

# Delta Sustainability Framework \_short version

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## Introduction

The **Delta Sustainability Framework** aims to align sustainability monitoring and reporting within and across the cotton and the coffee sectors. It provides a **common set of impact and outcome indicators** to measure and report on sustainability improvements.

Drawing inspiration from the ISEAL's Sustainability Claims Good Practice Guide, the framework guides private and public stakeholders to monitor and communicate relevant information generated through the common set of indicators, building on the principles of reliability, relevance, and transparency.

The Delta Sustainability Framework is intended to apply worldwide to any cotton and coffee farming system, with the potential to be expanded to other agricultural commodities over time.

Its strong alignment with the **Sustainable Development Goals (SDGs)** enhances the commodity sector's opportunities to embrace a common language and purpose, and to forge new partnerships to achieve a global sustainable agriculture.

The **intended uses** of the framework include:

- national reporting on the commitments set by the SDGs and the ratification of relevant international conventions on chemicals, climate change, biodiversity and labour rights;
- evidence-based recommendations to streamline sustainability in agricultural policies;
- upgrading of extension services to support continuous improvement at farm level;
- transparency and communication with consumers on the actual value of sustainably produced goods;
- identification of business opportunities leveraging sustainable value chains.

## Consultations with the sector stakeholders

The core set of indicators is the result of an intensive consultation process that began in June 2019 and engaged sustainability standards, retailers, donors, research institutes, national committees and international organisations from the agricultural sector.

## The Delta Sustainability Indicator Set

The Delta Sustainability Framework comprises a core set of **15 farm-level, outcome/impact indicators across the social, economic and environmental dimensions of sustainability**.

The core set builds on the work already undertaken by several commodity platforms and initiatives to define and harmonize sector-wide sustainability goals, and in particular on the **Coffee Data**



**Standard**<sup>1</sup> developed by Global Coffee Platform (GCP) and on **the Guidance Framework on Measuring Sustainability in Cotton Farming Systems** published by the Expert Panel on the Social, Environmental and Economic Performance of Cotton (SEEP)<sup>2</sup>.

Agriculture is a complex, local environment. The interpretation of the data generated through the application of the indicators must consider the context in which the information is collected. The 15 indicators were selected for their relevance, feasibility and usefulness in monitoring progress towards sustainable agricultural commodities. Considering the interdependences and potential trade-offs, between the social, economic and environmental sustainability pillars, the indicator set needs to be seen and used as a whole.

1. **Use of highly hazardous pesticides**
2. **Pesticide composite risk indicator**
3. **Water Management**
  - Quantity of water used for irrigation**
  - Water use efficiency - irrigated farms**
  - Water crop productivity (WCP)**
4. **Top soil carbon content**
5. **Fertilizer use by type (Nitrogen Use Efficiency in future)**
6. **Forest, wetland and grassland converted for cotton or coffee production**
7. **Greenhouse gas emissions**
8. **Yield (average)**
9. **Net average returns from cotton and coffee production (Living Income in future)**
10. **Price (at farmgate)**
11. **Wages - proportion of workers earning a legal minimum wage**
12. **Child labour: Incidence of the worst forms of child labour**
13. **Forced labour: Incidence of forced labour**
14. **Gender: women in managerial/leadership roles and other relevant decision-making influence**
15. **Number of fatalities and non-fatalities on the farm**

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<sup>1</sup> <https://www.globalcoffeeplatform.org/latest/2019/a-common-language-for-sustainable-coffee-the-coffee-data-standard>

<sup>2</sup> SEEP is an expert panel of the International Cotton Advisory Committee (ICAC) established in 2006



## Brief Description of the Indicators

### 1. Use of highly hazardous pesticides

Unit: kg active ingredient (a.i.) of highly hazardous pesticide per ha of harvested land  
Target: 0%, Exclusion criteria for certain standards. Not relevant to organic farms.

*Highly hazardous pesticides are defined by FAO/WHO International Code of Conduct on Pesticide Management (2014) as pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health or environment according to internationally accepted classification systems such as WHO or GHS [the Globally Harmonised System of Classification and Labelling of Chemicals] or their listing in relevant binding international agreements or conventions. In addition, pesticides that appear to cause severe or irreversible harm to health or the environment under conditions of use in a country may be considered to be and treated as highly hazardous. An “open” list of highly hazardous pesticides not recommended for use on cotton will be developed based on the FAO/WHO criteria.*

### 2. Pesticide composite risk indicator

Risk assessment model/approach under consideration

*This indicator is based on information on the use of pesticides on the farm, the type of pesticides used and the type of measure(s) taken to mitigate the associated risk. The best pesticide risk assessment approach to analyse pesticide use and exposure data for the purpose of the framework is under consideration.*

### 3. Water Management (irrigation only)

Not relevant to rainfed farms. Inclusion of indicators on water availability and water scarcity will be explored for the next version of the core set.

*This suite of indicators provides an indication of how effectively irrigation water is used on the farm. It includes the total water used, the efficiency in supplying the water used (water withdrawn or diverted from its sources versus water used) and the amount of marketable biomass produced in relation to the water used.*

- **Quantity of water used for irrigation**

Unit: mega litres (blue water)/ha of harvested land

- **Water use efficiency - irrigated farms**

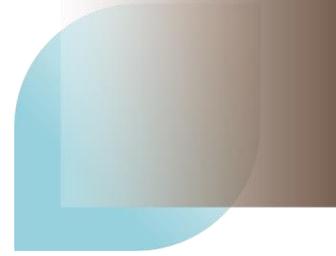
Unit: Percentage (%)

- **Water crop productivity (WCP)**

Unit: mega litres per tonnes of cotton lint or Green Bean Equivalent (GBE)<sup>3</sup>

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<sup>3</sup> GBE: green bean equivalent. Green coffee means all coffee in the naked bean form before roasting.



#### 4. Top soil carbon content

Unit: grams of organic carbon per kg of soil

*Top soil carbon content is to be measured in the top layer of the soil (0-10/30 cm) on a yearly basis using a visual assessment method. It is recommended to carry out soil testing every 5-6 years to validate the visual observations and the soil carbon trend over time. In order to explain variation, it is also recommended to monitor crop management practices to reduce soil erosion and soil fertility losses.*

#### 5. Fertilizer use by type (Nitrogen Use Efficiency in future)

Unit: kg a.i. of type of fertilizer per ha of harvested land

Not relevant to organic farms.

*A proper use and management of synthetic fertilizers is critical to avoid pollution and to maintain a good level of soil fertility.*

#### 6. Forest, wetland and grassland converted for cotton or coffee production

Unit: ha of forest, wetland or grassland converted to cotton or coffee production

Target: 0%. Exclusion criterion for sustainability standards

*This indicator measures the conversion of any natural land (e.g., forest, wetland, grassland) to land used for cotton or coffee production. The indicator will be used in combination with georeferenced deforestation risk maps. The definition of forest for the purpose of this framework refers to the FAO guidelines that defines forest as 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 or urban land use.*

#### 7. Greenhouse gas emissions

Unit: kg CO<sub>2</sub>e / kg cotton lint or GBE

*This indicator is defined as the ratio between CO<sub>2</sub> equivalent emissions from agricultural activities and the marketable biomass produced: cotton lint or Green Coffee Beans (GBE). Activities includes, among others, the use and manufacturing of fertilizers and pesticides.*

#### 8. Yield (average)

Unit: kg cotton lint or GBE/ha



## 9. Net average returns from cotton and coffee production (Living Income in future)

Unit: USD/ ha seed cotton or GBE

*This indicator measures the average gross income from coffee or seed cotton minus the cost of cultivation. The indicator therefore measures only the net operating income generated by cotton or coffee, as distinct from the total income of the farming household, which also includes remittances and off-farm income.*

## 10. Price (at farmgate)

Unit: local currency / tonne of seed cotton or coffee (GBE)

Relevant to premium-based standards.

*This indicator refers to the average price received per tonne of seed cotton or coffee (GBE). For countries like USA, BRAZIL, AUSTRALIA values will be provided for lint and cotton seed and converted into seed cotton.*

## 11. Wages - proportion of workers earning a legal minimum wage

Unit: Daily average earnings for farm labor compared to (rural) minimum wage in USD or local currency

Target:100%. Entry criterion for sustainability standards.

*All living wages or wages of all workers and employees should be equal or above existing official national minimum wages or sector agreements, whichever is higher. This indicator allows identifying holdings or businesses that do not pay a fair remuneration to all employees.*

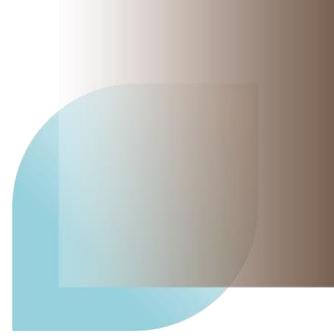
## 12. Child labour: Incidence of the worst forms of child labour

Unit: number of children aged 5–17 years engaged in child labour, by sex and age

*This indicator tracks the employment of children below the age of 15 or under the age defined by local law, whichever is higher. Child labour is “work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development”. Hazardous work includes work with dangerous machinery, equipment and tools, or hazardous products like pesticides, and work that involves the manual handling or transporting of heavy loads and work in an unhealthy environment.*

## 13. Forced labour: Incidence of forced labour

Unit: number of people engaged in forced labour, by sex and age



#### **14. Gender: women in managerial/leadership roles and other relevant decision-making influence**

Index under development

*Important decision making tasks include: input in productive decisions, access to and decision on credits, control over use of income, work balance, group membership and membership in influential groups.*

#### **15. Number of fatalities and non-fatalities on the farm**

Unit: number of incidents per 1 million people

*Worker health and safety refers as the principle that workers should be protected from sickness, disease and injury arising from their employment. The indicator measures the number of injuries and sickness episodes, including those due to exposure to pesticides.*