

# Delta Framework Sustainability Indicators

A common set of environmental, social, and economic indicators to measure sustainability at farm-level across cotton and coffee sectors



## Environmental Indicators

- 1 Use of highly hazardous pesticides**  
**Unit:** kg active ingredient (a.i.) of highly hazardous pesticide per ha of harvested land
- 2 Pesticide risk indicator**  
**Alternative:** pesticide use by active ingredient kg per ha
- 3 Water management (in irrigated farms)**
  - 3.1 Quantity of water used for irrigation**  
**Unit:** mega litres per ha of harvested land
  - 3.1 Water use efficiency**  
**Unit:** percentage of water used for the crop out of water withdrawn/ diverted from its source
  - 3.3 Water crop productivity**  
**Unit:** mega litres per tonnes of cotton lint or Green Bean Equivalent (GBE)
- 4 Top soil carbon content**  
**Unit:** grams of organic carbon per kg of soil
- 5 Fertiliser use by type**  
**Unit:** kg a.i. per ha of harvested land  
**In future:** nitrogen use efficiency
- 6 Forest, wetland and grassland converted for cotton or coffee production**  
**Unit:** ha of forest, wetland or grassland converted to cotton or coffee production
- 7 Greenhouse gas emissions**  
**Unit:** kg CO<sub>2</sub> equivalent per kg cotton lint or GBE



## Economic Indicators

- 8 Average yield**  
**Unit:** kg cotton lint or GBE per ha
- 9 Net average returns from cotton and coffee production**  
**Unit:** USD per ha seed cotton or GBE  
**In future:** Living Income
- 10 Price at farm gate** *Only for premium-based standards*  
**Unit:** local currency/ tonne of seed cotton per kg of GBE
- 11 Proportion of workers earning a legal minimum wage**  
**Unit:** daily average earnings for farm labour compared to (rural) minimum wage In US\$ or local currency



## Social Indicators

- 12 Incidence of the worst forms of child labour**  
**Unit:** number of children aged 5 to 17 years engaged in child labour, by sex and age
- 13 Incidence of forced labour**  
**Unit:** number of people engaged in forced labour, by sex and age
- 14 Women empowerment**  
*Composite indicator*
- 15 Number of fatalities and non-fatalities on the farm**  
**Unit:** number of incidences per 1 million people

**Units:** GBE coffee Green Bean Equivalent; ha hectare; kg kilogram