## **BCI Principles & Criteria**

### Introduction

BCI exists to make global cotton production better for the people who produce it, better for the environment it grows in, and better for the sector's future. BCI connects people and organisations from across the cotton sector, from field to store, to promote measurable and continuing improvements for the environment, farming communities and the economies of cotton producing areas.

The Better Cotton Standard System (BCSS) is a holistic approach to sustainable cotton production which covers all three pillars of sustainability: environmental, social and economic.

The Better Cotton Principles and Criteria (P&C) are a critical component of the BCSS. This practice-based standard forms the global definition of Better Cotton. By adhering to these principles, BCI Farmers produce cotton in a way that is measurably better for the environment and farming communities. The P&C provides rules and guidance to farmers participating in BCI programmes on how to reach BCI social and environmental sustainability objectives.

This document offers an overview of the 7 BCI Principles & Criteria.

## 1. Better Cotton farmers minimise the harmful impact of crop protection practices

#### Crop protection in the cotton context

Cotton is attractive to a range of pests, and subject to diseases and weed infestations. A range of techniques are available to control and manage them. This includes the use of bio-control agents, pheromones and hormones; plant breeding and appropriate cultivar selection; various cultural and mechanical techniques; the application of conventional pesticides (both natural and synthetic) and more recently, the use of genetically modified plants.

However, synthetic pesticides are predominant in crop protection, and their inappropriate or improper use can adversely affect human health, contaminate water sources, food crops and the environment more broadly.

#### Solutions proposed by BCI

BCI supports farmers through:

- The adoption of IPM and an emphasis on the use of pest control techniques other than pesticide application, in order to reduce reliance on pesticides. In addition to the risks associated with pesticide use, over-reliance has led to pesticide resistance, disruption to populations of natural pest enemies and secondary pest outbreaks, all of which make crop protection more challenging and costly;
- 2. The use of practices that minimise the potential harmful effects of pesticides.

#### Methods used

BCI seeks to enable farmers to make informed choices about the availability of technologies, and how to use them appropriately. We encourages informed decision-making at the farm level, to change practices that ensure improved outcomes – environmentally, socially and economically.

In parallel, as climate change will influence the ecology of weeds, pests and disease, with possible implications for the effectiveness of current IPM strategies in term of crop protection and pesticide use, BCI supports farmers in developing a better knowledge and understanding of pest behaviour under different projected scenarios and adopting new IPM technologies to respond to climate risks.

## 2. Better Cotton farmers promote water stewardship

#### Water stewardship in the cotton context

Cotton production impacts freshwater resources in terms of water quantity through irrigation (use of surface and groundwater) and the use of rainwater stored in land. It also affects water quality through the application of agrochemicals (use of pesticides and fertilisers) and farm runoff.

Water is a major limiting factor in cotton production. While cotton is a relatively drought tolerant crop, farmers who use water efficiently (on both rainfed and irrigated systems farms) can achieve greater yields and consume and pollute less water if appropriate management practices are applied. This contributes not only to more efficient and sustainable water use, but it also helps Producers build resilience to climate change, which is expected to intensify the existing pressures on water supply, particularly in regions where water scarcity is already a concern.

#### Solutions proposed by BCI

Water stewardship means using water in a way that is socially equitable, environmentally sustainable and economically beneficial. It is achieved through an inclusive stakeholder process encompassing site and catchment-based actions. Good water stewards understand their own water use, the catchment context and the shared risk in terms of water governance, water balance, water quality and important water-related areas. They engage in meaningful individual and collective actions that benefit both people and nature.

#### Methods used

BCI supports farmers in implementing good water management practices by adopting a Water Stewardship Plan at the farm level, which consists in:

- 1. Mapping and understanding water resources;
- 2. Managing soil moisture;
- 3. Using efficient irrigation practices to optimise water productivity;
- 4. Managing water quality;
- 5. Engaging in collaboration and collective action to promote sustainable water use.

### 3. Better Cotton farmers care for the health of the soil

#### Soil health in the cotton context

Soil is one of the fundamental assets for any farmer. It is also the most neglected and unknown. This leads to poor soil management, resulting in poor yields, depletion of soils, wind erosion, surface runoff, land degradation and climate change (both local and global). Even within conventional farming, better understanding and use of the soil can lead to a significant increase in the quality and quantity of yields and large cost reductions in fertilisers, pesticides and labour.

More importantly, given the impact of climate change on Producers, primarily in the form of disturbed rainfall patterns as well as worsening droughts, a healthy soil could well become the farmer's main asset for climate resilience and climate mitigation.

#### Solutions proposed by BCI

Any asset used needs to be properly understood, so it can be successfully managed. BCI wants soil management to result in healthy soils, since healthy soils have many direct and indirect benefits. For farmers, these benefits would be: better yields through improved availability of nutrients and water to their crops, reduction of pests and weeds, reduction in labour needs, improved land accessibility, reduction of erosion, soil compaction, soil degradation, and many more.

#### Methods used

Good soil management starts with developing some knowledge of soil science. In particular, a sound understanding of the basics in soil science is fundamental to addressing Producers' needs and creating a comprehensive soil management plan.

In this regard, BCI supports farmers in implementing a soil management plan to maintain and enhance soil health. It consists in:

- 1. Identifying and analysing soil type;
- 2. Maintaining and enhancing soil structure;
- 3. Maintaining and enhancing soil fertility;
- 4. Continuously improving nutrient cycling.

# 4. Better Cotton farmers enhance **biodiversity** and use **land** responsibly

#### Biodiversity and Land Use in the cotton context

Land used for the production of cotton crops has typically been cleared of vegetation and natural habitats, and this habitat clearing has a direct and significant negative impact on biodiversity. A reduction in habitat reduces or eliminates the breeding, foraging or migratory routes of many species. The cultivation of single crops over a large area reduces the total number of species able to live within that area, and promotes the establishment of dominant populations that may also be pests. For these reasons, enhancing biological diversity is ultimately beneficial for fauna and flora in and around the farm, but also increases yields and therefore profits.

#### Solutions proposed by BCI

To lessen their impact on biodiversity, BCI Farmers can conserve or enhance areas of natural habitat on their land, and adopt practices that minimise the negative impact on the habitat surrounding their farm. Mapping biodiversity as a way to undertake an analysis of existing fauna and flora in and surrounding the farm is an important first step.

BCI Farmers should also ensure that social and environmental values of significant importance, such as High Conservation Values (HCVs), are not damaged by conversion (from non-agricultural land to agricultural land). They should manage and monitor these over time.

#### Methods used

BCI supports farmers in:

- 1. Adopting a Biodiversity Management Plan that conserves and enhances biodiversity on and surrounding the farm and includes all of the following components:
  - i. Identifying and mapping biodiversity resources;
  - ii. Identifying and restoring degraded areas;
  - iii. Enhancing populations of beneficial insects as per the Integrated Pest Management plan;
  - iv. Ensuring crop rotation;
  - v. Protecting riparian areas.
- 2. Adopting the High Conservation Value approach and respect the right of local communities and indigenous people.

## 5. Better Cotton farmers care for and preserve fibre quality

#### Fibre Quality in the cotton context

Three broad characteristics of the cotton are important: the inherent characteristics of the fibre, the level of trash, and the level of contamination. The seed cotton delivered to gins should be as low in trash as possible, free of contaminants, and not too wet or dry. The value of cotton lint is related to both the quality of yarn that can be produced from it, and the efficiency with which this yarn can be produced. It is therefore essential that BCI Farmers consider the needs and requirements of the users of the cotton they are producing. It is also generally the case that the higher the quality of the cotton, the higher its value, which should lead to a better price for BCI Farmers.

#### Solutions proposed by BCI

The diverse range of quality characteristics includes both aspects that are directly influenced by genetic and seasonal considerations and conditions – and which can nevertheless also be influenced by farm management decisions – and aspects under the direct control of the farmer, such as the level of contamination. The focus on quality therefore includes the need to manage intrinsic fibre characteristics to the extent to which this is possible, as well as man-made contamination and trash content.

#### Methods used

BCI supports farmers in:

- 1. Harvesting, managing and storing seed cotton to minimise trash, contamination and damage. This includes harvest management and general hygiene, choice of materials in which to pick and carry or move cotton, how and where cotton is stored, and how cotton is transported.
- 2. Adopting management practices that maximise fibre quality. This includes the choice of cultivar, planting date, nutrition and irrigation management; and disease, insect and weed management.

## 6. Better Cotton farmers promote decent work

#### Decent Work in the cotton context

Main decent work challenges in the cotton sector include the following:

- The status of women, who often face serious challenges, and have access to fewer opportunities. They tend to be under-represented in learning groups, yet over-represented in field labour, including picking. In some countries, women workers earn less than men for the same work, or are employed in different, lower-paying tasks.
- Child labour, which happens when children are doing work which is not appropriate for their age, which impedes their schooling and development, and which damages their health and wellbeing.
- Wages and incomes, which often are below legal minima.
- Health and safety, with one the major risks usually being exposure to hazardous chemicals.
- Forced or bonded labour, including forms of debt bondage. This especially affects children and young workers, who are particularly vulnerable to false promises.

#### Solutions proposed by BCI

BCI understands that downward economic pressures on cotton producers, particularly in developing countries, are a barrier to improving both the environmental and social performance of cotton farming. In seeking to support the development of skills and institutions – particularly Producer organisations – and facilitate access to information, BCI strives to change the circumstances that perpetuate and entrench unsustainable labour practices in many cotton producing regions, and enable investment in improvements for the community, environment and workforce.

By using the concept of decent work as a means to describe how work contributes to equitable, inclusive and sustainable development, BCI has developed a broad-based and consistent approach to the diversity of contexts in which cotton is produced, from family smallholdings to large-scale farms.

#### Methods used

BCI supports farmers in promoting fundamental principles and rights at work on employment and income opportunities, social protection and social security, and social dialogue; based on international labour standards.

# 7. Better Cotton farmers operate an effective management system

#### Producer-level Management in the BCI context

The BCSS places special emphasis on driving change through continuous improvement, and on demonstrating results through the annual collection of field-level data. The BCSS also utilises self-assessment as one of the fundamental assurance mechanisms, ensuring that the Producer has primary responsibility for assessing and reporting on performance. These essential features of BCI's approach depend upon effective management at the Large Farm or PU level. Management activities are essential to ensuring that: farmers are trained to adopt improved practices; risks to noncompliance are identified and remediated; progress against production criteria is monitored and assessed; and field-level data is accurately maintained and systematically reported.

#### Solutions proposed by BCI

An effective management system is the backbone that enables Producers to achieve the other 6 production principles, by:

- 1. Developing and implementing a Continuous Improvement Plan that focuses on addressing the key sustainability issues identified through training (for farmers and PU staff), and other corrective actions.
- 2. Evaluating the effectiveness of training provided for farmers and PU staff as well as capacity-building work, and proposing improvements to these.
- 3. Developing and implementing a data management system that maintains accurate and complete records of the data required by BCI.
- 4. Identifying the key sustainability issues that create risks that the Producer may not comply with the core indicators.

#### Methods used

BCI supports farmers in operating a management system that includes the framework of policies, processes and procedures ensuring they can fulfil all the tasks required to meet the BCI Principles & Criteria; and to enable continuous improvement in farming practices.