COSA Committee On Sustainability Assessment

How Green is your tea?

Benefits of Shared Indicators

Elena Serfilippi
Daniele Giovannucci
Sarah Mohan

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Introduction

Today, buyer awareness about the sustainability of tea production and processing is growing. The tea sector has recently undertaken a number of initiatives to promote sustainability and, while many are conceptually excellent, a good many are impractical to scale because they lack comparability between different suppliers. They may also be difficult to understand, especially from the perspective of how effective they may be.

The objective of a simple, common “language” of measuring tea sustainability will improve our ability to understand and effect change. Such a language must begin with common indicators that would, of course, have to be relevant across diverse production systems and origins. The recent convening of a global working group: The International Expert Technical Committee for Tea (see members on page 2) served to identify and refine a core set of Sustainability Indicators and Metrics for Tea that are our joint contribution to this much-needed common language.

These indicators build on the best current work around tea and sustainability to distill the optimal practices and literature on the topic. The Experts, all with considerable experience, had filtered and tested the most vital sustainability practices in tea to ensure that they can be readily measured, understood, and acted on. The work has been oriented toward how to best measure environmental, social, and economic sustainability in the tea sector in a practical manner and with minimal cost, while keeping a level of accuracy and rigor that is necessary to ensure utility.

The work focuses on key factors such as consistently measuring costs of production in an accurate and comparable manner and does not avoid controversial practices such as the use of banned agro-chemicals and unjust treatment of workers that are becoming more frequently visible in the market. This article summarizes the work of the Experts and provides insights on the linkages between tea sustainability issues and the Sustainable Development Goals.

Background: The Work and the Experts

Tea production accounts for almost 3.8 million hectares of agriculture land and grew by 61% between 2000 and 2014, with 3/4 of that growth occurring in China (ITC, 2017). Tea is primarily produced in Asia and Africa with China (38%) and India (22%) leading, followed by Kenya (8%), Sri Lanka (6%) and smaller producers. The FAO (2016) records 5.6 million tons of tea produced in 2014. In that year, this tea trade was worth $6.3 billion, compared to $9.5 billion for cocoa and $20 billion for coffee (ITC, 2017; United Nations, 2016).

Actors along the tea value chain ranging from growers to the largest industrial concerns and brands such as Twinings, Tetley, Unilever, along with governments, trade unions and NGOs, are routinely and publicly pursuing sustainability in production, manufacturing, and trade efforts.

Many of these participate in public-private partnerships or Corporate Social Responsibility (CSR) programs. Major sustainability standards and initiatives active in the tea sector include Ethical Tea Partnership, Organic, Fair Trade, Rainforest Alliance, and UTZ. Looking at the most recent statistics reported in the State of Sustainable Markets (ITC 2017), 14.2% of the world’s tea area is certified to one or another of the main Voluntary Sustainability Standards (VSS). In 2012, it was estimated at 12%. Therefore, while

important and growing, these standards currently cover only a portion of the global production of tea.

The development and adoption of various tea-specific standards are the result of the need to address economic, environmental and social issues in tea production. The sustainability standards, when they are met, may serve to reduce issues ranging from loss of biodiversity, to high pesticide application, workers' health, safety, and payment issues. In the big sustainability picture, addressing those issues will help to align with the 2030 Agenda for Sustainable Development and the related Sustainable Development Goals (SDGs).

But decisions to ensure long-term sustainability are only as robust as the information and the measurement system upon which they are based. As such, there is a need among development professionals to complement the growing number of sustainability claims and initiatives with a reliable measurement system designed to ensure that sustainability efforts are indeed effective.

Good metrics can also serve to enhance the harmonization of efforts such as tea certification or efforts in domestic standards. Importantly, good metrics can engage continuous improvement and offer insights into actual impact of various efforts or initiatives, thus moving beyond the limits of the plethora of compliance efforts.

The Committee on Sustainability Assessment (COSA) and the Ethical Tea Partnership (ETP) together convened a diverse group of stakeholders from different parts of the tea value chain to fulfill the need for an objective understanding of how to measure basic sustainability in tea. The goal is to improve sustainability measurement tools by advancing a simple and consistent set of metrics to better understand and report on sustainability in the tea sector.

This International Expert Technical Committee for Tea is composed of these organizations and individuals:

Ethical Tea Partnership — Rachel Cracknell

Per Bogstad

UTZ Certified — Maya Sermeno

Ethical Trading Initiative — Sabita Banerji

idh the sustainable trade initiative — Marlies Huijssoon

TWININGS — Celine Gilart

giz — Eberhard Krain

Solidaridad — Ranjan Circar

Zhejiang Tea Group — Mao Limin

EASTERN PRODUCE KENYA · MALAWI · SOUTH AFRICA — Simon Odhiambo

forum for the future — Louise Rezler

McLEOD RUSSEL — Kaushik Saikia

Mattea Fleischner

TAYLOR'S — Simon Hotchkin

FAIRTRADE — Emma Mullins

How We Developed the Indicators

To undertake this work systematically, we pursued a four-stage process that would ensure that the indicators and metrics adequately represent the sustainability needs of the sector while also securing the necessarily broad perspective of Experts from different geographies, backgrounds, and function in the industry. This transparent process has not only been open and inclusive but also designed following best practices as outlined below.

Identification of Sustainability Challenges in the Tea Sector

The Main Challenges

The concept of sustainability can have different interpretations or applications - often focused on one or another factor and rarely a holistic perspective. This article uses the term in the generally accepted form of the international development community as outlined in the Brundtland Report, which states that *in order to achieve sustainability, long-term environmental, social, and economic needs must be met in an integrated manner without compromising the ability of future generations to meet their own needs (UNWCED, 1987)*.

Applying this definition to the tea sector implies working on the challenges and opportunities that affect the future of sustainable tea production. To identify and manage these challenges the development and adoption of a broadly recognized measurement system becomes obviously necessary to monitor issues and interventions.

For this work, we first distilled information from the research and publications of different leading organizations to identify the main sustainability issues in the tea sector, especially concerning metrics or indicators. These included key sources of information such as Ethical Tea Partnership (2011a), Forum for the Future (FFF, 2014), Oxfam (2016), IDH (2016), ITC (2014) and many others. These challenges have been regrouped in three main sustainability dimensions: economic, environmental and social.

In the **environmental sphere**, leading organizations consider climate change as the principal threat affecting the tea sector, in addition to other agricultural sectors (FFF, 2014; ETP, 2011; ITC, 2014; OXFAM 2014, FAO, 2016). In particular, the vulnerability of the tea bush to drought and pests, and the consequent intense pesticide and fertilizer application, represents a serious threat for the ecosystem, as well as for worker health and safety (IISD, 2014). Several policy recommendations can be made to stem the impact of climate change on the tea industry. There is a need to develop climate smart adaptation strategies, like the use of improved seed varieties, irrigation technologies, integrated pest management practices and diversification in both production and livelihood strategies (FAO, 2015). Without a rigorous adoption of climate adaptation and mitigation strategies a number of the current tea growing areas will likely become unsuitable in the coming years (FAO, 2015).

Aside from climate change issues, tea plantations seriously impact the surrounding environment because of the loss of biodiversity, greenhouse gas emissions and landslides resulting from deforestation (Sanne van der Wal, 2008, IDH 2016a). Direct consequences of the loss of biodiversity have been identified to include factors of local and global concern: soil erosion, loss of wetland habitats, and pollution of rivers and lakes (Clay, 2004).

Social issues are of critical importance as well in the tea sector, especially those concerning the use of child labor, working conditions, and pay. In general, working conditions for many laborers tend to be difficult, with few benefits in case of injury or illness, and the salaries are often below what is considered a living wage (Oxfam, 2014; Malawi Tea 2020 (2016a; 2016b); OXFAM and ETP 2013). Strong discrimination, harassment, and gender inequality exist (ETP, 2011a; ETP 2013; Sanne van der Wal, 2008; Mohan, 2018).

Although minimum wage structures are present in different countries, many do not permit workers to rise above poverty levels or earn a living wage. With more constructive dialogue on wages and working conditions between companies, civil society, and stakeholders, there are possibilities to better align wages to household needs, and not just the traditional minimum wages mechanism (OXFAM and ETP 2013), and to provide incentives for better quality.

On the **economic side**, the main challenge is the tea world price and its effects on the livelihood and income of tea producers. The tea world price is reportedly dominated by a handful of multinational tea packers and brokers (Sanne van der Wal, 2008; IDH and True Price, 2016). In particular, the market is characterized by “a concentration of buyers, with a degree of monopsony power vis-à-vis local producers” (IDH and True Price, 2016). This situation makes producers weak, and even more so in the face of volatile market prices and persistent low prices wherein they sometimes cannot cover production costs.

Aligning Tea Sustainability and SDGs

The social, economic and environmental challenges of tea production can be expressed in the collectively agreed set of universal goals for an inclusive and sustainable global development process: the Sustainable Development Goals (SDGs). The analysis of those issues in light of the UN’s 2030 Sustainable Development Agenda also contributed to identifying the most important tea sustainability indicators.

Environmental issues

When we talk about climate change issues in the tea sector, we refer to the more general Target 11.b that invites “cities and human settlements to adopt and implement integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change...” A range of environmental actions to fight climate change should be developed, starting with land restoration and reforestation, in order to limit the losses of biodiversity, as stated in Target 15.5*:* “Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species, and continuing with the reduction of water contamination and pollution generated by an extensive use of chemicals (fertilizers and pesticides).

Here, the agricultural industry in general, and the tea industry in particular, could work on the promotion of sustainable management practices such as integrated pest management, conservation and utilization of local genetic resources, breeding for local adaptation, and other climate-smart agricultural practices to reach Target 15.2: “By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.”

Social Issues

On social issues, promoting sustainable growth and decent work for all it is at the core of SDG 8, and in the sub-goal of Target 8.7 we find both the eradication of forced and child labor: “Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms.” It is also in the development of policies oriented at supporting productive activities, decent job creation, entrepreneurship, and innovation (Target 8.3), without discrimination, as highlighted in Target 8.5 “By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.”

Economic Issues

All the environmental and social sustainability efforts should also be oriented to the stated economic principle, as expressed by Target 2.3, to “...double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land…”

This target recognizes price volatility as one of the biggest challenges associated with the accomplishment of this goal. Price volatility affects not only food crops but also commodities such as tea and coffee. To resolve this challenge, it is fundamental to “Adopt measures to ensure the proper functioning of commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme price volatility”.

Development of a Tea Measurement System

Informed by the literature on tea sustainability and the SDGs, the set of tea indicators initially proposed by COSA to the International Experts is the result of a thorough distillation from the work of leading organizations. We worked with the most-used and respected indicators and practices that were important across tea production systems to shape them into one practical set. COSA presented a preliminary comprehensive set of tea indicators that the International Experts have improved through an interactive review, based on the following structured criteria.

Science based

To help ensure the initial rigor of the proposed indicators, COSA and the International Experts reviewed current best practices in leading institutions, interviewed noted experts, and conducted a review of published and unpublished literature on the topic. This led to a solid understanding of the intrinsic complexity of tea production systems and the wide range of variables that may affect their performance.

S.M.A.R.T. Process

For indicators to be effective in accurately capturing complex topics and a wide range of variables faithfully over time and across diverse geographies and types of production systems, we applied SMART filters. These build on a sustainability-oriented application of such filters derived from our historic development of indicators for leading international initiatives (COSA 2014).

SMART indicators help translate complex phenomena that are difficult to perceive or measure into relatively simple, actionable metrics. These filters, our history with hundreds

of thousands of field surveys, and subsequent reviews among the Experts, help us to guarantee that the indicator is highly functional. Thus, with the International Experts, we reviewed indicators applying these filters to ensure that each one is:

1. **Specific** in its definition to ensure clarity and comparability and ensure that the same thing is measured each time in the same way (can also include the concept of capturing what is significant in a sensible manner)

2. **Measurable** with reasonable cost and effort and also that the indicator be worth measuring because it is meaningful.

3. **Actionable** or attainable in the sense that the information from the indicator could reasonably function to inform a change of policy or investment.
4. **Relevant** for most users to apply and realistic rather than theoretical. We also ask whether the indicator offers the opportunity for a results-based metric.
5. **Time-bound** refers to whether the indicator is oriented to measurably show change and be readily tracked over a reasonable time period.

To be certain that the selected indicators and their associated metrology are on sound scientific footing, we also applied a vetting and testing process built on the successful approach already utilized by COSA in its global efforts with other sectors and platforms ranging from the FAO (SAFA) to the IDB (SAFE) to the Global Coffee Platform.
This work led to the creation of a library of tea indicators to measure and monitor the main sustainability challenges related to the tea sector in a way that is simpler, more accessible and comparable.

The indicators are classified following the multi-dimensional approach used for the identification of the main challenges in the tea sector, with social, environmental, and economic (SEE) dimensions able to capture the complexity of factors relevant to measuring sustainability.

The Range of Application of the Tea Sustainability Indicators

These indicators are, first and foremost, designed to be pragmatic and as simple as possible. They focus on the farm-level realities where information is typically most difficult to obtain. We elected to sacrifice high levels of accuracy to instead make them more universal and accessible for a wide range of users. They can provide high-level diagnostic information on the state of tea sustainability and the main challenges, and readily convey specific and vital information that can inform policy and decision-making. The information collected through the use of these indicators can also help in better designing future interventions and in evaluating their impacts in the tea sector.

In particular, this set can be used to:

1. Rapidly assess the main tea sustainability issues. A small sub-set of tea Key Performance Indicators (KPIs) can be suggested when a project has very limited budget, but it wants to explore some essential facets of tea sustainability. The KPIs serve as the basis for brief surveys.
2. Identify the critical hot spots by quantitatively assessing levels of farmer

sustainability in a target area at a given point in time. The indicators are optimal for such diagnostic purposes to simply determine critical factors affecting sustainability and to help design appropriate interventions.

3. Identify the relative impact of sustainability and certification initiatives on farmers' well-being, livelihoods, and environment

Key Points to Consider

If the aphorism holds true that you cannot manage what you cannot measure, then one of the key challenges facing the tea sector today lies in establishing practical and broadly recognized ways to measure and manage sustainability efforts. Credibility is key and so is comparability. In tea, as in many other sectors, without pragmatic measurement, we will never have the necessary clarity to determine what efforts or investments are working and what may miss the mark or even be detrimental.

The International Experts convened by COSA and the ETP accomplished an important first step toward this by creating a comprehensive core set of tea indicators capable of grasping the key issues around tea and sustainability and tracking changes over time. They are freely available and can be accessed here on COSA's website

As a group, we are conscious that the transition to a sustainable tea sector faces obstacles. We are certain that only with a common and comparable set of metrics can we ensure rapid progress and facilitate the transition to a more sustainable tea industry.

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