

BETTER COTTON PRINCIPLES AND CRITERIA

ANNEXES

VERSION 2.0

1 March 2018

Table of Contents

Annexure 1- Terms and definitions	01
Annexure 2 - Summary of relevant ILO conventions	13
Annexure 3 - BCI Categorisation of farmers	17
Annexure 4 - Definition of BCI Farmers and workers	.18
Annexure 5 - Climate change mitigation and adaptation in BCI Principles and Criteria	24



ANNEXURE 1: TERMS AND DEFINITIONS

A

Acre

A unit of area equal to 4,840 square yards or 43,560 square feet or 4000 square meters. Approximately 0.4 hectares.

Atmospheric stability

The resistance of the atmosphere to vertical motion. A large decrease of temperature with height indicates an unstable condition which promotes up and down air currents. A small decrease with height indicates a stable condition which inhibits vertical motion. Where the temperature increases with height, through an inversion, the atmosphere is extremely stable. Indicators of atmospheric instability include fast moving cumulus clouds and the build-up of thunderstorms.

B

Bale

A unit of compacted cotton lint ready for shipping to the spinning mill, generally wrapped in a protective covering and tied with bands or wires. By convention, a 'statistical' bale weighs 480 pounds or 218 kilograms. However, nominal cotton bale weights vary depending on the country of origin; for example, a standard bale weighs 227 kilograms (500 pounds) in Australia, 180 kilograms (396.6 pounds) in Brazil, and 170 kilograms (375 pounds) in India and Pakistan. Actual or physical bale weights will vary from the standard weight.

Beneficial insects

Predators and parasitoids of pests.

Bio-control agents

Parasites, predators or pathogens used to control the population of a pest. They may occur naturally in the field, or may be reared in a laboratory and released in the field, as required.

Biodiversity

'Biological diversity' or 'Biodiversity' is the variability among living organisms from all sources, including, among others, terrestrial, marine and other aquatic ecosystems and the ecological complexes to which they belong. This includes diversity within species, between species and of ecosystems. (Source: Convention on Biological Diversity 1992, Article 2).

Boll

The fruit or seedpod of the cotton plant. Bolls typically have 4 or 5 segments (locks) that each contain 6 - 10 seeds, from which the cotton fibres grow.



Bract

The opened segments of the boll, encasing the seed cotton.



Colour

Colour is a measure of the whiteness and brightness of the cotton fibre. Colour is directly affected by the weather, and length of exposure to the weather of the open boll. Colour will start to deteriorate as soon as the boll opens and the lint is exposed to moisture and light. Other factors that may affect colour include: pest damage, green leaf at harvest, seed cotton with too high a moisture content, incorrect storage and transport of cotton on dusty roads. Abnormal colour may indicate deterioration in quality, and variations in the colour of the raw cotton may lead to variations in the colour of the dyed fabric made from it.

Conservation tillage

A tillage system that leaves at least 30% of the soil surface covered with crop residue or plant matter.

Contamination

Any foreign matter, i.e. any material in a lot of cotton other than cotton lint or trash (cotton leaf). It may be either man-made (e.g. grease, plastic, cloth, hair, machinery parts) or natural (bark, grass, seed coat fragments). Contamination can occur during picking, transportation and ginning, and can include items such as jute, textiles1.p

èpoiu, thread pieces, polyethylene, pieces of polypropylene string, human and animal hairs, metal items, birds' feathers, paper, cigarette packages, etc.

Continuous improvement

A systematic process of continuously improving management policies and practices by learning from the outcomes of existing measures.

Conversion (of land)

Land conversion in the cotton production context refers to altering the landscape in a way that changes the natural or semi-natural state for the purpose of growing Better Cotton.

Cotton lint (raw cotton)

The cotton fibre separated from the seed cotton during the ginning process. Each cotton fibre is a single cell that arises from the cotton seed.

Criteria

The Criteria listed under the Production Principles provide a greater level of detail on the specific areas to be addressed within each Production Principle.

Cultivar

An assemblage of plants that has been selected for a particular attribute or combination of attributes; it is clearly distinct, uniform and stable in those characteristics and when propagated



by appropriate means, it retains those characteristics. (Source: International Code of Nomenclature for Cultivated Plants).

Cut-off date

BCI will not license illegal or irresponsible land use conversion. Accordingly, any conversion of land from its natural state after January 1, 2016 shall not be accepted for licensing purposes unless it complies with the requirements of this Standard. (Note, land conversion occurring prior to 2016 shall be considered for the BCI licence, subject to compliance with local legal requirements for land use change in existence at the time of conversion. This allowance is consistent with the requirement of the BCI Standard at that time.)



Decent Work

Decent Work is understood by the BCI as the International Labour Organization (ILO) concept which describes work that provides opportunities for women and men to work productively in conditions of freedom, equity, security and human dignity. This concept is understood to encompass respect for the ILO core labour standards and national labour legislation, alongside the promotion of safe and productive work, social protection and social dialogue.

Defoliation

The removal of leaves from the cotton plant, in preparation for harvest.

Denitrification

The loss of nitrogen available to plants following the conversion of soil nitrates to nitrogenous gases (through microbial action).



Eutrophication

An increase in nutrients (especially nitrogen and/or phosphorus) in water; leads to excessive plant growth and decay that in turn may lead to algal blooms and a decline in water quality. An algal bloom can deplete the oxygen available for fish to breathe, posing a fatal risk to their survival.

F

Fibre length

See Length.



Free, Prior and Informed Consent

'Free, Prior and Informed Consent' (FPIC) is defined as a legal condition whereby a person or community can be said to have given consent to an action prior to its commencement, based upon a clear appreciation and understanding of the facts, implications and future consequences of that action, and the possession of all relevant facts at the time when consent is given. FPIC includes the right to grant, modify, withhold or withdraw approval

G

Gender equality

Gender equality or gender equity means that women and men have equal conditions for realising their full human rights and for contributing to, and benefiting from, economic, social, cultural and political development.

Genotype

The genetic make-up of an organism.

Ginning

The process whereby the cotton lint (fibres) is removed from the cotton seed.

Grade

The overall appearance of a sample of cotton, primarily based on a classer's assessment of colour, visible trash and preparation (ginning). In this context, 'preparation' describes the degree of smoothness or roughness with which the cotton is ginned and the relative neppiness and nappiness of the ginned lint. Longer cottons normally have rougher appearance after ginning than shorter cottons. Naps are relatively easier for classers to detect, but they are not as detrimental to cotton quality as neps. Cotton classification by grade is defined as the art and science of describing cotton quality in terms of grade, according to official standards. Grading is based on a visual inspection and evaluation of raw cotton quality.

Н

Hectare

A unit of area, equal to 10,000 square metres. Approximately 2.47 acres.

High Conservation Value (HCV)

- HCV1: Concentrations of biodiversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.

 E.g. the presence of several globally threatened bird species.
- HCV2: Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of naturally occurring species in natural patterns of distribution and abundance.



E.g. a large tract of Mesoamerican flooded grasslands and gallery forests with healthy populations of hyacinth macaw, jaguar, maned wolf, and giant otter, as well as most smaller species.

- HCV3: Rare, threatened, or endangered ecosystems, habitats or refugia. E.g. patches of a regionally rare type of freshwater swamp.
- HCV4: Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

 E.g. forest on steep slopes with avalanche risk above a town.
- HCV5: Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water etc.), identified through engagement with these communities or indigenous peoples. E.g. key hunting areas for communities living at subsistence level.
- HCV6: Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples.
 - E.g. sacred burial grounds within a forest management area or new agricultural plantation.

Honeydew

A sticky, sugar-rich waste excreted by aphids and whiteflies when feeding on the cotton plant. It can adversely affect crop growth, and when present on lint, cause difficulties in fibre processing (spinning).

Integrated Pest Management (IPM)

The careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to economically justified levels that reduce or minimise risks to human health and the environment. IPM emphasises the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms. (Source: The United Nations' Food and Agriculture Organization's (UN FAO) International Code of Conduct on the Distribution and Use of Pesticides (Revised Version, 2002).)



Large farms

BCI defines large farms as farms that are structurally dependent on permanent hired labour. Farm size is above 200ha of cotton.



Length

The length of the cotton fibre. As with strength, longer fibres generally contribute to superior fibre quality. While staple length is primarily determined by variety, seasonal factors may limit the ability of the variety to produce its maximum possible staple length. Critical stress factors for staple length include high temperatures, severe moisture stress and potassium deficiency.

Length uniformity

Length uniformity is the ratio of the mean fibre length and upper half mean fibre length. The more uniform the fibre length, the better the cotton is for spinning, as uniformity makes it easier to produce yarns of uniform strength and quality (in contrast to variable fibre lengths). The greater the lack of length uniformity, the higher the percentage of short fibres in the sample. This decreases spinning mill efficiency, and increases the quantity of waste fibre (i.e. raw cotton that does not end up in yarn).

M

Maturity

As the cotton fibre grows and matures, the cell wall thickens. Fibre maturity is determined by the degree of thickening of the cotton fibre's cell wall relative to its perimeter. Fibre maturity can be affected by lower than normal temperatures during fibre development and the timing of the harvest.

Medium farm:

BCI defines medium farms as Producer Units where farmers are structurally dependent on permanent hired labour. The typical farm size of such Producer Units is between 20 and 200ha of cotton.

Micronaire

Micronaire is a combined measure of two different fibre attributes:

- 1. the thickness (fineness) of the fibre, i.e. its diameter; and
- 2. the thickness (maturity) of the fibre wall (cotton being a hollow tube).

Fibre diameter is largely determined by genetics, while fibre wall thickness is determined by environmental factors, such as late season stress. Fibre fineness is important to the spinner, as fine cotton allows more fibres per given cross-sectional area of yarn, making for a stronger yarn. Low micronaire (immature) fibre creates problems as it cause neps, and is likely to result in more short fibres and a lower length uniformity, all of which have a detrimental effect on spinning mill efficiency, and on the quality of the yarn and fabric produced from that cotton.



N

Natural habitat

A natural habitat is an area where the original biodiversity remains largely undisturbed by human activities. It may also include areas where once-disturbed biodiversity has been restored or regenerated by human or natural forces.

Naps

Large, relatively loose clumps of fibres or matted masses of fibres (cf. neps). Generally, the term 'nappy' describes lint that is rough in appearance. The formation of naps is often pronounced when seed cotton is wet and when the seed roll in the gin is too tight, causing faulty removal of fibres.

Neps

Neps are small clusters or entanglements of fibres, and may fall into 1 of 3 categories:

- 1. biological neps
- 2. mechanical neps
- 3. white specks.

Neps may be caused by environmental factors or processing; the exact level of contribution from each source is unknown. The list of potential causes is extensive, and includes immature fibres, poor staple length, moisture content, fineness, mechanical handling by the cotton picker and or gin, once-over harvesting practices, premature defoliation, disease and frost.

Longer and finer cotton fibres are more prone to form neps than shorter and coarser fibres. Neps in the cotton lint can translate into neps in the spun yarn, which in turn can reduce the quality of the yarn, as neps can result in white dots or specks in finished fabric.

No Net Loss

While all conversion of natural landscapes will involve some impact on biodiversity and ecosystems, it is essential that projects seeking the BCI licence are able to demonstrate No Net Loss of High Conservation Value(s). No Net Loss in the BCI context is defined as the point at which project-related impacts on biodiversity are balanced by measures taken to avoid and minimise the project's impacts. Note that it is the High Conservation Value that must be protected, not necessarily a defined parcel of land.



Organic matter

Carbon containing material in the soil derived from living organisms.

P

Parasite

An organism that lives in or on another organism.



Parasitoid

Parasites of insects that kill the host insect.

Personal Protective Equipment (PPE)

Any specialist clothing, material or equipment designed to provide protection against exposure to pesticides.

Pesticide

Any substance or mixture of substances intended for preventing, destroying or controlling any pest. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant or agent for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. (Source: FAO International Code of Conduct on the Distribution and Use of Pesticides (Revised Version), 2002.)

The term includes insecticides, herbicides, fungicides and acaricides, growth regulators, defoliants, conditioners and desiccants, as well as bio-pesticides. No distinction is made between synthetic or natural substances that are applied for any of these purposes.

рΗ

A measure of acidity or alkalinity. Cotton prefers soils with a pH of between 6 and 8.

Pheromone

A substance secreted by an organism that affects the behaviour of the opposite sex of the same species.

Persistent Organic Pollutant (POP)

Persistent Organic Pollutants (per the Stockholm Convention) are considered to constitute a serious environmental hazard: they are extremely stable; persist in the environment; accumulate in high concentrations in fatty tissues; are bio-magnified through the food chain; are transported in the environment over long distances and have toxic and chronic effects on humans and animals.

Preparation

A measure of the degree of roughness or smoothness of ginned lint cotton. Generally, smooth cotton will produce a smoother and more uniform yarn, with less waste, than rougher cotton.

Producer

'The Producer' is defined as the person or entity holding or applying for a BCI licence, and is responsible for demonstrating compliance with the requirements upon which BCI licensing is based. It can be either the Producer Unit or Implementing Partner for smallholders/medium farms; or farming organisations in the case of large farms.

Production Principles

Broad areas under the control of the farmer that he/she must address in order to produce Better Cotton.



Producer Unit (PU)

A number of Learning Groups and/or large farm employers (depending on their size) form a PU. At PU level, self-assessment forms are compiled and consolidated into a PU report by a dedicated person (the 'Documentation Officer'). The PU plays an important role in Farm Assessment, as the PU recommends to the BCI Regional Coordinator whether a Learning Group or individual large farm employer can sell Better Cotton. The size of a PU will depend on local circumstances (e.g. farm size, the volume of Better Cotton needed by the ginner for a gin run). In the first few years, the Implementing Partner is likely to take on a number of roles that in time will be performed by the PU. For individual large farms, the PU may be the national organisation representing producers.

Pupa / pupae

The life stage of an insect undergoing transformation, e.g. between the caterpillar (larval) and moth (adult) stages of the life cycle of the cotton bollworm (plural: pupae).



Quality

The suite of characteristics of a cotton lot that influences its suitability for yarn and textile processing. For the purposes of BCI, it includes both intrinsic fibre characteristics relating to its length, strength, fineness, maturity and colour, as well as extrinsic properties, in particular contamination.



Raw cotton (cotton lint)

The cotton fibre separated from the seed cotton during the ginning process. Each cotton fibre is a single cell that arises from the cotton seed.

Riparian buffer

A riparian buffer is a vegetated area (a 'buffer strip') near a stream, usually forested, which helps to shade and partially protect a stream from the impact of adjacent land uses. It plays a key role in increasing water quality in nearby streams, rivers, and lakes, thus providing environmental benefits. With the decline of many aquatic ecosystems due to agricultural production, riparian buffers have become a very common conservation practice aimed at increasing water quality and reducing pollution.

Riparian land

The land surrounding water bodies, rivers, streams etc.

Rotterdam Convention

The Rotterdam Convention on the Prior Informed Consent Procedure (PIC) for certain hazardous chemicals and pesticides was introduced in 1998. It is designed to ensure that any



international trade of a substance that has been banned or had its use severely restricted in any country does not proceed without the prior consent of the government of the country to which the substance is being exported. Information on the particular hazards associated with the substance, and methods for controlling the hazards must be provided prior to consent being given.



Saline / Salinisation

Soil with a high salt content (the process of becoming saline), especially sodium chloride. While cotton is a relatively salt-tolerant crop, very saline soils affect yields. The ability to grow some rotation crops (for example legumes) may also be adversely affected by saline soils. Indicators of salinity include: poor crop growth, increasing numbers of salt-tolerant weeds and prolonged soil wetness.

Seed coat fragments (SCF)

Parts of the seed coat that remain attached to the fibre after ginning; they are undesirable.

Seed cotton

The cotton lint, still attached to the cotton seed, as harvested from the plant and prior to ginning.

Short fibre content (SFC)

A measure of the number of fibres below 12.7 mm / 0.5 inches in length. As with length uniformity, the fewer short fibres, the less waste cotton generated, and the better the efficiency of the spinning mill. Yarn quality is also improved with reduced short fibre content. Mechanically harvested cotton is more susceptible to having unacceptable levels of short fibres than hand-harvested cotton.

Smallholders

BCI defines smallholders as PUs where farmers are not structurally dependent on permanent hired labour. The typical farm size of such Producer Units does not exceed 20ha of cotton.

Social and Environmental Impact Assessment (SEIA)

The core process that ensures these key issues are given appropriate consideration is the commissioning of an expert Social and Environmental Impact Assessment (SEIA) (including an HCV assessment). The assessment(s) should be conducted by an independent body widely recognised for its subject matter expertise. It is recommended to utilise assessors licensed by an accreditation scheme such as that provided by the High Conservation Value Resource Network. The assessment should ensure compliance of the conversion project with applicable local legislation, but also internationally recognised standards, where such practice exceeds the requirements of local law.

Landscapes suitable for the production of cotton, notably savannahs, are often rich in wildlife and/or flora that should be taken into consideration prior to implementing any land use change programme. It is expected that the Environmental Impact Assessment would contain an



analysis of the wildlife (and vegetation) in the extended region of planned conversion. Similarly, appropriate safeguards for rare, threatened or endangered species should be implemented, wildlife corridors established, access to water anticipated, workers provided with training to protect such species, etc.

Sodic

Soil with excessive level of sodium. Sodic soils are at an increased risk of structural instability, and may adversely affect crop growth. Indicators of sodicity include dispersion (the separation of sand silt and clay) or wetting, waterlogging and crusting when dry.

Soil structure

Describes the arrangement of the soil particles: their size, shape and stability, as well as the size, shape and continuity of the spaces (pores) between the soil particles.

Staple length

See Length.

Stickiness

Stickiness is caused by sugary deposits on the fibre left by either insects (e.g. honeydew from aphids or whitefly), or produced by the plant itself.

Spinning mills have nearly zero tolerance for stickiness due the significant damage sticky cotton may cause to a spinning mill. The sugary deposits adhere to the surfaces of the machinery in the spinning mill, necessitating the shutdown of the mill to clean the machinery, thereby increasing production costs.

Stockholm Convention

The Stockholm Convention on POPs provides for the phasing out of production and use of persistent organic pollutants. The following pesticides are included on the list: aldrin, chlordane, chloredecone, dieldrin, dichlorodiphenyltrichloroethane (DDT), endosulfan, endrin, heptachlor, hexachlorobenzene, hexachlorocyclohexane, lindane, mirex and toxaphene.

Strength

Strength is a measure of a fibre sample's resistance to longitudinal stress. The stronger the fibre, the better, as there is a direct correlation between fibre strength and the quality of yarn and fabric. Strong fibres are necessary to allow today's high-speed spinning mills to operate at maximum capacity and efficiency. Fibre strength is a varietal characteristic, and is less influenced by adverse growing conditions than length and micronaire.

Т

Tailwater

Water that has drained from the surface of the cotton field.

Tillage

Mechanical manipulation of the soil.



Trash, trash content

Cotton leaf material found in seed cotton or cotton lint. Trash content refers to the level of leaf in the ginned cotton. A balance needs to be struck between the level of trash removed during ginning and the subsequent adverse effects on fibre quality of increased cleaning to remove more trash. The more cleaning cycles employed, the greater the damage to the fibre, in particular fibre breakage, which leads to increased short fibre content. Poor defoliation is a major contributor to excess trash in the cotton, and rank growth must be managed to minimise the risk of excess trash content. Seed cotton usually contains varying amounts of trash, depending on harvesting method; hand-picked cotton is much less contaminated by trash than mechanically harvested cotton. Even when cotton is carefully harvested under ideal field conditions, it is very difficult not to include at least some trash. Although much of the trash is removed in the cleaning and drying processes during ginning, it is impossible to remove all trash. Minimising trash content is important, as it must be removed as waste, accompanied by a loss of fibre. Further, small fine particles of trash that cannot be removed detract from the quality and appearance of the manufactured yarns and fabrics. In general, cottons that contain the least amount of trash, other conditions being equal, are those with the highest spinning value.



Waterlogging

A prolonged period during which the plant roots are under water, and which prevents oxygen being available to the roots. It results in impaired water and nutrient uptake by the plant, which in turn can adversely affect crop growth and yield.

Water table

The point at which the ground is completely saturated. Below this level, the pore spaces between every grain of soil and rock crevice completely fill with water.

World Health Organization (WHO) Class I

Those pesticides classified by the WHO as either Extremely (1 a) or Highly (1 b) hazardous, based on their acute toxicity (known as WHO Class 1 a and 1 b).

Withholding period

The time that must be allowed to elapse after the application of a pesticide before the crop can be harvested.

Workers

BCI defines workers as all waged employees of cotton farmers, including migrant, temporary, seasonal, sub-contracted and permanent workers. This also includes family members employed directly by cotton farmers.



ANNEXURE 2: SUMMARY OF RELEVANT ILO CONVENTIONS

CORE CONVENTIONS

The ILO has declared eight Conventions as fundamental to workers' rights worldwide: these are summarised below. The eight Conventions relate to four major international labour standards:

- 1. Workers everywhere should have the right to organise in trade unions and negotiate their working conditions collectively.
- 2. Workers should be free from any form of forced labour, such as slavery, servitude, compulsory labour for political re-education, or debt indenture.
- 3. Children, meaning people below the age of 15 (or as defined by national law), should not work so that they have the opportunity to learn and develop freely.
- 4. Discrimination on the grounds of gender, race, nationality, religion, political opinion or social origin is banned, as is discrimination in remuneration on the grounds of gender.

The eight ILO core conventions are international standards that apply to industrial countries as much as to developing countries (but are addressed to member states, not private sector actors). Because the ILO Core Conventions are essential labour standards, they have been integrated into a range of guidelines for companies, such as the UN Global Compact and the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises.

1. Freedom of Association

Freedom of Association and Protection of the Right to Organise Convention, 1948 (No.87)

This fundamental convention sets forth the right for workers and employers to establish and join organisations of their own choosing without previous authorisation. Workers' and employers' organisations shall organise freely and not be liable to be dissolved or suspended by administrative authority. They shall have the right to establish and join federations and confederations, which may in turn affiliate with international organisations of workers and employers.

Right to Organise and Collective Bargaining Convention, 1949 (No. 98)

This fundamental convention provides that measures appropriate to national conditions shall be taken, where necessary, to encourage and promote the full development and utilisation of mechanisms for voluntary negotiation between employers or employers' organisations and workers' organisations. The aim is to regulate the terms and conditions of employment by means of collective agreements.



2. The Abolition of Forced Labour

Forced Labour Convention, 1930 (No. 29)

This fundamental convention prohibits all forms of forced or compulsory labour, which is defined as '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/herself voluntarily'. Exceptions include: work required by compulsory military service; normal civic obligations; as a consequence of a conviction in a court of law (provided that the work or service in question is conducted under the supervision and control of a public authority and that the person conducting it is not hired to or placed at the disposal of private individuals, companies or associations); in cases of emergency, and for minor communal services performed by the members of a community in the direct interest of the community. The convention also requires that the illegal extraction of forced or compulsory labour be punishable as a penal offence, and that ratifying states ensure that the relevant penalties imposed by law are adequate and strictly enforced.

Abolition of Forced Labour Convention, 1957 (No. 105)

This fundamental convention prohibits forced or compulsory labour as a means of political coercion or education, or as a punishment for holding or expressing political views or views ideologically opposed to the established political, social or economic system; as a method of mobilising and using labour for purposes of economic development; as a means of labour discipline; as a punishment for having participated in strikes; or as a means of racial, social, national or religious discrimination. Additionally, forced or compulsory labour is considered as one of the worst forms of child labour under the Worst Forms of Child Labour Convention, 1999 (No. 182).

3. Equality

Equal Remuneration Convention, 1951 (No. 100)

This fundamental convention requires ratifying countries to ensure the application to all workers of the principle of equal remuneration for men and women workers for work of equal value. The term 'remuneration' is broadly defined to include the ordinary, basic or minimum wage or salary and any additional emoluments payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment.

Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

This fundamental convention defines discrimination as any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation. It requires ratifying states to declare and pursue a national policy designed to promote, by methods appropriate to national conditions and practice, equality of opportunity and treatment in respect of employment and occupation, with a view to eliminating any discrimination in these fields. This includes discrimination in relation to access to vocational training, access to employment and to particular occupations, and terms and conditions of employment.



4. The Elimination of Child Labour

Minimum Age Convention, 1973 (No. 138)

This fundamental convention sets the general minimum age for admission to employment or work at 15 years (13 for light work) and the minimum age for hazardous work at 18 (16 under certain strict conditions). It provides for the possibility of initially setting the general minimum age at 14 (12 for light work), where the economy and educational facilities are insufficiently developed.

Worst Forms of Child Labour Convention, 1999 (No. 182)

This fundamental convention defines a 'child' as a person under 18 years of age. It requires ratifying states to eliminate the worst forms of child labour, including all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict; child prostitution and pornography; using children for illicit activities, in particular for the production and trafficking of drugs; and work which is likely to harm the health, safety or morals of children. The convention requires ratifying states to provide the necessary and appropriate direct assistance for the removal of children from the worst forms of child labour and for their rehabilitation and social integration. It also requires states to ensure access to free basic education and, wherever possible and appropriate, vocational training for children removed from the worst forms of child labour.

5. ILO Conventions Applicable Solely to Agriculture

In addition to the ILO Core Conventions cited above, there are some Conventions relating exclusively to agricultural work.

Plantations Convention, 1958 (No.110)

This convention covers the recruitment and engagement of migrant workers and affords protection to plantation workers in respect of employment contracts, wages, working time, medical care, maternity protection, employment accident compensation, freedom of association, labour inspection, and housing.

Rural Workers' Organisations Convention, 1975 (No.141)

All categories of rural workers, whether they are wage earners or self-employed, shall have the right to establish and, subject only to the rules of the organisation concerned, to join organisations of their own choosing, without prior authorisation. The principles of freedom of association shall be fully respected; rural workers' organisations shall be independent and voluntary in character, and shall remain free from all interference, coercion or repression. National policy shall facilitate the establishment and growth, on a voluntary basis, of strong and independent organisations of rural workers as an effective means of ensuring the participation of these workers in economic and social development.



6. Indigenous and Tribal Peoples' Rights

Indigenous and Tribal Peoples Convention, 1989 (No. 169)

Convention No.169 is a legally binding international instrument open to ratification, which deals specifically with the rights of indigenous and tribal peoples. Today, it has been ratified by 22 countries. Once it ratifies the Convention, a country has one year to align legislation, policies and programmes to the Convention before it becomes legally binding. Countries that have ratified the Convention are subject to supervision with regard to its implementation.



ANNEXURE 3: BCI CATEGORISATION OF FARMERS

	Labour	Farm Size**	Learning	Results	Self-Assessment	2 nd Party	3 rd Party
			Groups	Indicators	& licensing	Credibility Check	verification
Smallholders	Producer Unit where	Farm size within	Yes	Sampling-based	Producer Unit	Yes	Yes
	farmers are not	the Producer Unit		approach +	level (through	(sampling)	(sampling)
	structurally dependent	does not exceed		Control groups	Internal		
	on permanent hired	20ha of cotton			Management		
	labour*				System)		
Medium	Producer Unit where	Farm size within	No	Data collected	Producer Unit	Yes	Yes
farms	farmers are	the Producer Unit		from all farms +	level (through	(sampling)	(sampling)
	structurally dependent	is between 20 to		control groups	Internal		
	on permanent hired	200ha of cotton			Management		
	labour				System)		
Large farms	Farmers who are	Farm size is above	No	Data collected	Individual level	No	Yes
	structurally dependent	200ha of cotton		from all farms +			(all farms)
	on permanent hired			control groups			
	labour						

^{*} Labour arrangements in smallholder category may include (by order of importance): family/own labour (most common form), temporary/seasonal labour for specific activities, or permanent labour (in some limited cases).

^{**} In the case where (1) there is an extreme minority of growers in a different category (for a particular PU, project or country), (2) the cultivated area of a particular farmer changes from year to year across categories: common sense should be applied by the partner for the categorisation of farmers and confirmed by BCI before the start of the growing season.

ANNEXURE 4: DEFINITION OF BCI FARMERS AND WORKERS

1. Background

The Better Cotton Standard System (BCSS) directly addresses farm workers in two distinct ways. Firstly, the standard includes requirements on occupational health and safety (e.g. safe pesticide application). Secondly, it has a Decent Work principle, which is concerned with the provision of opportunities for women and men to work productively in conditions of freedom, equity, security, and human dignity.

Within the sector, there are fluid boundaries between self-employment, family/community labour, and waged labour. It is a challenge for stakeholders to identify, in a consistent manner, what types of individuals are considered workers and should therefore be included as direct participants in BCI projects. It is also a challenge to determine which Standard criteria may apply to whom, especially when much of this labour operates informally, especially in small-scale agriculture. There is potential for individuals or entire groups of people to be excluded from training or other activities either required by or encouraged by the BCSS. For example, the wife of a smallholder cotton farmer may perform key tasks (e.g. storing and disposing of pesticide containers), but may not be considered as a worker and may not receive information that could help to keep her and the family safe and healthy.

BCI has therefore created an expanded and standardised set of categories for the farmers and workers active in global cotton production. The aim is to harmonise understanding and ensure that those likely to be among the most vulnerable participants in the cotton value chain are effectively included in the BCSS. This set of categories is for the purposes of improved consistency across partners and stakeholders in different countries and contexts, and is based on functional roles. The categories, while loosely based on International Labour Organization recommendations, have no legal ramifications, i.e. participants are not required to disclose their legal landholding or official immigration status. The categories are envisioned to support Implementing Partners in more fully identifying their participants, in order to enable optimised programme planning and implementation.

The document first describes the categories of farmers and workers, including tenant farmers and sharecroppers, then explains the process for categorising each and creating a labour profile.

2. The Categories

2.1 Farmers

The BCSS defines the farmer as the one individual with primary decision-making responsibility for the cultivation of the cotton crop on a farm, and officially registered to participate in BCl's Assurance Programme.

- Land ownership is not a requirement.
- In large industrialised contexts, farm managers may participate as the farmer.



- In some countries, a man and woman in a couple share the farming duties and decision-making responsibilities equally. One individual is named as the farmer and the other a co-farmer, which is reflected in the Producer's Farmer List.

2.2 Tenants and Sharecroppers

The ILO¹ defines these individuals as tenants and sharecroppers (the term used in this document to cover all similar types) if they meet any of the following criteria:

- Pay a fixed rent in cash, in kind, in labour, or in a combination of these.
- Pay rent in kind consisting of an agreed share of the product.
- Are remunerated by a share of the product, insofar as they are not covered by laws or regulations applicable to wage earners, when they work the land themselves or with the help of their family, or when they engage outside help within limits prescribed by national laws or regulations.

Tenants and sharecroppers are considered to have a profile distinct from that of farmers or workers, but participate in the BCSS as either a farmer or worker depending on the extent to which they have decision-making power over cotton production practices. Generally, a tenant or sharecropper participating as a farmer will share input costs and be primarily responsible for production practices; a tenant or sharecropper participating as a worker will contribute minimal financial resources and have limited decision-making power.

- If classified as a *Farmer*, the tenant or sharecropper is accountable for ensuring labour rights of any workers assisting in cotton production on their rented land as outlined in the Decent Work Principle.
- If classified as a *Worker*, this will require the landowner (or land manager) to participate in the BCI project as a farmer. This individual is responsible for ensuring the tenant's or sharecropper's labour rights as outlined in the Decent Work Principle (along with ensuring the labour rights of all other workers of various profiles on the farm).

The responsibility of categorising tenants and sharecroppers as either a Farmer or Worker rests with the PU Manager for PUs. BCI secretariat staff can advise in cases that are difficult to categorise.

2.3 Workers

According to the ILO, waged agricultural workers are women and men who labour in crop fields to produce the world's food and fibres. They are employed on small- and medium-sized farms as well as large industrialised farms and plantations. They are waged workers because

¹ ILO document discussing Recommendation 132 (1968) on Tenants and Sharecroppers http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312470



they do not own or rent the land on which they work, nor the tools and equipment they use, and are therefore a group distinct from farmers.²

BCI also includes unpaid family labourers in its definition of workers. The Better Cotton Standard requires certain health and safety conditions for anyone performing tasks on the cotton field (e.g. pesticide application or harvesting seed cotton), regardless of whether or how they are remunerated. This enables a more nuanced and accurate understanding of the people involved in cotton production globally across varied contexts, and covered by the Standard.

People who work in cotton production come from diverse backgrounds and varying terminology is used globally to describe farm workers. To better understand the cotton labour landscape at the global level, BCI considers three factors to help standardise how the labour force is discussed:

- 1. Length and timing of work
- 2. Relation to farming community
- 3. Work arrangement.

In addition, for appropriate programme planning and data gathering purposes, BCI also distinguishes between males and females in the labour force.

Length and Timing of Work

The descriptions in the table below apply to any farm, regardless of BCI farm category - smallholder, medium or large. They also apply to any range of tasks performed by the worker, including but not limited to sowing, applying pesticides, nutrient management, trimming, weeding or harvesting.

Туре	Description
Permanent	Working 12 months a year. May or may not be 100% dedicated to cotton. Some such workers will support production of other crops within the wider farm area.
Seasonal	Working during the cotton season – 3-7 months a year.
Temporary	Working on a short-term basis, normally paid a daily or hourly wage (or piece- rate in the case of picking). In some countries, 'Temporary' and 'Casual' workers have different legal statuses. For BCI purposes, they are represented by one category, which is labelled Temporary.

Relation to Farming Community

Beyond the types of workers listed in the table above, workers fall into different categories based on their role in the community: family, member of the local community or migrant. BCI

² ILO, http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_113732.pdf, page 23.



stakeholders should take these categories into consideration in order to ensure, for example, that family members are included in appropriate training (especially wives or adult sons or daughters of farmers in smallholder contexts), or that migrants or other potentially vulnerable groups do not experience discrimination.

- Family Workers

Family workers can include the spouse (husband of a female farmer or the wife of a male farmer) or extended family, such as cousins. Family workers may live permanently or temporarily with the farmer. Exceptionally, in the case of family smallholdings, children 13 years or above may help on their family's farm, provided that the work does not threaten their health, safety, well-being, education or development, and that they are supervised by adults and given appropriate training. Children under 18 must not participate in hazardous tasks (including pesticide application).³

In smallholder and some medium farms, family workers may or may not receive remuneration. Members of the nuclear family typically contribute to the family farming enterprise and do not receive cash wages, while more distant relatives might work for cash or other in-kind support.

If a family member is formally employed by a farm, he/she would not be considered an 'unpaid family worker', rather counted as an official employee from the local community. This is an important distinction, as it may affect farm categorisation, i.e. whether a farm is considered dependent on permanent hired labour.

- Local Community Members

These are workers who live in the cotton producing area. They may work on their own land to grow crops and perform casual or temporary work on others' cotton fields to supplement their income. They may be skilled workers operating farming machinery or acting in a management capacity. They may also be landless community members performing unskilled or semi-skilled tasks, working in fields to earn their livelihood.

In some contexts, smallholder cotton farmers participating in BCI projects may work on others' cotton fields at specific points during the season. While they may not constitute a group requiring additional training or services because they access those as a farmer, it is important to capture what is an important factor in a local labour force. BCI does therefore consider them in the labour profile of an area, as a separate group called 'In-kind shared labour'). An assumption is made that in a BCI PU location, the majority of smallholder farmers providing in-kind shared labour would also be participating as BCI Farmers.

Migrant Workers

Migrant workers are found in all types of employment relationships as temporary, seasonal or full-time permanent workers. They may be migrant workers from a different

³ For a detailed explanation of the intention behind the family smallholder exception for children participating in light farm work, see pages 36-39 of *Better Cotton Production Principles and Criteria Explained*.



part of a country, or foreign workers. BCI's intent behind identifying workers as migrants, when pertinent, is to ensure their visibility in the system, so they have access to relevant training and services. In some cases, migrants may be disadvantaged in terms of pay, social protection, housing and medical care. For BCI's purposes, the distinction of migrant does not need to match official immigration status. For example, a full-time permanent worker originally from one country who has been employed on the same cotton farm for 15 years will likely be categorised as a member of the local community, even if he/she holds the nationality of his or her country of origin.

Work Arrangement

Pertaining only to wage labour (not unpaid family labour), there are two ways in which workers may be hired – directly by the farmer or sub-contracted through a labour contractor.

- Directly Hired Workers

These workers are hired directly by the farmer, or in large operations, by an employee of the farmer. In either case, the worker communicates directly with the farmer (or delegated employee) and receives remuneration from them.

- Sub-Contracted Workers

Sub-contracted workers are organised by an external labour contractor who acts as an intermediary between the farmer and the workers on issues of pay negotiation and possibly others. This situation may apply to both workers from the local community and migrants who travel to another area for work.

3. Process for Categorising Farmers and Workers

3.1 Farmers

Consistent with the definition in section 2.1 above, an individual is considered a farmer participating in the Better Cotton Standard System if he/she is:

- The primary decision-maker on the farm, and
- The person who interacts with the BCI Assurance Programme to be considered for a
 Better Cotton Licence (e.g. for PUs, the farmer may be selected for a visit during
 external assessment by BCI, the Implementing Partner, or third party verifiers; for
 large farms, he/she conducts the self-assessment and is interviewed as the farmer by
 third party verifiers).

If an individual does not meet these criteria, but he/she participates in the cultivation of cotton on the farm registered with BCI, the person is likely a worker and will be categorised based on the below process.



3.2 Tenants and Sharecroppers

Consistent with section 2.2 above, tenants and sharecroppers are individuals who are engaged in cotton cultivation and rent the land on which they operate with cash, in kind work, or by sharing a portion of the cotton produced. They are distinct from farmers and workers, but are considered by the BCSS as either a farmer or a worker.

- Farmer include the individual on the Farmer List (for PUs) or register directly with BCI (for large farms)
- Worker include the individual (or group) in the process for categorising workers outlined below.

3.3 Workers

This set of standardised descriptions of types of workers can be compared within and across countries. The Better Cotton Standard and associated capacity building allows BCI to reach workers more consistently around the world. Using this process, we can therefore understand that within a particular PU or large farm, the labour force engaged in cotton cultivation may consist of any combination of the following:

- 1. Unpaid family workers
- 2. Permanent workers from the local community hired directly by farmers
- 3. Permanent migrant workers hired directly by farmers
- 4. Seasonal workers from the local community hired directly by farmers
- 5. Seasonal workers from the local community who are sub-contracted
- 6. Seasonal migrant workers hired directly by farmers
- 7. Seasonal migrant workers who are sub-contracted
- 8. Temporary workers from the local community hired directly by farmers
- 9. Temporary workers from the local community who are sub-contracted
- 10. Temporary migrant workers hired directly by farmers
- 11. Temporary migrant workers who are sub-contracted
- 12. In-kind shared labour.



ANNEXURE 5: CLIMATE CHANGE MITIGATION AND ADAPTATION WITHIN THE BCI PRINCIPLES AND CRITERIA

1. Background

Responding to and developing solutions to tackle climate change is increasingly expected from all sectors of the society and the economy. Agriculture, in particular, has come into focus due to the critical role played by the soil in regulating the Earth's climate. By removing carbon dioxide (CO₂) from the atmosphere, the soil forms the world's largest terrestrial storage of atmospheric carbon. Equally, when soils are degraded, large amounts of carbon are released into the atmosphere. The destruction and degradation of soil worldwide through unsustainable farming accounts for a higher share of global CO₂ emissions than the entire transport sector. Likewise, poor management of fertilisers also generates considerable amounts of nitrous oxide emissions, in addition to the greenhouse gas (GHG) emissions associated with the production of fertilisers and biocides. Biomass burning is also responsible for a large amount of methane emissions. Large open fires are used by farmers to destroy crop waste and clear land for agricultural or other uses. These emissions contribute to the greenhouse effect, increasing the risk of climate change.

Further, relationships between climatic variability and yield are relatively strong in the context of cotton farming, meaning cotton production is vulnerable to climate change. Higher temperatures will eventually reduce yields and increase the prevalence of pests and diseases. Changes in precipitation are likely to lead to crop failures and production declines. While there will be some gains depending on crops grown and regions, the overall impacts on agriculture are expected to be negative, thus threatening global cotton production.

Sustainable cotton production can make a significant contribution to a low-cost global mitigation agenda, providing synergies with adaptation and sustainable development. Mitigation options include: managing soil, water, energy, nutrients, tillage, inputs and residues more sustainably; improving agronomic and IPM practices and enhancing the sequestration of carbon in soils. Adaptation measures include: technical measures such as changing the intensification of production; alternative tillage and irrigation; socio-economic measures such as improved access to finance and insurance; (horizontal) organisation of producers and (vertical) partnerships in the supply chain, and ultimately diversifying crops and/or livelihoods.

Therefore, sustainable agriculture also involves considering carbon cycles and should aim to maintain or restore carbon stocks. Well-managed cotton production areas are more resilient, can more readily adapt to climate change and provide a wide range of social, environmental and economic benefits. It is therefore imperative for farmers to manage cotton farms in a responsible manner. Approaches to reduce GHG emissions and adapt to climate change include: protecting non-agricultural lands from conversion to other land uses such as agriculture when relevant; introducing management practices that maintain the integrity of soils, and restoring largely degraded soils and vegetation in critical habitats (riversides, slopes).



2. How BCI addresses Climate Change

2.1 Climate change adaptation within the BCI Principles and Criteria

Climate change adaptation is the adjustment in natural or human systems in response to actual or expected climatic evolution and its effects.

BCI acknowledges that it is a necessity for cotton farmers to adjust to climate change (including climate variability and extremes) and moderate potential damage, and to take advantage of opportunities or cope with the consequences, as they are exposed to more unexpected or unforeseen changes in rainfall patterns and availability of (irrigation) water. As they are exposed to increased risk, more robust adaptation plans are required to manage these additional risks.

The principal adaptation strategies are:

Technical

- Using management systems that are effective under a broad range of soil and climatic conditions; requires systematic measurement of inputs and their GHG footprints as well as environmental resources mapping, leading to tangible, 'climate smart' management decisions or production. (*Criteria 2.1, 3.1, 4.1*)
- Reversing land degradation through the adoption of a sustainable land use change approach, so that high carbon density areas are protected from significant loss. (*Criterion 4.2*)
- Promoting the efficient capture, storage and utilisation of rainfall through the adoption of appropriate water conservation practices, the provision of irrigation, and the use of systems and practices with high use efficiency, including upstream natural vegetation and aquifer or groundwater recharge areas in cotton growing regions. (*Criterion 2.1*)
- Maintaining soil fertility and productivity by arresting nutrient mining and building or sustaining soil fertility. Increased levels of soil organic matter can help make agricultural soils resilient to the stresses of climate change. In particular, the moisture and nutrient retention properties of soils with higher carbon content can help agricultural lands remain productive as climates become drier. Higher soil carbon content also reduces the erodibility of soils and the presence of a mulch or straw cover conserves moisture, fosters healthy soil organisms and reduces raindrop impact and therefore erosion. (*Criteria 3.1 to 3.3*)
- Guarding against pest and disease pressure using early warning systems and IPM, as well as crop rotation and diversification. (*Criterion 1.1*)



Socio-economic

- Enhancing the resilience of communities by encouraging producer organisations and improving their efficiency. (**Criterion 6.9**)
- Ensuring (BCI) farmers integrate and participate with other natural resources users, government and civil society into collective action. (*Criteria 2.1, 3.1, 4.1, 4.2*)

2.2 Climate change mitigation within the BCI Principles and Criteria

Climate change mitigation involves reducing the level of greenhouse gases (GHG) in the atmosphere or enhancing their sinks, e.g. by reducing the use of fossil fuels, planting trees, or enhancing the mineralisation of organic matter into soil organic carbon.

In the context of cotton production, the use of good management practices can substantially reduce GHG emissions:

- Improving fertiliser management to ensure optimal nitrogen oxide use and ultimately mitigate the resulting emissions. Increasing the nitrogen efficiency also decreases leakage into the environment and contamination of surface and ground water. (*Criterion 3.2*)
- Managing soil carbon to increase carbon stocks through appropriate practices including: tillage, residue management and erosion control. Increasing the soil organic matter of soils also improves the soil fertility, reduces erosion, increases moisture retention and can lead to increased yields. (*Criteria 3.1, 3.3*)