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First Edition

Sugar industry — Code of practice

Part 3: Environmental and socio-economic sustainability



**Kenya Bureau of
Standards**

Standards for Quality life

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The following organizations were represented on the Technical Committee:

Agriculture and Food Authority — Sugar Directorate
Ministry of Industry, Trade and Co-operatives
Ministry of Health – Food Safety Unit
Kenya Industrial Research and Development Institute
National Public Health Laboratories Services
Government Chemist's Department
Kenya Revenue Authority
University of Nairobi — Department of Food Science and Technology
Kenafric Industries Limited
Consumer Information Network
Trufoods Limited
Brookside Limited
Kenya Sweets Limited
Mars Group Limited
Muhoroni Sugar Company Limited
South Nyanza Sugar Company Limited
West Kenya Sugar Company Limited
Sukari Industries Limited
Butali Sugar mills Limited
Chemilil Sugar Company Limited
Kibos Sugar and Allied companies
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REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards should be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

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Sugar industry — code of practice

Part 3: Environmental and socio-economic sustainability

Kenya Bureau of Standards, Popo Road, Off Mombasa Road,
P.O. Box 54974 - 00200, Nairobi, Kenya



+254 020 6948000, + 254 722202137, + 254 734600471



info@kebs.org



@KEBS_ke



kenya bureau of standards (kebs)

Foreword

This Kenya Standard was prepared by the **Sugar and sugar products** Technical Committee under the guidance of the Standards Projects Committee, and it is in accordance with the procedures of the Kenya Bureau of Standards

This Code of Practice is aimed at providing guidance to all stakeholders in the value chain to conduct all activities in a manner that ensures food safety and quality; personnel safety and welfare; environmental protection and sustainability. It also intends to enhance compliance with statutory and regulatory requirements in Kenya.

*KS xxx:2022 consists of the following parts, under the general title **Sugar industry - Code of practice**:*

— Part 1: Primary production

— Part 2: Cane harvesting, processing and trade

— Part 3: Environmental and socio-economic sustainability

This first Edition provides guidelines and covers recommended best practices and requirements Cane harvesting, transportation and processing of sugarcane. During the preparation of this standard, reference was made to the following document (s):

ARS/AES 01:2014 Agriculture — Sustainability and eco-labelling — Requirements

Acknowledgement is hereby made for the assistance derived from this (these) source (s) |

Contents

Page

| | |
|---|------------------------------|
| Foreword | iv |
| Introduction..... | vi |
| 1 Scope..... | 2 |
| 2 Normative references..... | 2 |
| 3 Terms and definitions | 2 |
| 4 General Requirements | 3 |
| 4.1 Flexibility / Relevance | 4 |
| 4.2 Stakeholder engagement..... | 4 |
| 4.3 Undue administrative burden..... | 4 |
| 4.4 Management plan | 4 |
| 5 General requirements | 4 |
| 5.1 Responsibility | 4 |
| 5.2 Transparency | 5 |
| 5.3 Legality | 5 |
| 5.4 Science-based approach | 5 |
| 5.5 Human rights | 5 |
| 5.6 Working conditions..... | 5 |
| 6 Principles, criteria and indicators..... | 5 |
| 6.1 Legal compliance | 5 |
| 6.2 Economic sustainability | 6 |
| 6.3 Social and Environmental Management | 6 |
| 6.4 Human rights protection..... | 8 |
| 6.5 Labour rights protection..... | 8 |
| 6.6 Maintenance of biodiversity | 15 |
| 6.7 Soil management..... | 20 |
| 6.8 Water management | 22 |
| 6.9 Climate change, mitigation and adaptation | 26 |
| 6.10 Crop husbandry and farm management | 27 |
| 6.11 Pesticide use and management..... | 27 |
| 6.12 Energy efficiency..... | 28 |
| 6.13 Waste and pollution management..... | 28 |
| 6.14 Handling and segregation of certified products | 28 |
| Annex A (normative) Annex title..... | 29 |
| A.1 General | Error! Bookmark not defined. |
| Bibliography..... | 33 |

Introduction

The Kenyan sugar industry has over the years experienced numerous operational challenges in primary production, processing and marketing. Part 3 of this code of practice provides requirements for the sustainable production, processing and trading of sugar and sugar products. The standard applies to all production, processing and trading within the operator's sphere of influence a framework and guidance to industry players to embrace industry best practices, law and order, harmony, fair play, competitiveness, discipline and self-regulation among others in Cane harvesting, transportation and processing.

List of principles

Principle 1: Legal compliance

Principle 2: Economic Sustainability

Principle 3: Social and Environmental Management

Principle 4: Human Rights Protection

Principle 5: Labour Rights Protection

Principle 6: Maintenance of Biodiversity

Principle 7: Soil Management

Principle 8: Water Management

Principle 9: Climate Change, Mitigation and Adaptation

Principle 10: Crop Husbandry and Farm Management

Principle 11: Pesticide Use and Management

Principle 12: Energy Efficiency

Principle 13: Waste and Pollution Management

Principle 14: Handling and Segregation of Certified Products

Principle 15: Animal Husbandry

Principle 16: To develop and implement policies, programs and procedures for managing acquisitions, productivity and trading of the animal and animal products by the enterprise and records maintained. |

Sugar industry — Code of practice

Part 3: Environment and socio-economic sustainability

1 Scope

This Kenya Standard provides guidelines for achieving requirements for food safety and quality; worker health, safety and welfare; environmental protection and sustainability by value chain actors during primary production of sugar in Kenya. It applies to all players in the primary production including but not limited to growers, millers, harvesters, transporters, county governments and relevant government agencies.

2 Normative references

The following referenced documents referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies, see [ISO/IEC Directives, Part 2](#).

- I. *Forced Labour ILO Convention (No. 29)*
- II. *Discrimination (Employment and Discrimination) ILO Convention (No. 111)*
- III. *Minimum Age ILO Convention (No. 138)*
- IV. *ISO 9000: Quality management systems — Fundamentals and vocabulary*
- V. *ISO 9001: Quality Management Systems – Requirements*
- VI. *ISO 14001, Environmental Management Standards*
- VII. *ISO 14040: Environmental management — Life cycle assessment — Principles and framework*
- VIII. *ISO 19011, Guidelines for Auditing Quality Management Systems*
- IX. *ISO 26000: Guidance on Social Responsibility*
- X. *ISO/IEC 17065: Conformity assessment -- Requirements for bodies certifying products, processes and services*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 audit: A systematic and functionally independent examination to determine whether quality and food safety activities and results comply with planned procedures and whether these procedures are implemented effectively and are suitable to achieve objectives.

certification: All those actions leading to the issuing an official document attesting to a status or level of achievement of requirements of a standard

documentation: Is the collection, classification and dissemination of information relating to a process or procedure usually in written or electronic form

erosion: Erosion is the mechanical movement of the land surface by wind, rain, running water or moving ice resulting in the wearing away of land or soil

food safety: The assurance that food will not cause harm to the consumer when it is prepared and consumed according to its intended use

Integrated pest management (IPM): a consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep plant protection products and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment

value chain actors: Individual producers of primary agricultural products including propagators and breeders; growers, associations and cooperatives; processors and packers; trading companies (including exporters), shippers, consolidators and cargo handlers

sugarcane - Botanically a tall grass of the genus *Saccharum* and agriculturally the crop produced from hybrids which are the progeny of a number of *Saccharum* species commonly referred to as cane. For determination and payment of sucrose in cane it is the raw material accepted at the mill for processing.

Operator - an individual or organisation responsible for ensuring that the production system and the products meet the requirements of this standard

production management unit (PMU)- unit (can be a farm, field, orchard, herd, greenhouse, etc.) defined by the producer for units where segregation of output (agricultural products) is intended and all provisions have been made and put in place to keep separate records and prevent mixing in the case of parallel production

social and environmental management system (SEMs) - part of an organization's management system used to develop and implement its social and environmental policy and manage its social and environmental aspects

biodiversity - the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

management plan - the collection of documents, reports, records and maps that describe, justify and regulate the activities carried out by any manager, staff or organization within or in relation to the management unit, including statements of objectives and policies

conformity assessment - demonstration that specified requirements relating to a product, process, system, person or body are fulfilled

certified product - crops and the products produced on a certified farm that complies with applicable standards and policies.

Environmental sustainability - |

4. General Requirements

Stakeholders within the sugar value chain should undertake production, processing, distribution and trading of sugar in a manner that ensures high productivity and efficiency; food safety and quality; worker health, safety and welfare; environmental protection and sustainability.

Adequate measures should be taken, as appropriate throughout the value chain in accordance with relevant Kenya Standards to achieve the following:

- a) High productivity and efficiency by adopting industry best practices;
- b) Safety by identifying practices, control measures, and monitoring hazards associated with the product at each step;

- c) Quality by identifying factors that compromise sugar quality and implement measures to ensure conformity to product specifications;
- d) Environmental protection by adopting sustainable practices; and
- e) Worker health, safety and welfare by adhering to relevant legislation.

4.1 Guidance clause

4.1.1 Flexibility / Relevance

This standard is flexible enough to be useful for operators of various sizes, processes, systems, products and countries of operation. In adhering to this standard, the operator should deal only with those elements that are relevant to the operator's activities.

If certain specific sustainability aspects are considered not relevant to the process, the operator should justify the specific manner in which its operations do not contribute to the impact of the aspects concerned.

Local circumstances should be taken into account when assessing the environmental, social or economic situation.

4.1.2 Stakeholder engagement

Where required in this standard or when a legal right is exercised by a stakeholder in regard to any indicator that affects the stakeholder's welfare, the operator should document how stakeholders were engaged.

NOTE "Engaged" means both that stakeholders were provided opportunity to comment and that the operator provided a documented response to any grievance presented by stakeholders.

4.1.3 Undue administrative burden

The capacity and resources of the operator should be taken into account so that this standard does not cause excessive administrative burden.

4.1.4 Management plan

When referenced as an indicator in this standard, management plans are intended to be a flexible mechanism for the operator to use to establish reasonable and appropriate plans to address relevant sustainability aspects. A plan that does not include all elements listed in the definition of a management plan is not considered a management plan for the purpose of this standard.

The form of a management plan is not specified; a plan may be comprised of disparate or consolidated proprietary documents, reference materials and/or demonstrated knowledge and/or practice. Monitored data generated in accordance with the plan should be accessible to the verifier to facilitate his or her assessment and to ensure that the definition of a management plan has been adhered to. The data itself would not be attached to or incorporated into the verifier's conformity assessment.

5 Specific requirements

5.1 Responsibility

An operator should be responsible for only its own operations in applying this standard. Its own operations are defined as the sum of activities conducted by the operator throughout the supply chain, including those contracted activities conducted by its subcontractors.

5.2 Transparency

The data, information sources and assumptions used should be communicated in a clear, accurate, timely, honest and complete manner (ISO 26000).

5.3 Legality

The operator should be in compliance with all applicable laws and regulations having direct relevance to the principles, criteria and indicators presented in this standard. An operator may document instances where it is prohibited from complying with this standard as a consequence of a conflicting applicable law or regulation.

5.4 Science-based approach

Any data collected or used in the application of this standard, as well as justifications, presentations, commentary, or interpretation of results associated with the use of this standard, should be based on science, experience and technology.

5.5 Human rights

This standard strives to ensure that the actions of the operators and their subcontractors respect the human rights of all citizenry, especially those of local stakeholders.

The operators should respect universally recognized human rights.

5.6 Working conditions

The operator should respect labour rights and provide safe and healthy working conditions, including providing tools, equipment and training that address the risk of workplace hazards.

6 Principles, criteria and indicators

6.1 Legal compliance

Principle: Compliance with all applicable laws and regulations.

6.1.1 Compliance with national and international law

Criterion: The operator should comply with applicable national laws and regulations and with applicable international treaties and agreements.

Indicators

6.1.1.1 The operator documents outstanding (unresolved) issues of non-compliance with all applicable national laws and regulations and with applicable international agreements.

6.1.1.2 The operator knows and complies with the applicable laws and all applicable licenses, permits and other legal requirements are valid.

6.1.1.3 Number of final, binding and unappealable decisions of the applicable judicial authority against the operator related to the violation of applicable national laws and regulations and with applicable international agreements.

6.1.1.4 Documented evidences for ensuring that all identified laws and regulations are implemented.

6.1.1.5 An appropriately scaled system for tracking any changes in the law.

NOTE 1 Implementing all legal requirements is an essential baseline requirement for all agriculture enterprises whatever their location or size. Relevant legislation includes, but is not limited to, regulations governing land tenure and land-use rights, labour, agricultural practices (e.g., chemical use), environment (e.g., wildlife laws, pollution, environmental management and forestry laws), storage, transportation and processing practices. It also includes laws made pursuant to a country's obligations under international laws or conventions (e.g. the Convention on Biodiversity, CBD). Furthermore, where countries have provisions to respect customary law, these must be taken into account.

NOTE 2 For small-scale enterprises the focus should be on the enterprisers having adequate knowledge of the main legal requirements and implementing them.

NOTE 3 For national interpretation, all relevant legislation should be identified, and any particularly important requirements identified. Contradictions and inconsistencies should be identified and solutions suggested.

NOTE 4 For group certification of small enterprises — group managers should provide training for group members on applicable laws and legal compliance.

6.2 Economic sustainability

Principle: To produce, process and trade agricultural products in an economically and financially viable way.

6.2.1 Fair business practices

Criterion: The operator should follow fair business practices and thereby not engage in any fraudulent, deceptive, or dishonest consumer or commercial business practice that is prohibited by statute or regulation.

Indicators

6.2.1.1 Number of final, binding and unappealable decisions of an applicable judicial authority against the operator for unfair business practices that remain unresolved.

6.2.1.2 The operator has programs for monitoring and enforcement in regard to fair business practices.

6.2.2 Financial risk management

Criterion: The operator should manage financial risk.

Indicators

6.2.2.1 There is evidence that the operator has identified any significant financial risks.

6.2.2.2 There is evidence that the operator has strategies in place to manage significant financial risks.

6.3 Social and Environmental Management

6.3.1 Social and Environmental Management System

Principle: A social and environmental management system ensuring sustainability and integrity with respect to this standard and respective national legislation binding for social, labour and environmental aspects of operations.

Criterion: The operator should have a social and environmental management system for the Production Management Unit (PMU) according to the nature of the enterprise that contains the necessary policies, programmes and procedures that facilitate compliance with the requirements of this standard and relevant local and national legislation.

Indicators

6.3.1.1 Documented evidence of a functional social and environmental management system and in line with the requirements of this standard and applicable laws and regulations.

6.3.1.2 Maps identifying the projects, infrastructure and special areas (for conservation and protection) related to the indicated activities or to the requirements of this standard

6.3.1.3 Evidence of monitoring and regular reviews to ascertain that the social and environmental system is functioning adequately and to accommodate emerging innovations in the environmental, social and circumstances.

6.3.1.4 The objectives and a summary of the social and environmental management system and its programs are publicly available and made known to workers.

6.3.1.5 All documentation and records created for the social and environmental management system, as well as documents proving compliance with the standard are available to the persons responsible for carrying out the plan's various programs and activities.

6.3.1.6 Evidence that the potential social and environmental impacts of new works or activities are evaluated in accordance with applicable laws or, in their absence, based on technically accepted and recognized methods.

6.3.1.7 Existence of a mechanism for follow-up, measurement and analysis, to evaluate the functioning of the social and environmental management system and contribute to continual improvement.

6.3.1.8 Evidence of a mechanism to assess and establish commitment by the operator service providers to complying with the environmental, social and labour requirements of this standard, not only while operating on the farm but also for any outside activities related to the services provided.

6.3.1.9 Evidence of a training and education program in order to guarantee the effective execution of the social and environmental management system and its programs.

6.3.2 Contribution towards the community well-being

Criterion: The operator should implement policies and procedures for identifying and considering the interests of local populations and community interest groups regarding farm activities or changes that could have an impact on their health, employment or local natural resources.

Indicators

6.3.2.1 Operators can demonstrate participation in actions that strengthen the local economy including through the following actions:

(a) By adopting a policy of preferential employment of residents from the local community or from labour tenants on the farm.

(b) Pro-active consultations with local communities, either independently, or through a local forum to establish both community needs and aspirations, and to work towards a commonly agreed goal for the mutual benefit of all participating parties.

6.3.2.2 The operators should document and make available for public view all complaints and comments it receives related to its activities and its replies to them.

6.3.2.3 The operator should contribute to the protection and conservation of community natural resources, collaborate with the development of the local economy, and contribute fairly towards the costs of the community infrastructure and local shared resources consumed – schools, pathways, aqueducts and other infrastructure as well as water and other resources – according to the amount used by the operator.

6.3.2.4 Operators should negotiate a fair compensation with local communities and local and national authorities for resources and infrastructure used.

6.3.2.5 The operator should help with local environmental education efforts and must support and collaborate with local research in areas related to this standard.

6.3.2.6 The operator should have a legitimate right to land use and tenure, demonstrated by presenting the appropriate official documentation. If there is no such documentation the operator should show either:

- (a) The absence of significant disputes on land use, tenure and access, or;
- (b) The consent of local communities, regarding the land, natural and agricultural resources.

6.4 Human rights protection

Principle: Respect human rights.

6.4.1 Universal Declaration of Human Rights

Criterion: The operator should provide information regarding how the Universal Declaration of Human Rights is applicable to the operations of the enterprise and how issues are addressed.

Indicators

6.4.1.1 Number of final, binding and unappealable decisions of the applicable judicial authority against the operator related to the violation of the human rights described in the Criterion that remain unresolved.

6.4.1.2 The operator has implemented a declaration on social practices supporting human rights that has been signed by the management of the operator and any existing representative(s) of employees and the declaration has been communicated to the employees.

6.5 Labour rights protection

Principle: Respect of labour rights.

6.5.1 ILO conventions

Criterion: The operator should comply with nationally applicable ILO Conventions.

6.5.1.1 Indicator: Evidence of compliance with nationally applicable ILO conventions.

6.5.2 Third party contractors

Criterion: Operators should implement a mechanism to ensure the human rights and labour rights apply equally when labour is contracted through third parties.

Indicators

6.5.2.1 The operator maintains up-to-date records of all independent third parties engaged in the project operation(s).

6.5.2.2 Evidence that the third parties who engage these workers are reputable and legitimate enterprises.

6.5.2.3 Evidence of established policies and procedures for engaging, managing and monitoring the performance of third party employers in relation to the requirements of this Standard and that, as far as commercially reasonable, incorporation of these requirements in contractual agreements with third party employers

6.5.2.4 Documents verifying that the third party is contracted in accordance with criterion (6.5.2)

6.5.2.5 Evidence that contracted workers have access to a grievance mechanism. In cases where the third party is not able to provide a grievance mechanism the participating operator provides its own grievance mechanism to serve workers engaged by the third party.

6.5.3 Forced or slave labour

Criterion No slave labour or forced labour should occur and the operator should not employ trafficked persons.

Indicators

6.5.3.1 Evidence that operator does not engage in or support the use of forced, compulsory, bonded, trafficked or otherwise involuntary labour as defined in ILO Convention 29 either directly or through independent third parties (e.g. contractors, etc.).

6.5.3.2 Workers engaged in the operation(s) of the operator confirm that they are not required to lodge their identity documents with anyone and that no part of their salary, benefits or property is retained in order to force them to work or stay on the operation(s).

6.5.3.3 Spouses and children of workers engaged in the operation(s) of the operator are not obliged to work in the operation(s).

6.5.3.4 Workers engaged in the operation(s) confirm that they are allowed to leave their employment after due notice according to their contractual agreements.

6.5.3.5 Workers engaged in the operation(s) of the operator confirm that they are allowed to leave company premises freely at the end of their work shifts.

6.5.3.6 Evidence that workers are not subject to corporal punishment, mental or physical oppression or coercion, verbal or physical abuse, sexual harassment or any other kind of intimidation.

6.5.4 Child labour

Criterion: The operator should not employ children in any manner that is economically exploitative, or is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

Indicators

6.5.4.1 Evidence that the operator does not engage children below minimum age or the legal national age.

6.5.4.2 Evidence that, where legally allowed, workers under the age of 18 do not undertake hazardous or dangerous work, as defined by ILO convention 138.

In the case of family farms only:

6.5.4.3 Evidence demonstrating that in operations where permitted by law, children between 12 and 14 years of age can work part time on family farms, only if they are family members or neighbours in a community where children have traditionally helped with agricultural work.

6.5.4.4 Evidence demonstrating that in project operations, the work of children on family farms does not interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development and that the work day including schooling, transport and work does not exceed 10 hours.

6.5.4.5 The operator provides objective evidence demonstrating that the work of children on family farms does not have negative impacts on the children's schooling (i.e. this may be verified by interviewing the children and the teachers at the local school).

6.5.4.6 The operator provides objective evidence demonstrating that the work of children on family farms does not have negative impact on the children’s health and development (i.e. this may be verified by interviewing children and local health service providers).

6.5.4.7 Evidence of workers ages can be shown and those under 18 year are identified.

6.5.5 Trade unions, freedom of association and the right to organize

Criterion: The operator should respect the right of forming and joining or not joining trade unions, freedom of association, the right to organize, and to collectively bargain, according to national law.

Indicators

6.5.5.1 The right to form, join, trade or not join unions should be stated in the labour contract, subject to national law. Workers engaged in the operation(s) of the operator confirm that they are aware of, and have the right to freely organize, voluntarily negotiate their working conditions and bargain collectively with the management of the operation(s), as established in ILO Conventions 87 and 98.

6.5.5.2 Workers engaged in the operation(s) of the operator confirm that they do not fear nor suffer any negative consequences (e.g. loss of privileges, penalties, lack of career advancement) in exercising the right to freely organize, voluntarily negotiate their working conditions and bargain collectively with the management of the operation(s).

6.5.5.3 Workers engaged in the operation(s) of the operator confirm that there is no perceived or actual threat of undue interference by the management and/or their designated representatives of the operation(s) of the operator in workers exercising their rights to freely organize, voluntarily negotiate their working conditions and bargain collectively with the management of the operation(s).

6.5.5.4 In situations where the rights to freedom of association and collective bargaining are restricted by law, the management of the operation(s) of the operator allows workers to freely elect their own representatives, does not interfere with such representational mechanisms, and provides a mechanism for workers to freely engage and negotiate with employers without breaking the law analogue to the requirements established in ILO Conventions 87 and 98.

6.5.5.5 Evidence that workers are not hindered from interacting with external parties outside working hours (e.g. NGOs, labour inspectors, agricultural extension workers, certification bodies).

6.5.6 Contracts

Criterion: There should be in existence a contract or equivalent document, covering workers' wages and working conditions, according to national law and nationally applicable international conventions, as well as relevant collective agreements.

Indicators

6.5.6.1 Evidence of contracts and records of paid wages.

6.5.6.2 Records of paid wages that meet industry or legal minimum wage and/or collective bargaining agreements can be presented.

6.5.6.3 Evidence of contractual arrangements, including those involving multiple parties establishing who is responsible for providing adequate labour and working conditions to workers.

6.5.7 Working conditions

Criterion: Workers' wages and working conditions should respect all applicable laws and international conventions, as well as all relevant collective agreements. Where a government regulated minimum wage is in place in a given country and applies to the specific industry sector, this should be observed. Where a minimum

wage is absent, the wage paid for a particular activity should be negotiated and agreed on an annual basis with the workers. All workers should receive equal remuneration for work of equal value.

Indicators

6.5.7.1 Workers (including temporary workers), sharecroppers, contractors and subcontractors have a written contract, in a language that they can understand.

NOTE: The requirements of indicator 6.5.7.1 are recommended in all cases. However, for small farms where there are high illiteracy rates group managers may implement alternative mechanisms to make collectively known and verify valid working relationships.

6.5.7.2 The workers are provided with documented information that is clear and understandable, regarding their rights under national labour and employment law and any applicable collective agreements, including their rights related to hours of work, wages, overtime arrangements and overtime compensation; breaks; rest days; and leave for illness, maternity, vacation or holiday and benefits upon beginning the working relationship and when any material changes occur.

6.5.7.3 Objective evidence demonstrating that all workers are paid at least the government regulated minimum wage in the specific industry sector for the applicable work as required by law, and that this includes all mandated wages, allowances and benefits.

6.5.7.4 Evidence demonstrating that where government regulated minimum wages do not exist in the specific industry sector, the management of the operation(s) of the operator has agreed a wage with the workers.

6.5.7.5 Workers engaged in the operation(s) of the operator confirm that the agreed wage, as referred to in indicator 6.4.7.4 is agreed freely on an annual basis.

6.5.7.6 Evidence demonstrating that such agreements are in line with all applicable laws and international conventions and local collective agreements.

6.5.7.7 Workers engaged in the operation(s) of the operator confirm that men, women and migrant workers earn equal pay for equal work.

6.5.7.8 Workers engaged in the operation(s) of the operator confirm that for piecework, the pay rate allows male and female workers to earn at least the legal minimum wage (or comparable regional wage) for the specific work, based on an eight-hour workday under average conditions.

6.5.7.9 Workers engaged in the operation(s) of the operator confirm that wages are paid on a regular or monthly basis in legal tender

6.5.7.10 Workers engaged in the operation(s) of the operator confirm that no deductions from wages as a result of disciplinary measures are made.

6.5.7.11 Workers engaged in the operation(s) of the operator confirm that all agreements relating to pay, benefits and conditions of employment are upheld.

6.5.7.12 Evidence that normal weekly working hours do not exceed **48[52] hours**. Weekly overtime hours do not exceed 32 hours. Supporting documents of working hours or schedules as well as breaks (indicator)

6.5.7.13 If additional overtime hours are necessary demonstrable evidence that the following conditions are met:

(a) It only occurs for limited periods of time (e.g. peak harvest, planting).

(b) Where there is a trade union or representative organization the overtime conditions are negotiated and agreed with that organization.

(c) Where there is no trade union or representative organization agreement the average working hours in the two-month period after the start of the exceptional period still do not exceed 60 hours per week

6.5.7.14 Evidence that overtime work at all times is voluntary and paid according to legal or sector standards. In case overtime work is needed, workers receive timely notification. Workers are entitled to at least one day off following every six consecutive days of work.

6.5.7.15 Evidence that salaried workers have all entitlements and protection in national law and practice with respect to maternity. Workers taking maternity leave are entitled to return to their employment on the same terms and conditions that applied to them prior to taking leave and they are not subject to any discrimination, loss of seniority or deductions of wages.

6.5.7.16 Workers engaged in the operation(s) of the operator confirm that in cases of terminations/redundancies/lay-offs, compensation for workers is provided according to relevant national labour legislation, and that in the absence of national legislation, the labour contract includes a provision for compensation.

6.5.7.17 Adequate and appropriate training and comprehensible instructions on fundamental rights at work, health and safety and any necessary guidance or supervision are provided to all workers. ~~To be optimized~~

6.5.7.18 Evidence that the management does hold regular two-way communication meetings with their employees where issues affecting the business can be discussed openly. (indicator)

6.5.8 Health, safety and hygiene policy

Criterion: The operator should follow a written and updated occupational health, safety and hygiene policy and procedures, including issues of risk assessment in accordance with internationally recognized standards

Mental health issues/bill

Indicators

6.5.8.1 Evidence that conditions of safety and health at the work place are in consistent compliance with the provisions of ILO convention 155 and 184.

6.5.8.2 Producers and their employees demonstrate an awareness and understanding of health and safety matters.

6.5.8.3 Relevant health and safety risks are identified, procedures are developed to address these risks by employers, and these are monitored.

6.5.8.4 Potentially hazardous tasks are only carried out by capable and competent people who do not face specific health risks.

6.5.8.5 Evidence demonstrating that workers are skilled in the implementation of their prescribed activities and jobs to minimize health and safety risks and the risk of work related accidents.

6.5.8.6 The operator has a health and safety policy in place, which applies to all workers, including contractors, and out growers.

6.5.8.7 Small operators do not need to have the procedures required in indicator 6.5.7.19.6 in written form, but they need to be able to demonstrate that the requirements of indicators 6.5.7.19.6 are complied with, and that their workers are aware of, and confirm implementation of such requirements (procedures and measures).

6.5.8.8 Evidence demonstrating that procedures and measures addressing emergencies and accidents are in place, fully implemented, continuously monitored and improved, and apply to all workers engaged in the operations of the participating operator.

6.5.8.9 Evidence demonstrating that all workers understand the operators' accident and emergency prevention, preparedness and response arrangements and measures. **6.5.8.10** The operator maintains, and reviews periodically records of all work-related accidents, incidents and diseases and adjusts its accident and emergency procedures to minimize the risk of work-related accidents.

6.5.8.11 Evidence demonstrating that first aid kits, fire extinguishers, and spill and operator contamination response material are available in sufficient quantity (i.e. readily available and accessible to workers) and quality (i.e. current and periodically serviced and appropriate to address the associated hazards and risks) at all sites including mobile facilities and that workers are knowledgeable of such equipment and its use.

6.5.8.12 Evidence demonstrating that all workers (including subcontractors) are provided with and regularly use personal protective equipment to protect them from all occupational health and safety hazards associated with their respective jobs.

6.5.8.13 Evidence that there is a system of warnings followed by legally-permitted sanctions for workers that do not apply safety requirements.

6.5.8.14 Objective evidence of a work and safety plan demonstrating that all workers (including subcontractors) are:

(a) trained, knowledgeable and regularly using protective equipment and installations,

(b) trained and knowledgeable in interpretation of labels, markings, signs, and other safety relevant audio and/or visual signals,

(c) trained and knowledgeable about work-related health and safety risks and preventative measures for minimizing the risk to health and safety,

(d) trained and knowledgeable about work-related risks to the environment and/or society,

(e) trained and knowledgeable about accident and emergency procedures,

(f) trained and knowledgeable about correct application, transport, storage and handling of hazardous substances and waste, and

(g) trained and knowledgeable about all other aspects of the operation(s) of the participating operator that pose occupational health and safety risks or risks to the environment and/or to society.

6.5.8.15 In operation(s) other than small operations the operator provides objective evidence demonstrating that specially trained and equipped teams have been established to respond to accidents and emergencies without delay.

6.5.8.16 Evidence demonstrating that all workers have access to clean sanitary facilities and potable (drinking) water.

6.5.8.17 Evidence that any living quarters and infrastructure for sleeping, for sanitary facilities (e.g. toilet/latrines, showers, etc.) and facilities for storing, preparing and distributing of food provided to workers are designed, built and regularly maintained to meet the basic needs of the personnel and their families, and comply with legal requirements, and ensure safe and healthy conditions.

6.5.8.18 Workers engaged in the operation(s) of the operator confirm that housing provided by the operator is in good structural condition, is maintained sufficiently and offers sufficient privacy, sanitary, health, and safety conditions.

6.5.8.19 Evidence that the management does hold regular two-way communication meetings with their employees where issues related to worker health, safety and welfare can be discussed openly

6.5.9 Social welfare and benefits

Criterion: In the operation the workers should be linked to the system of social welfare and participate in the plan of occupational health and safety, as per the current national legislation. All social benefits required by national law and/or collective negotiations should be offered by the employer to employees and their families.

6.5.10 Non-discrimination

Criterion: Workers should be free of discrimination of any kind, whether in employment or opportunity, with respect to gender, wages, working conditions, and social benefits.

Indicators

6.5.10.1 Self-declaration by the operator implements the provisions of ILO Convention 111.

6.5.10.2 Workers engaged in the operation(s) of the operator confirm that they are not subjected to any form of discrimination in hiring, remuneration, benefits, access to training, promotion, termination, retirement or any other aspect of employment.

6.5.10.3 Workers engaged in the operation(s) of the operator confirm that they are not subjected to corporal punishment, mental or physical oppression and coercion, verbal or physical abuse, sexual harassment or any other kind of intimidation in the workplace and where applicable in residences and other facilities provided by the operation(s) of the operator for use by workers.

6.5.10.4 Male and female workers engaged in the operation(s) of the operator confirm that they have equal access to career development programs (not applicable to family farms or small-scale operators and outgrowers).

6.5.10.5 A publicly available equal opportunities policy exists.

6.5.10.6 If the operator hires migrant workers, appropriate measures have been taken to prevent any discriminatory treatment of migrant workers.

6.5.10.7 Evidence that the operator has addressed protection of disabled people's rights under all of their labour policies and procedures including working conditions, access and egress for disabled people.

6.5.10.8 Special measures of protection or assistance to remedy past discrimination have been put in place such as policies designed to increase employment of underrepresented groups in the workforce or in particular occupations in order to remedy past discrimination, such as affirmative action and employment of members of the local community, with a view to achieving effective equality of opportunity and treatment in the workplace.

6.5.11 Retrenchment

Criterion: Prior to implementing any collective dismissals, the operator should carry out an analysis of alternatives to retrenchment. If the analysis does not identify viable alternatives to retrenchment, a retrenchment plan should be developed and implemented to reduce the adverse impacts of retrenchment on workers.

NOTE 1 Collective dismissal cover all multiple dismissals that are a result of an economic, technical, or organizational reason; or other reasons that are not related to performance or other personal reasons.

NOTE 2 Examples of alternatives may include negotiated working-time reduction programs, employee capacity-building programs; long-term maintenance works during low production periods, etc.

Indicators

6.5.11.1 The retrenchment plan is based on the principle of non-discrimination and reflects the operator's consultation with workers, their organizations, and, where appropriate, the government, and complies with collective bargaining agreements if they exist.

6.5.11.2 The operator complies with all legal and contractual requirements related to notification of public authorities, and provision of information to, and consultation with workers and their organizations.

6.5.11.3 The operator ensures that all workers receive notice of dismissal and severance payments mandated by law and collective agreements in a timely manner. All outstanding back pay and social security benefits and pension contributions and benefits are paid (i) on or before termination of the working relationship to the workers, (ii) where appropriate, for the benefit of the workers, or (iii) payment is made in accordance with a timeline agreed through a collective agreement.

6.5.11.4 Where payments are made for the benefit of workers, workers are provided with evidence of such payments.

6.5.12 Right to privacy

Criterion: The HR policy of the operator should uphold and communicate workers' right to privacy relevant to the business operations.

Indicators

6.5.12.1 Evidence that the policy includes:

- (a) **notification:** notification to workers on the data collection process and the type of data collected;
- (b) **purpose:** the purpose of collecting the data;
- (c) **consent:** data should not be collected or disclosed without the worker's consent;
- (d) **security:** data should be kept secure and confidential;
- (e) **disclosure:** workers should be informed as to who is collecting their data;
- (f) **access:** workers should be allowed to access their data and make corrections to any inaccurate data; and
- (g) **accountability:** workers should have a method available to them to hold data collectors accountable for following the above principles.

6.5.12.2 Evidence that data is only collected and used for reasons directly relevant to employment and that all medical data remains confidential.

6.5.12.3 Evidence that if workers are being filmed, or will be body searched, or if other surveillance methods are used, the operator has informed them and the reasons explained for these procedures. Any such method should follow the criterion stated above and should be conducted in ways that does not cause harassment, intimidation, harm on safety and health of workers intrusion of privacy and insensitivity to cultural and spiritual believes of the concerned workers..

6.5.12.4 The operator has informed workers about the type of information that will be kept and how this information will be used.

6.5.12.5 Evidence that the operator is complying with legal requirements for employment record retention and has informed the workers to ensure that information is accurate, relevant and safe from improper disclosure.

6.5.12.6 The operator keeps personnel files that reflect performance reviews and any complaints brought against the company or individual employees.

6.5.12.7 The operator keeps all final memoranda and correspondence reflecting performance reviews and actions taken by or against personnel in the employee's personnel file.

6.6 Maintenance of biodiversity

Principle: To maintain and/or enhance biodiversity and supporting habitats within the farming system and its surroundings.

6.6.1 Protection and conservation of biodiversity

Criterion: The operator should identify, support, protect and maintain the integrity of terrestrial, wetland and aquatic ecosystems inside and outside of the farm and promote ecologically functional habitats and species, and should not permit their destruction or alteration as a result of management or production activities on the farm.

Indicators

6.6.1.1 The operator addresses biodiversity within the farm plan to assess current ecosystems and identify appropriate habitat management practices, and encouraging participation in existing conservation programs and watershed ecosystem protection efforts to support diverse species and habitats.

6.6.1.2 The status of rare, threatened or endangered species that exist in the area of operations or that could be affected by operations are identified, recorded and their conservation taken into account in management plans and operations.

6.6.1.3 Primary ecosystems, such as primary forests and wetlands, should not be cleared or drained for the purpose of establishing production, processing or trading operations.

6.6.1.4 To the extent possible and appropriate to the crop and the conditions, trees cover should be enhanced in and/or around the fields in addition to activities aimed at restoration of natural ecosystems within the farm.

6.6.1.5 Intentional burning of vegetation should be prohibited and alternative methods adopted for utilization of vegetation thereby protecting organic matter and biodiversity for enhanced productivity.

6.6.1.6 Appropriate measures (such as but not limited to mulching, composting, crop rotation, intercropping, agro-forestry) should be undertaken to stimulate and enhance plant production, organic matter, soil fertility, microbial activity, soil and plant health.

6.6.1.7 For perennial crops, intercropping may be undertaken for crops whose husbandry practices do not lead to risks on food safety. For perennial crops that are grown as monocultures where intercropping is not possible, other means to secure biodiversity should be applied to the growing system.

6.6.1.8 For any new plant introduction, the operator should undertake a risk assessment on ecological suitability and the impacts the new species will have on the ecosystem.

6.6.1.9 Hunting, capturing, extracting and trafficking wild animals should be prohibited on the farm. Cultural or ethnic groups are allowed to hunt or collect fauna in a controlled manner and in areas designated for those purposes under the following conditions:

(a) The activities do not involve species in danger of or threatened with extinction.

(b) There are established laws that recognize the rights of these groups to hunt or collect wildlife. Hunting and collection activities do not have negative impacts on the ecological processes or functions important for agricultural and local ecosystem sustainability. The long-term viability of the species' populations is not affected.

(d) These activities are not for commercial purposes.

6.6.1.10 Timing harvest and other mechanical activities, within the window of opportunity, to minimize impacts on wildlife, habitat, and/or ecosystem functions, especially during critical reproduction and migratory periods.

6.6.2 Protection of areas of high biodiversity value

Criterion: There should be no economic production in areas designated as conservation areas according to national law and regulations and international conventions except when a specific form of use is stated to serve the biodiversity protection purpose in official documentation and/or approved management plans.

Indicators

6.6.2.1 The operator provides objective evidence demonstrating that they have identified the status of the area and the conservation values of global, regional or local importance affected by the potential or existing operation(s) of the operator.

6.6.3 Biodiversity values within the area of production

Criterion: Biodiversity values should be promoted within the area of production and the nearby environment that can be directly influenced by the operator.

Indicators

6.6.3.1 The operator has developed and implemented a biodiversity management plan.

6.6.3.2 The operator's biodiversity management plan encompasses fragmentation of habitat.

6.6.3.3 The operator's biodiversity management plan encompasses the mapped area (ha) of protected or restored ecological corridors, the buffer zones and the set-aside areas in the bioenergy production site and the percentage of the bioenergy production site that is set aside for biodiversity protection.

6.6.3.4 Evidence of implementation of appropriate crop management practices to assist conservation of rare, threatened, endangered or important vulnerable ecosystems species of local, regional, or global importance, where present including:

(a) Appropriate timing of field operations to avoid harm to listed species, e.g. field operations timed to avoid disturbance to nesting and fledging birds

(b) Use of fertilizers, pesticides, herbicides and fungicides considers impact on listed species

(c) Limited and appropriate use of burning of crop residues

6.6.3.5 The presence of important habitats and species is periodically assessed and the status of rare, threatened or endangered species or habitats of high conservation value is documented.

6.6.3.6 Appropriate conservation measures are included in the biodiversity management plan to protect rare, threatened or endangered species and habitats of high conservation value within production area to include:

(a) retention of riparian and wetland habitats

(b) retention protection of veteran trees

(c) no-spray and no-burn areas within 10 m of areas of high conservation value

6.6.3.7 Evidence of additional conservation measures to encourage wildlife and restore degraded natural ecosystems including:

(a) Restoration of degraded natural habitats within 50 m of production areas

(b) Use of biological controls in crop management

6.6.4 Ecosystem functions and services within the area of production

Criterion: The ecosystem functions and services within the area of production should be maintained or enhanced at the landscape level.

Indicators

6.6.4.1 Where a project is likely to adversely impact ecosystem services, evidence that the operator conducts a systematic review to identify priority ecosystem services, i.e.: (i) those services on which project operations

are most likely to have an impact and, therefore, which result in adverse impacts to Affected Communities; and/or (ii) those services on which the project is directly dependent for its operations (e.g., water).

6.6.4.2 Evidence of reasonable effort to avoid adverse impacts on priority ecosystem services of relevance to Affected Communities and where these impacts are unavoidable, the operator minimizes them and implements mitigation measures that aim to maintain the value and functionality of priority services.

6.6.4.3 With respect to impacts on priority ecosystem services on which the project depends, evidence that operators minimize impacts on ecosystem services and implement measures that increase resource efficiency of their operations.

6.6.4.4 Evidence that Affected Communities likely to be impacted participate in the determination of priority ecosystem services in accordance with the stakeholder engagement process.

6.6.4.5 If evidence exists that the operation will directly affect ecosystem functions and services, the operator provides objective evidence demonstrating that there is in place a biodiversity management plan to ensure that the operation(s) effectively maintains or enhances the ecosystem functions and services identified both inside, and outside the production site(s).

NOTE The management practices in the Environmental and Social Management Plan (ESMP) may include:

(a) For ecosystem functions: the creation or maintenance and protection of areas where natural regeneration processes are allowed to take place, and where populations of native plants and animals can breed, feed and find refuge.

(b) For ecosystem services:

(i) Actions to control and minimize disturbance to water quality and water flows e.g. the creation or protection of riparian buffer zones of natural vegetation, to help control physical events such as floods or the spread of diseases, and the maintenance of natural vegetation in important water catchments, especially steep slopes.

(ii) Actions to control and minimize soil disturbance, erosion and compaction including the avoidance of land clearance on sensitive or highly erodible soils, especially on steep slopes, and positive soil restoration measures where appropriate.

(iii) Actions to minimize the risk of fire and the effects of wind erosion e.g. maintenance of appropriate natural barriers.

(iv) Protection and maintenance of areas of natural vegetation where local populations can maintain a sustainable harvest of those natural goods e.g. Non Timber Forest Products (NTFPs) which have been identified as important to their livelihoods.

6.6.4.6 The operator provides objective evidence demonstrating that continuous monitoring and measures implemented through their ESMP to maintain and enhance ecosystem functions and services are effective.

6.6.5 Buffer zones

Criterion: operators should protect, restore or create buffer zones.

Indicators

6.6.5.1 The operator provides objective evidence demonstrating that buffer zones are protected, restored or created within the site(s) of her/his/its bioenergy operation(s) around areas with conservation values of local, regional or global importance.

6.6.5.2 The operator provides objective evidence demonstrating that buffer zones are effective in mitigating potential negative impacts of the operations on areas that are contiguous to the operation site and, within the operation site, on any area containing conservation value(s) of local, regional or global importance.

6.6.5.3 The operator provides objective evidence demonstrating that buffer zones remain unused for economic operation(s).

NOTE Buffer Zones may be managed in order to contribute to the sustained supply of environmental goods and services, in line with their protective function.

6.6.6 Ecological corridors

Criterion: Ecological corridors should be protected, restored or created to minimize fragmentation of habitats.

Indicators

6.6.6.1 The operator provides objective evidence demonstrating that ecological corridors within the production site(s) have been identified.

6.6.6.2 Evidence demonstrating that existing ecological corridors within the production site(s) are set-aside and protected with appropriate buffer zones.

6.6.6.3 Evidence demonstrating that, where there is the risk that operation(s) could increase the fragmentation of surrounding ecosystems, the spatial layout of the operation(s) is adjusted to not cause any additional fragmentation and to maintain connectivity of ecosystems through the creation of ecological corridors within the operation(s).

6.6.6.4 Evidence that specific measures are implemented to establish ecological corridors that facilitate the movement of wildlife in areas surrounding the site(s) of operation(s).

6.6.6.5 Indicator: New ecological corridors are created within the operation site if it is surrounded by areas containing wildlife and there is evidence that such corridors would improve connectivity.

6.6.6.6 Indicator: Ecological corridors, which were destroyed and for which the operator is directly accountable, have been restored effectively.

6.6.6.7 Indicator: Ecological corridor(s) are effective in protecting, maintaining and/or enhancing the environmental aspect for which they were established.

6.6.7 Invasive alien species

Criterion: operators should prevent invasive species from invading areas outside the operation site.

Indicators

6.6.7.1 The operator complies with applicable laws and regulations regarding the cultivation, handling and use of genetically modified organisms, non-native crops and nationally recognised alien and invasive species or which has been analysed or recorded (e.g. in the Global Invasive Species Database) (even if not prohibited in the country of operation) as highly invasive under similar conditions (climate, local ecosystems, soil types, etc.). In the absence of national law, compliance with requirements from a relevant national authority

6.6.7.2 The operator provides objective evidence demonstrating that a Weed Risk Assessment has been undertaken analyzing each species cultivated, used, or otherwise handled in the operation(s) of the operator to identify the potential threat of invasion.

6.6.7.3 The operator provides objective evidence demonstrating that the species used in the operation(s) have no or low risk of invasion in similar conditions.

6.6.7.4 If no evidence exists demonstrating that the species used have no or low risk of invasion in similar conditions, the operator provides objective evidence demonstrating implementation of applicable international or government approved guidelines that exist in the country or region of the operation(s).

6.6.7.5 The operator provides objective evidence demonstrating that specific measures are implemented which prevent and mitigate the risk of invasion during cultivation, harvesting, processing, transport and trade by among other things containing propagules in an appropriate manner.

6.6.7.6 The operator provides objective evidence demonstrating that continuous monitoring is undertaken to detect any invasion outside the operation site, of species cultivated, used or otherwise handled by the bioenergy operation(s).

6.6.7.7 Evidence that the operator has established a management plan, which includes cultivation practices that minimize the risks of invasion, immediate mitigation actions (eradication, containment or management) in case of escape of a plant species outside the operation site (possibly through the provision of a specific fund), as well as a monitoring system that checks for escapes and the presence of pests and pathogens outside the operation site.

6.6.7.8 Rare, threatened or vulnerable ecosystems and species are protected

6.6.7.9 Optimize the use, handling, storage and disposal of fertilizers, herbicides, pesticides, fuels and other chemicals from an environmental perspective.

6.6.7.10 Evaluation of consequences of non-native crops.

6.6.7.11 Evidence of the adoption of safeguards to avoid potential risks associated with the use of GMO and alien species.

6.7 Soil management

Principle: To maintain and replenish long-term soil health, fertility and productivity.

6.7.1 Soil management plan

Criterion: A soil management plan, which aims to maintain and protect soil health, quality and productivity and reverse soil degradation, should be developed and implemented.

Indicators

6.7.1.1 The operator has developed a soil management plan, or has implemented a soil management plan approved by a local authority, with applicable abatement measures; and ongoing status is monitored at appropriate intervals.

6.7.1.2 The operator has provided measures of the quality and productivity of soils at the site and local level, including those for salinization, compaction, contamination, water holding capacity and retention of organic carbon content.

6.7.1.3 The operator provides evidence that the use of agrarian and forestry residual products, including lignocellulosic material, is not at the expense of long-term soil stability and organic matter content.

6.7.1.4 The operator provides evidence of implementing measures to improve soil health, such as Conservation Agriculture practices as defined by the FAO

6.7.1.5 The operator provides objective evidence demonstrating that the Soil Management Plan is based on continuous monitoring (e.g. at minimum once per season and once per crop rotation, etc.) of physical, chemical, organic and biological properties of the soils and other related factors (e.g. rainfall, water availability, run-off and other conditions, climatic conditions, size and layout of the production area, etc.) in and around the production area of the operation(s) of the operator, as collected through the impact assessment studies or other equivalent source.

6.7.2 Soil erosion

Criterion: Practices that minimize and control erosion and degradation of soils should be used.

Indicators

6.7.2.1 Evidence of maps indicating areas of fragile soils.

6.7.2.2 The operator has identified local soil erosion forces (rainfall, runoff and/or wind) and all parameters of agronomic (soil erodibility, etc.), physical/topological (e.g., field slope) and/or climatic conditions that affect soil loss.

6.7.2.3 Indicator: The operator's soil management plan encompasses engineering and technical measures to address soil loss.

6.7.2.4 The operator provides objective evidence demonstrating implementation of practices to reduce or avoid soil erosion and compaction, and to maintain or improve soil organic matter.

6.7.2.5 Mitigation measures are in place

6.7.2.6 Tillage practises (season/no/low/high)

6.7.2.7 A management strategy should exist for plantings on slopes above a certain limit (needs to be soil and climate specific).

6.7.2.8 A management strategy should be in place for other fragile and problem soils (e.g. sandy, low organic matter, acid sulfate soils)

6.7.2.9 Presence of road maintenance programme.

6.7.3 Soil productivity and fertility

Criterion: Soil productivity and fertility should be maintained or improved with due regard for soil structure and stability, organic matter and nutrient content.

Indicators

6.7.3.1 Productivity issues are specified in the soil management plan.

6.7.3.2 Evidence that the soil management plan reviews erosion risk, sets out a strategy for protecting high-risk areas, and assesses soil structure to identify impediments to rooting and crop water use.

6.7.3.3 Rotation period with an integrated plant nutrition approach and soil nutrient compensation (indicator)

6.7.3.4 Analysis of topsoil nutrient status at 5 yearly intervals following recommended sampling and analysis methods. Should include P, K, N and pH status.

6.7.3.5 Use of a farm nutrient management plan, which details fertilizer and manure management principles – including no spread zones (to protect water bodies), soil nutrient status, crop requirements and inputs of nutrients in manure.

6.7.3.6 Evidence of checks on fertilizer spreaders to ensure evenness of spread, within acceptable limits.

6.7.3.7 Proportion of biomass harvested

6.7.3.8 Compensatory measures for soil carbon losses

6.7.3.9 Productivity over time

6.7.3.10 Monitoring data

6.7.3.11 Evidence of following recommendations of the agroecological zoning

6.7.3.12 Changes in productivity on arable land.

6.7.4 Soil physical status

Criterion: Soil physical status should be maintained.

Indicators

6.7.4.1 Physical status issues are specified in the soil management plan.

6.7.4.2 Where the Soil Impact Assessment demonstrated that the soil conditions were already optimal, the operator provides objective evidence demonstrating that implementation of Soil Management Plan effectively prevents (and if necessary mitigates) alteration of physical, chemical and/or biological soil properties including soil organic matter. Where the Soil Impact Assessment demonstrated that the soil conditions were below optimal, the operator provides objective evidence demonstrating that implementation of Soil Management Plan effectively reverts soil degradation and restores physical, chemical and/or biological soil properties to optimal levels.

6.7.4.3 Tillage practices (season/no/low/high).

6.7.4.4 Equipment and technique used.

6.7.4.5 Soil characteristics.

6.7.4.6 Monitoring data.

6.7.5 Soil chemical and biological status

Criterion: Soil chemical and biological status should be managed

Indicators

6.7.5.1 Optimize the use, handling, storage and disposal of fertilizers, herbicides, pesticides, fuels and other chemicals from an environmental perspective.

6.7.5.2 The management system is based on an integrated system of pest control.

6.7.5.3 The use of restricted pesticides is controlled and administration is kept up to date. Stock is kept in a separate and locked storage.

6.7.5.5 Biological control agents and organic pesticides, as well as traditional knowledge and skills regarding alternatively non-chemical pest control have to be identified and implemented in the agricultural management system.

6.7.6 Land conservation and rehabilitation

Criterion: The agriculture management should be aimed at land conservation and rehabilitation.

Indicators

6.7.6.1 Land degradation is surveyed on a regular basis.

6.7.6.2 Land and conservation areas at risk are identified and the policy and management measures are formulated.

6.7.6.3 The general planning, management and utilization of land resources and the preservation of soil fertility are defined and executed.

6.8 Water management

Principle: To maintain or enhance the quality and quantity of surface and ground water resources, and respect prior formal or customary water rights.

6.8.1 Water rights

Criterion: Operators should respect the existing water rights of local and indigenous communities.

Indicators

6.8.1.1 Evidence that the operation(s) do not negatively affect (i.e. reduce and/or alter in quality or quantity) the water supply to communities which rely on the same water resource(s). This usually includes objective evidence:

- (a) identifying the communities which rely on the same water resource(s) as operation(s);
- (b) analyzing the water supply to communities which rely on the same water resource(s);
- (c) analyzing whether the water supply to communities which rely on the same water resource(s) is affected in quality or quantity by operation(s);
- (d) ensuring use of water for operations should not be at the expense of the water needed by the communities that rely on the same water source(s) for subsistence.

6.8.1.2 Evidence of evaluation of the actual and potential impacts of operation(s) on the availability of water resource(s) within the local community.

6.8.1.3 If the screening exercise indicated any significant potential impacts of operations on water availability within the local community and ecosystems, the operator provides objective evidence demonstrating that a water rights impact assessment has been completed and any actual or potential negative impacts of operation(s) on the availability of water resource(s) within the local community have been mitigated.

6.8.1.4 Evidence demonstrating continuous monitoring of the actual and potential impacts of bioenergy operation(s) on the availability of water resource(s) within the local community.

6.8.1.5 Evidence that the use of the water resource(s) for operation(s) is not legitimately disputed by stakeholders who rely on the same water resource(s).

6.8.1.6 Evidence that the use of the water resource(s) for operation(s) has been agreed with free, prior and informed consent by stakeholders who rely on the same water resource(s).

6.8.1.7 Evidence that the use of the water resource(s) for operation(s) has been consulted with water regulatory authorities, local water experts, community members, and indigenous peoples which relate to and/or rely on the same water resource(s) to:

- (a) identify all stakeholders who rely on the same water resource(s);
- (b) identify formal water rights relating to the same water resource(s);
- (c) identify customary water rights relating to the same water resource(s);
- (d) evaluate the actual and potential impacts of operation(s) on the same water resource(s);
- (e) evaluate and identify measures to fully mitigate the actual and potential impacts of operation(s) on the same water resource(s);
- (f) evaluate and identify measures to fully protect the formal or customary water rights to the same water resource(s) and to prevent infringement and/or compromising of such rights;
- (g) ensure that the formal or customary water rights to the same water resource(s) are only modified based on Free, Prior and Informed Consent of stakeholders relating to and/or relying on the same water resource(s);

(h) ensure that there is priority to human consumption (indicator); and

(i) evaluate and identify measures to continuously monitor and ensure comprehensive implementation of the requirements detailed in indicator 6.8.1.7 as listed above.

6.8.1.8 Evidence that the outcomes and agreements resulting from the consultation process detailed under indicator

6.8.1.7 are comprehensively and fully implemented.

6.8.1.9 Supporting documents of water rights and permissions on overall process and irrigation water withdrawal.

6.8.2 Water management plan

Criterion: Water resources are managed at the local and/or site level to protect water quality and quantity over time and taking the watershed into account.

Indicators

6.8.2.1 The source, quantity and quality of water withdrawal are identified.

6.8.2.2 Evidence demonstrating that valid abstraction licences or permits have been obtained.

6.8.2.3 The operator has developed and implemented a water management plan that includes measurements and monitoring.

6.8.2.4 The operator has implemented measures to address the impacts of water withdrawal on the quality of water resources.

6.8.2.5 The operator has implemented measures to address the availability of surface or groundwater resources in water-scarce countries.

6.8.2.6 The operator's water management plan addresses riparian areas and other areas which receive direct water run-off from the area of operation.

6.8.2.7 Evidence that the water management plan is available to the public unless this is limited by national law or international agreements on intellectual property.

6.8.2.8 Evidence that the water management plan is consistent with local conditions of rainfall, water storage, water distribution and water treatment.

6.8.2.9 Evidence demonstrating that the water management plan is consistent with any other regional or local water management plans.

6.8.2.10 Evidence that any negative impacts resulting directly or indirectly from the operation(s) on the water resources of the neighbouring areas are mitigated fully.

6.8.2.11 Evidence that the water management plan is reviewed and revised periodically (i.e. at least annually) to assess its effectiveness at achieving its stated objectives.

6.8.2.12 Evidence that best practices measures for reusing or recycling of waste water have been identified and are implemented over time.

6.8.2.13 Evidence that the water management plan uses solutions that lower the risk for impaired water quality.

6.8.2.14 Evidence that the water management plan uses solutions that lower the risk for exhaustion and overuse of regional water resources.

6.8.2.15 Evidence that the water management plan contains measures to protect water courses and wetlands, including maintaining and restoring appropriate riparian buffer zones.

6.8.2.16 Evidence demonstrating that the water management plan contains measures to optimize the use, handling, storage and disposal of fertilizers, herbicides, pesticides, fuels and other chemicals from an environmental perspective.

6.8.2.17 Evidence demonstrating that the water management plan contains measures to avoid depletion of surface or groundwater resources beyond replenishment capacities.

6.8.2.18 Evidence demonstrating that the water management plan contains measures to contribute to the enhancement or maintaining of the quality of surface or groundwater resources.

6.8.2.19 The operator has identified the quantity and quality of final effluents to the receiving water body or treatment plant.

6.8.2.20 Where freshwater intensive operations are established in drought prone areas or where irrigated crops are used in drought prone areas, the operator provides objective evidence demonstrating that best available practices are used, and that measures are implemented to mitigate changes in water quantity and quality.

6.8.2.21 In drought-prone areas, irrigation is not used unless the operator can demonstrate the existence of implemented mitigation measures that ensure the level of water resources used remains stable.

6.8.2.22 Evidence that the use of water from natural water bodies does not result in a permanent change in its natural course or change the physical, chemical or biological equilibrium the water body had before the operation(s) started.

6.8.2.23 Evidence that efficiency of water use has improved over time through implementation measures to conserve water.

6.8.2.24 Evidence that critical aquifer recharge areas, replenishment capacities of local water tables, watercourses, and ecosystem needs have been identified and evaluated.

6.8.2.25 Evidence that any potential negative impacts of bioenergy operation(s) on local water tables, watercourses, and ecosystem needs have been mitigated.

6.8.2.26 Evidence that the use and share of water resources has been agreed upon with local experts and the community, and that all water user committees have been consulted.

6.8.3 Water quality

Criterion: Project operations should contribute to the enhancement or maintaining of the quality of the surface and groundwater resources.

Indicators

6.8.3.1 Evidence that bio-energy is not produced or processed in critical aquifer recharge areas, without official authorization from relevant legal authorities.

6.8.3.2 Evidence of availability of best practices to maintain or enhance the quality of water resources to their optimal level are implemented in the bio-energy operations to ensure sustained water supply, ecosystem functioning and ecological services.

6.8.3.3 Evidence that sufficient precautions have been taken to contain effluents from the bio-energy operation(s) and prevent contamination of water resources. This includes treatment and/or recycling of waste water and the establishment of buffer zones between the operation site and surface or ground water resources.

6.8.3.4 Evidence that emergency plans and measures are in place, known and implemented in the operation(s) in case accidental contamination of water resources is identified.

6.8.3.5 For bio-energy operations where degradation of water resources existed before said operation was accepted, the bio-energy operator provides objective evidence of mitigation measures to be implemented to reverse the degradation of water resources and that the bio-energy operator has taken part in projects to improve water quality at the watershed level.

6.8.3.6 Evidence that waste water or runoff with organic or mineral contaminants are treated, recycled or properly disposed of.

6.8.3.7 Where the screening exercise has triggered the need for a Water Assessment, the bio-energy operator provides objective evidence that studies have been conducted to determine the optimal water quality level required to sustain the system, taking into account local, climatic, hydrologic and ecologic conditions.

6.8.4 Fresh water supply

Criterion: The agriculture management should be aimed at the insurance of freshwater supply and quality for sustainable food production and sustainable rural development.

Indicators

6.8.4.1 Efficiency and productivity of agricultural water use for better utilization of limited water resources has to increase.

6.8.4.2 Monitoring of the irrigation performance.

6.8.4.3 Proper disposal of sewage and waste from the farm and human settlements and of manure produces by intensive life stock breeding.

6.8.4.4 Water quality has to be monitored on biological, physical and chemical quality.

6.8.4.5 Measures have to be taken to minimize soil run-off and sedimentation.

6.8.4.6 Irrigation has to be planned in a long term program.

6.8.4.7 Long term strategies and implementation program have to be developed on water use under scarce conditions.

6.8.4.8 Waste water re-use has to be part of the agriculture management system.

6.9 Climate change, mitigation and adaptation

Principle: To contribute to the mitigation of and the adaptation to the detrimental effects of climate change.

6.9.1 Climate change adaptation

Criterion: Farmers should take note of current and predicted climatic changes and their potential impacts on their farming activities, and to implement adaptation strategies to increase their resilience and reduce their vulnerability to climatic changes.

Indicator

6.9.1.1 The effects of climate change on current farming practices are recognized and, where possible, are adapted to cope with predicted climate change impacts. Adaptation measures to be considered include:

(a) the more efficient use of water on the farm (e.g. improving irrigation efficiency, rainwater tanks, water reuse and intercropping to maximize uptake of water and crop productivity);

(b) wetland and catchment/riparian restoration to increase water quantity and quality;

- (c) removal of alien plant infestations to increase water flow;
- (d) reducing stocking rates to reduce grazing pressure on rangelands;
- (e) planting drought resistant crops;
- (f) building soil health (see 6.7);
- (g) avoiding bare fallows to prevent erosion and soil water loss.

NOTE: These adaptation measures fit suitably with sustainable farm management practices as they ensure the wise use of agricultural resources and the restoration and protection of ecosystem health. These practices also contribute to reducing the farm's greenhouse gas emissions and thus assist in mitigating climate change itself.

6.9.2 Climate change mitigation

Criterion: Operator should adopt strategies which contribute to climate change mitigation in their operations.

Indicator

6.9.2.1 The need for climate change mitigation and energy efficiency is recognized and, where possible, implemented.

More indicators-

6.10 Crop husbandry and farm management

Principle: To develop and implement policies and procedures on input procurement, use/ application, storage and disposal of unwanted inputs and their residues.

Criterion: The operator should ensure that the chemical input procured are in compliance with applicable laws and regulations (both local and international) in view of, registration, banned substances and transportation both in the country of origin and country of use.

Indicators

6.10.1 The operator should ensure that all stores located away from water sources in compliance with existing legislations and regulations. The stores should be lockable. The operator should document and maintain a stock control management plan. Within the store, there should be adequately stocked first aid facility and availability of well-known spillage and emergency response procedures.

6.10.2 The farm should have the necessary equipment for carrying out activities such as mixing and applying agrochemicals. Procedures should be developed and implemented concerning calibration, repair and maintenance of equipment and records maintained.

6.11 Pesticide use and management

Principle: To promote the use of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides.

Criterion: The operator should have an integrated pest management programme based on ecological principles for the control of harmful pests (insects, plants, animals and microbes). The programme should give priority to the use of physical, mechanical, cultural and biological control methods, and the least possible use of agrochemicals. The program should include non-chemical Pest monitoring, scouting, Record of non-chemical practices re-entry intervals and sound disposal of pesticide containers

6.11.1 The operator should have a plan for eliminating the use of all endocrine disruptions and cholinesterase inhibiting substances, carcinogenic and mutagenic causing substances WHO Class 1a and 1b, WHO class II

and all highly hazardous chemical substances under the Stockholm convention on persistent organic pollutants (Pops Convention)

6.11.2 The operator should ensure that dosage/rates, re-entry periods and postharvest intervals are strictly observed. Measures should be put in place to ensure that this information is documented and publicly communicated.

6.11.3 The operator should ensure all employees engaged in any chemical application are trained on safe use of chemicals; provided with adequate personal protective equipment and trained on their safe usage.

6.12 Energy efficiency

Principle: To ensure efficient use of energy.

Criterion: The operator should determine and document the energy demand by the enterprise for developing an energy efficiency plan with goals and implementation activities towards increased efficiency, reduced dependency on non-renewable sources and increased use of renewable energy. The energy audit plan should be done in accordance to the existing laws and regulations.

Indicator

6.12.1 Record should be maintained on all aspects of energy management

Energy act refer especially renewable act.

6.13 Waste and pollution management

Principle: To ensure the responsible management of wastes and pollutants.

Criterion: The operator should identify and document all elements of waste and pollutants generated by the enterprise. The operator should develop and implement an integrated waste management programme based on the concept of the waste management hierarchy, that is: avoidance, reuse, recycling and reprocessing, waste treatment and waste disposal, and ensuring proper management of unavoidable pollution and waste, especially as regards the disposal of obsolete pesticides and chemicals.

Indicator

6.13.1 The operator should classify all the wastes and pollutants generated by the enterprise and adopt best practices for each class. To the extent possible restrain from the use of open waste dumps and open-air burning of waste.

Waste management should be done by licenced handlers - EMCA

6.14 Handling and segregation of certified products

Principle: To ensure the integrity of certified products throughout the phases of handling, storage, processing and transport.

6.14.1 Handling of certified products

Criterion: The operator should keep records of all inputs, sales and deliveries and have up-to-date certificates from each supplier. If certified ingredients are imported, the operator should have transaction certificates for each consignment he/she has received, or some other method of proving traceability.

Indicators

6.14.1.1 The integrity of certified products should be ensured throughout the phases of post-harvest handling, storage, processing and transport.

6.14.1.2 All certified products should be clearly identifiable as certified.

6.14.1.3 The operator should ensure that certified products do not come into contact with chemical cleaning materials and methods.

6.14.1.4 In cases where the operator is not the actual producer of the product the operator should endeavour to source goods and services ethically from suppliers whose practices are consistent with this standard. Written contractual arrangements should be put in place in accordance with existing national and/or international laws. The contract should include but not limited to; mutually agreed payment terms and arbitration conditions.

6.14.1.5 The operator should ensure that relevant market information, quality specification, pricing information is shared with all contracted value chain actors

6.14.2 Segregation of certified and uncertified products

Criterion: The operator should establish a system for avoiding the mixing of certified products with non-certified products in its facilities, including harvesting, handling, storage, processing and packaging of products, as well as transportation.

Indicators

6.14.2.1 All transactions involving certified products are recorded.

6.14.2.2 Products leaving the farm are duly identified and accompanied with the relevant documentation indicating a certified farm as origin.

6.14.2.3 Evidence of a system for separation.

Annex A

Product diversification

Millers should diversify their production to include the following:

- a) Brown/mill white sugar
- b) Refined white sugar
- c) Sugar cane jaggery
- d) Raw cane sugar
- e) Fortified sugar
- f) Icing sugar
- g) Molasses
- h) Bagasse
- i) Carbonized briquettes for household
- j) Non-carbonized briquettes for industrial
- k) Ethanol
- l) Co-generation
- m) Filter mud
- n) Fly ash
- o) Fibre boards

p) Pulp and paper

COMMITTEE DRAFT

Annex B (informative)

Relevant legislations

The following is a list of legislations that apply to the sugar industry:

- I. The Constitution of Kenya, 2010
- II. The Agriculture, Fisheries and Food Authority Act (AFFA) 2013 (Revised , 2016).
- III. The Crops Act, 2013.
- IV. Kenya Agricultural and Livestock Research Organization Act, 2013.
- V. The Employment Act, Cap. 226.
- VI. The Environmental Management and Coordination Act, 1999.
- VII. Occupational Safety and Health Act, 2007
- VIII. Work Injury Benefits Act, 2007.
- IX. The Food, Drugs and Chemical Substances Act, Cap. 254.
- X. The Public Health Act, Cap. 242.
- XI. The Irrigation Act, Cap. 347.
- XII. The Lakes and Rivers Act, Cap. 409.
- XIII. The National Hospital Insurance Fund Act, Cap. 255.
- XIV. The National Social Security Fund Act, Cap. 258.
- XV. The Physical Planning Act, 1996.
- XVI. The Regulation of Wages and Conditions of Employment Act, (ROWA) Cap. 229.
- XVII. The Standards Act, Cap. 496.
- XVIII. The Trade Disputes Act, Cap. 234.
- XIX. The Children's Act, 2001.
- XX. The Sexual Offences Act,
- XXI. The Trade Union Act, Cap. 233.
- XXII. The Water Act, Cap. 372.
- XXIII. Seeds and Plant Varieties Act, Cap. 326.
- XXIV. The Pest Control Products Act, Cap. 346.
- XXV. The Plant Protection Act
- XXVI. Weights and Measures Act, Cap 513
- XXVII. Land Act No. 6 of 2012

- XXVIII. The Fertilizers and Animal Foodstuffs Act, Cap 345
- XXIX. Factories and Other Places of Works Act, Cap 514
- XXX. Co-operative Societies Act Cap 490
- XXXI. The Crops (Sugar) (General) Regulations, 2020
- XXXII. The Crops (Import, Export and By-products) Regulations, 2020
- XXXIII. The Labour Institutions Act No. 12 of 2007
- XXXIV. The Labor Relations Act No. 14 of 2007
- XXXV. Retirement Benefit Act No.3 1997

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- (3) Global GAP: General Regulations, Part I, General Rules, Version 4.0. 2011
- (4) Global Sustainable Tourism Council (GSTC): GSTC Criteria. 2011
- (5) IFOAM Norms, 2012: *International Labour Organization (ILO): Forced Labour Convention (No. 29). 1930*
- (6) International Labour Organization (ILO): Forced Labour Convention (No. 29). 1930
- (7) International Labour Organization (ILO): Freedom of Association and Protection of the Right to Organise Convention (No. 87). 1948
- (8) International Labour Organization (ILO): Right to Organise and Collective Bargaining Convention (No. 98). 1949
- (9) International Labour Organization (ILO): Equal Remuneration Convention (No. 100). 1951
- (10) International Labour Organization (ILO): Abolition of Forced Labour Convention (No. 105). 1957
- (11) International Labour Organization (ILO): Discrimination (Employment and Occupation) Convention (No.111). 1958
- (12) International Labour Organization (ILO): Minimum Age for Admission to Employment and Work (No. 138). 1999
- (13) International Labour Organization (ILO): Worst Forms of Child Labour Convention (No. 182). 1999
- (14) International Standardisation Organisation (ISO): Environmental management systems – Requirements with guidance for use. ISO 14001:2004(E)
- (15) International Standardisation Organisation (ISO): Environmental management – Life cycle assessment – Principles and framework. ISO 14040:2006
- (16) Rainforest Alliance Sustainable Agriculture Network: Sustainable Agriculture Standard – Version 2. 2010
- (17) United Nations Environment Programme (UNEP): Convention on Biological Diversity. 1992
- (18) United Nations Environment Programme (UNEP): Rio Declaration on the Environment and Development. 1992
- (19) United Nations Environment Programme (UNEP): Stockholm Convention on Persistent Organic Pollutants. 2001
- (20) United Nations Environment Programme (UNEP), Food and Agriculture Organisation (FAO): Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. 2004
- (21) United Nations Environment Programme (UNEP): Montreal Protocol on Substances that Deplete the Ozone Layer. 1989
- (22) United Nations Environment Programme (UNEP): Convention on Biological Diversity. 1992 .]