for the Directorate-General for Health and Consumers of the European Commission (available at http://ec.europa.eu/food/food/labellingnutrition/nutritionlabel/impact_assessment.pdf).

Toscano, G. 1997. Brief: Dangerous Jobs. In *Bureau of Labor Statistics*. Compensation and Working Conditions, Summer, 57–60.

Ulrich, P. 2008. *Integrative Economic Ethics: Foundations of a Civilized Market Economy.* Cambridge University Press.

UN Habitat. 2009. *Promoting Local Economic Development through Strategic Planning. Volume 5: Trainer's Guide.* UNON. Nairobi (available at www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=1922).

UN HUMAN RIGHTS COUNCIL. 2011. *Protect, Respect and Remedy: a Framework for Business and Human Rights.* (available at: http://www.business-humanrights.org/SpecialRepPortal/Home/Protect-Respect-Remedy-Framework/GuidingPrinciples)

UN Security Council. 2004. *The Rule Of Law And Transitional Justice In Conflict And Post-Conflict Societies.* Report of the Secretary-General. (available at www.unrol.org/files/2004 report.pdf).

UN. 1948. *Universal Declaration of Human Rights.* Geneva (available at www.un.org/en/documents/udhr).

UN. 1996. *Indicators of Sustainable Development Framework and Methodologies.* UN Commission on Sustainable Development. NY.

UN. 2001. *Indicators of Sustainable Development: Guidelines and Methodologies.* Economic and Social Affairs. NY.

UN. 2007. *Indicators of Sustainable Development: Guidelines and Methodologies – Third edition.* Methodology sheets. Economic and Social Affairs (DESA). New York. (available at www.un.org/esa/sustdev/natlinfo/indicators/Guidelines.pdf).

UN. 2009. *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization To The Convention On Biological Diversity.* Secretariat of the Convention on Biological Diversity. Convention on Biological Diversity. Montreal. (available at www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf).

UN. 2010. *Retooling Global Development.* World Economic and Social Survey 2010. Economic and Social Affairs (DESA). New York. (available at www.un.org/esa/policy/wess/wess2010files/wess2010.pdf).

UN. 2011. *The Millennium Development Goals Report 2011.* New York. (available at http://www.un.org/millenniumgoals/pdf/(2011_E)%20MDG%20Report%202011_Book%20LR.pdf)

UNCTAD, FAO and IFOAM. 2013. *Common Objectives and Requirements of Organic Standards (COROS).* The Global Organic Market Access (GOMA) project and IFOAM Organic Guarantee System (OGS). (available at http://www.goma-organic.org/tools/coros/)

UNEP DITIE/SETAC. 2009a. *Guidelines for Social Life Cycle Assessment of Products.* UNEP/SETAC Life Cycle Initiative. (available at http://www.lifecycleinitiative.org/wp-content/uploads/2012/12/2009%20-%20Guidelines%20for%20sLCA%20-%20EN.pdf).

UNEP DTIE/SETAC. 2009b. *Life Cycle Management. How business uses it to decrease footprint, create opportunities and make value chains more sustainable.* A UNEP/SETAC Life Cycle Initiative (available at http://www.lifecycleinitiative.org/wp-content/uploads/2012/12/2009%20-%20LCA%20-%20How%20business%20uses%20it.pdf).

UNEP DTIE/SETAC. 2011a. *Towards a Life Cycle Sustainability Assessment. Making informed choices on products.* A UNEP/SETAC Life Cycle Initiative (available at http://www.lifecycleinitiative.org/wp-content/uploads/2012/12/2011%20-%20Towards%20LCSA.pdf).

UNEP DTIE/SETAC. 2011b. *Global Guidance Principles for Life Cycle Assessment Databases. A basis for greener processes and products.* A UNEP/SETAC Life Cycle Initiative (available at http://www.lifecycleinitiative.org/wp-content/uploads/2012/12/2011%20-%20Global%20Guidance%20Principles.pdf).

UNEP. 1992. *Agenda 21. The United Nation's Programme of Action from Rio.* UN, New York (available at http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf)

UNESCO. 2001. *UNESCO Universal Declaration on Cultural Diversity.* (available at http://unesdoc.unesco.org/images/0012/001271/127160m.pdf).

UNESCO. 2003. *UN World Water Development Report: Water for People, Water for Life.* 1st edition. Jointly published by UNESCO and Berghahn Books. (available at http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/wwdr1-2003/)

UNESCO. 2008. *UNESCO and Cultural Diversity* (available at http://www.unescobkk.org/culture/diversity/lens/).

UNESCO. 2009. Water in a Changing World. The United Nations World Water Development Report 3. UNESCO Publishing and Earthscan. (available at http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/wwdr3-2009/)

UNHRC. 2008. Addendum. *Corporations and Human Rights: A Survey of the Scope and Patterns of Alleged Corporate-Related Human Rights Abuse.* In *Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises.* Human Rights Council VIII Session, Agenda item 3. A/HRC/8/5. (available at www.reports-and-materials.org/Ruggie-2-addendum-23-May-2008.pdf).

UNHRC. 2011. Report of the Special Representative of the Secretary-General on the Issue Of Human Rights and Transnational Corporations and Other Business Enterprises. *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework.* A/HRC/17/31 (available at www.business-humanrights.org/media/documents/ruggie/ruggie-guiding-principles-21-mar-2011.pdf).

UNIDO. 2011. *Industrial Value Chain Diagnostics: An Integrated Tool.* Vienna. (available at http://www.unido.org/fileadmin/user_media/MDGs/IVC_Diagnostic_Tool.pdf)

Unilever. 2010. *Unilever Sustainable Agriculture Code* (available at http://www.unilever.com/images/sd_Unilever_Sustainable_Agriculture_Code_2010_tcm13-216557.pdf.)

Unilever. 2012. Sustainable Living Plan. Progress Report 2012. (available at http://www.unilever.com/sustainable-living/index.aspx

United Nations Development Programme (UNDP). 2011. *Sustainability and Equity: A Better Future for All.* 2011 Human Development Report. New York (available at http://hdr.undp.org/en/reports/global/hdr2011).

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). 2009. *What is Good Governance?* Bangkok. (available at http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp)

United Nations Economic and Social Council (UNECE). 2007. Guidance Document on Control Techniques for Preventing and Abating Emissions of Ammonia. Economic Commission for Europe. (available at www.unece.org/env/documents/2007/eb/wg5/WGSR40/ece.eb.air.wg.5.2007.13.e.pdf)

United Nations Environment Programme (UNEP). 1992. *Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal.* Protocol on Liability and Compensation. (available at www.basel.int/Portals/4/Basel Convention/docs/text/BaselConventionText-e.pdf).

United Nations Environment Programme (UNEP). 2011. *Towards a Green Economy. Pathways to Sustainable Development and Poverty Eradication. A synthesis for Policymakers.* (available at http://www.unep.org/greeneconomy/portals/88/documents/ger/GER_synthesis_en.pdf).

United Nations Environment Programme (UNEP). 2012. *Green Economy in a Blue World.* UNEP, FAO, IMO, UNDP, IUCN, World Fish Center, GRIDArendal. (available at http://www.unep.org/pdf/green_economy_blue.pdf)

United Nations Environment Programme Finance Initiative (UNEPFI). 2006. *Sustainability Management and Reporting. Benefits for Financial Institutions in Developing and Emerging Economies.* UNEP Finance Initiative Sustainability Management and Reporting Project. (available at http://www.unepfi.org/fileadmin/documents/smr_benefits_dec2006_01.pdf)

United Nations Global Compact (UNGC) and International Finance Corporation (IFC). 2009. *Corporate Governance. The Foundation for Corporate Citizenship and Sustainable Businesses.* (available at www.unglobalcompact.org/docs/issues_doc/Corporate_Governance/Corporate_Governance_IFC_UNGC.pdf).

United Nations Global Compact (UNGC). 2010. *United Nations Global Compact Management Model. Framework for Implementation.* New York (available at www.unglobalcompact.org/docs/news_events/9.1_news_archives/2010_06_17/UN_Global_Compact_Management_Model.pdf).

Van der Ploeg, R.R., Ehlers, W. & Horn, R. 2006. *Schwerlast auf dem Acker* (in German). Spektrum der Wissenschaft, August, 80-88.

Vargas-Lundius, R. & Villarreal, M. 2008. *International Migration, Remittances and Rural Development.* IFAD/FAO. Rome. (available at www.ifad.org/pub/remittances/migration.pdf).

Vitousek, P.M., Aber, J.D., Howarth, R.W., Likens, G.E., Matson, P.A., Schindler, D.W., Schlesinger, W.H. & Tilman, D. 1997. *Human Alteration of the Global Nitrogen Cycle: Sources and Consequences. Ecol. Appl.* 7: 737–750.

Von Wirén-Lehr S. 2001. *Sustainability in Agriculture – An Evaluation of Principal Goal-Oriented Concepts to Close the Gap Between Theory and Practice. Agriculture, Ecosystems and Environment,* 84: 115-129.

Wackernagel M. & Rees W. 1997. *Unser ökologischer Fussabdruck: Wie der Mensch Einfluss auf die Umwelt nimmt* (in German). Birkhäuser, Basel, Boston, Berlin.

Wal-Mart. *Wal-Mart Supplier Sustainability Assessment* (available at http://www.greenbiz.com/sites/default/files/Walmart_Sustainability_Assessment.pdf).

Western Development Commission (WDC). 2007. *Indicators, Balanced Regional Development and the National Development Plan 2007-2013*. Republic of Ireland (available at http://www.wdc.ie/wp-content/uploads/reports_IndicatorsBRDandNDP2007-2013.pdf)

WHO. 2007. Food Safety. Foodborne Illness. World Health Organisation, Geneva (available at . http://www.who.int/foodsafety/foodborne_disease/en/)

WHO. 2009. General Information Related to Chemical Risks in Food. Geneva. (available at www.who.int/foodsafety/chem/general/en/index.html).

World Bank. 2011. World Development Indicators (WDI) & Global Development Finance (GDF). *World dataBank*. Washington D.C. (available at databank.worldbank.org/ddp/home.do?Step=12&id=4&CNO=2).

World Business Council for Sustainable Development (WBCSD). 2000. *Eco-efficiency. Creating More Value With Less Impact*. Geneva (available at www.wbcsd.org/web/publications/eco_efficiency_creating_more_value.pdf).

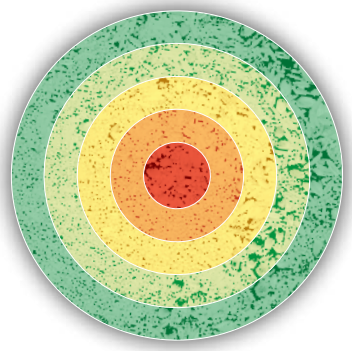
World Commission on Environment and Development (WCED). 1987. *Report of the World Commission on Environment and Development: Our common future* (available at www.un-documents.net/wced-ocf.htm).

World Economic Forum (WEF). 2010. *Realizing a New Vision for Agriculture. A roadmap for stakeholders*. (available at http://www.weforum.org/reports/realizing-new-vision-agriculture-roadmap-stakeholders).

Design and Layout :: studio@bartoleschi.com

SAFA

SUSTAINABILITY ASSESSMENT OF
FOOD AND AGRICULTURE SYSTEMS



SAFA GUIDELINES

WWW.FAO.ORG/NR/SUSTAINABILITY/SUSTAINABILITY-ASSESSMENTS-SAFA

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)
Viale delle Terme di Caracalla - 00153 Rome, Italy

SAFA
SUSTAINABILITY ASSESSMENT OF
FOOD AND AGRICULTURE SYSTEMS