



CARICOM REGIONAL STANDARD

**Voluntary sustainability standard for
coconut and coconut products**

FDCRS 88 : 202X

Voting Deadline: 23 October 2026



CARICOM Regional Organisation for Standards and Quality (CROSQ)

2nd Floor Baobab Tower

Warrens

St Michael

Barbados

T: 246.622.7670

Website: <http://www.crosq.org>

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Committee representation

This CARICOM Regional Standard was developed by the Regional Technical Committee – Agricultural Produce (RTC # 7) which is hosted by the CARICOM Member State, Dominica, and at the time comprised the following members:

Members	Representing
Dr Oral Daley (Chairman)	The University of the West Indies, Trinidad and Tobago
Mr Adrian Mangar	National Agricultural Research and Extension Institute, Guyana
Ms AnnaMary Seraphine Alexander	Ministry of Agriculture, Fisheries, Blue and Green Economy, Dominica
Mr Franklyn Joseph (Alternate)	Ministry of Agriculture, Fisheries, Blue and Green Economy, Dominica
Mr Augustus Bannis	Agriculture Alliance for the Caribbean (AACARI) - Dominica Chapter
Mr Michael Warrington (Alternate)	Agriculture Alliance for the Caribbean (AACARI) - Dominica Chapter
Mr Brandon Murphy	The Cropper Foundation, Trinidad & Tobago
Mr Brian Sears	National Plant Protection Organisation (NPPO), Guyana
Mr Roy Porter (Alternate)	Ministry of Agriculture, Guyana
Mr Cheryl Lewis	Barbados National Standards Institution (BNSI)
Mr Dane Hartley	Inter-American Institute for Cooperation on Agriculture (Guyana)
Donnet McEwen	Donnet's Enterprise, Grenada
Mr Jerrol Renfurm	Ministry of Agriculture, Animal Husbandry and Fisheries, Suriname
Ms Jinelle-Marie Radhay	Trinidad and Tobago Manufacturers' Association
Mr Jonah Ormond	Ministry of Agriculture, Trade and Barbuda Affairs, Antigua & Barbuda
Ms Kamaria Dick	CGA Caribbean Ltd., Trinidad & Tobago
Mr Akiel Dubrie (Alternate)	CGA Caribbean Ltd., Trinidad & Tobago
Ms Kelvene Spencer	Department of Analytical Services, Antigua & Barbuda
Mr Marnus Cherry	Saint Lucia
Mr Julian Calderon (Alternate)	JKLM Products, Saint Lucia
Mr Renold Ramdial	Ministry of Agriculture, Land and Fisheries Trinidad and Tobago
Ms Shenese Trimmingham	St Vincent and the Grenadines Bureau of Standards

Members

Mr Sherlock Krenten

Ms Sherma Desire - George

Naomi Bannis-Sampson (Technical Secretary)

Representing

Kabalebo District Commissioner's Office (BIC), Suriname

Dominica Coconut Producers (DCP) Successors

Dominica Bureau of Standards

Technical Advisory Team

Tessa Boland

UNIDO Consultant

Contents**Page**

Foreword	11
1 Scope	12
2 Normative references	12
3 Definitions	12
4 General requirements	16
4.1 Production Requirements	16
5 Sustainability requirements	17
5.1 Governance	17
5.2 Economic (operations)	17
5.3 Social	19
5.4 Environmental	20
Bibliography	23

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Foreword

This standard sets out the requirements for the production of sustainable Coconut and Coconut Products. It guides economic, social and environmental requirements to be met by an entity desirous of meeting the standard. It addresses Production and Sustainability Requirements.

A producer of Coconut and Coconut Products meeting the requirements of the standard shall declare their product sustainable and seek to benefit from the growing desire for sustainable products in various markets of the world, particularly the European Union and the UK. Production and sale of sustainable products are in keeping with the UN Sustainable Development Goals (SDGs). This standard is expected to meet a number of the UN SDGs, including:

SDG 1 - No Poverty
 SDG 2 - Zero Hunger
 SDG 3- Good Health and Well-being
 SDG 5- Gender Equality
 SDG 7 – Affordable and Clean Energy
 SDG 8 – Decent Work and Economic Growth
 SDG 10 – Reduced Inequalities
 SDG 12 – Responsible Consumption and Production
 SDG 13 – Climate Action
 SDG 15 – Life on Land

In developing this Standard considerable assistance was derived from the following publications which were still current when the standard was being developed:

International Organisation for Standardization (ISO)

ISO 14001:2015, Environmental Management Systems. Requirements with guidance for use

ISO 26000:2010, Guidance on Social Responsibility.

ISO 37000:2021, Governance of Organisation. Guidance.

ISO/TS 26030:2019, Social responsibility and sustainable development — Guidance on using ISO 26000:2010 in the food chain.

Rain Forest Alliance Sustainable Agricultural Standard. Farm Requirements 2025, Ver.1.4. Rainforest Alliance and UTZ.

Fairtrade Standard for Small Scale Producer Organizations, 03.04.2019_v2.4. Fairtrade International.

RSPO

- RSPO Principles and Criteria. 2024. 2024 RSPO Principles and Criteria for the sustainable cultivation of oil palms and the production of sustainable palm oil and oil palm products. 2.1.2 Scope. Version 4.0.

1 Scope

This standard specifies requirements for the sustainable production, collection, processing, packing, packaging, storage and traceability of coconut and coconut products by individual operators (producers) and producer groups in CARICOM Member States.

The standard applies to dry coconuts and water coconuts and products of processed coconut including but not limited to copra, desiccated coconut, coconut water, coconut milk/cream and coconut oil, including virgin coconut oil.

This standard does not apply to:

- a) Coconut plants
- b) Non-food coconut products
- c) Other products where the coconut is used only as a flavouring.

2 Normative references

The following referenced documents are indispensable for the application 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.

CROQS Standards

- CRCP 5:2010, *Code of Practice – General principles of food hygiene*.
- CDCRP 13: Coconut - Good Agricultural Practices (GAP)

Note: Additional food hygiene standards can be found in Annex A.

3 Terms and Definitions

For the purpose of this document the following terms and definitions apply.

3.1

agrochemicals

chemical products used in agriculture to improve crop production and protect crops from pests, diseases, and weeds

3.2

approved supplier

a supplier that has been formally evaluated and accepted by an organisation as capable of meeting specified requirements for the materials, ingredients, products, packaging, or services it supplies.

3.3

child labour

work that children are too young to perform or that can be hazardous and can cause harm to a child's health, safety or moral development

3.4

coconut

the fruit of the coconut palm (*Cocos nucifera*), consisting of an outer skin, fibrous husk, hard shell, and kernel containing coconut water

3.5

coconut product

any product derived from the coconut, including coconut water, coconut milk, coconut oil, copra, desiccated coconut, coconut cream, and other processed or unprocessed coconut-derived products

3.7**competent authority**

the official government agency or legally designated body that has the authority and responsibility to regulate, control, approve, inspect, or enforce requirements relating to a particular activity or product.

3.8**corrective action**

action to eliminate the cause of a nonconformity and to prevent recurrence

[SOURCE: ISO 14001:2015, *Environmental Management Systems. Requirements with guidance for use*]

3.9**employee**

individual in a relationship recognised as an “employment relationship” in national law or practice

[SOURCE: ISO 26000:2010, *Guidance on Social Responsibility*]

3.10**energy efficiency**

when less energy than before is used to perform similar tasks

[SOURCE: GLOBALGAP, Integrated Farm Assurance, Glossary. English Version 6.0_Apr22. PUBLISHED ON: 26 November 2024]

3.11**environment**

surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships.

Note 1 to entry: Surroundings can extend from within an organisation to the local, regional and global system.

Note 2 to entry: Surroundings can be described in terms of biodiversity, ecosystems, climate or other characteristics

[SOURCE: ISO 14001:2015, *Environmental Management Systems. Requirements with guidance for use*]

3.12**ethical behaviour:**

behaviour based on the values of honesty, equity and integrity and showing concern for people, animals and the environment and a commitment to address the impact of activities and decisions on stakeholders' interests

[ADAPTED FROM: ISO/TS 26030:2019, *Social responsibility and sustainable development — Guidance on using ISO 26000:2010 in the food chain*]

3.13**food defence**

security of food and drink and their supply chains from all forms of malicious attack, including ideologically motivated attack leading to contamination or supply failure

[SOURCE: GLOBALGAP, Integrated Farm Assurance, Glossary. (Source: PAS 96:2010). English Version 6.0_Apr22. PUBLISHED ON: 26 November 2024]

3.14**food fraud**

collective term encompassing the deliberate and intentional substitution, addition, tampering with, or misrepresentation of food, food packaging, or labelling or product information, or false or misleading statements made about a product for economic gain that may impact consumer health

[ADAPTED FROM: GLOBALGAP, Integrated Farm Assurance, Glossary. (Source: GFSI 2020.1). English Version 6.0_Apr22. PUBLISHED ON: 26 November 2024]

3.15

forced labour

all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily

3.16

hazardous work

work that, because of its nature or the circumstances in which it is carried out, is likely to harm the health, safety, or morals of the persons involved

3.17

lot

a defined quantity of product or material produced, processed, packaged, or handled under substantially uniform conditions and assigned a unique identification code for identification and traceability

3.18

nonconformity

non-fulfilment of a requirement

[SOURCE: ISO 14001:2015, *Environmental Management Systems. Requirements with guidance for use*]

3.19.

organisation

entity or group of people and facilities with an arrangement of responsibilities, authorities and relationships and identifiable objectives

[SOURCE: ISO 26000:2010, *Guidance on Social Responsibility*]

3.20.

governance

system by which an organisation makes and implements decisions in pursuit of its objectives

[ADAPTED FROM SOURCE: ISO/TS 26030:2019, *Social responsibility and sustainable development — Guidance on using ISO 26000:2010 in the food chain*]

3.21.

personnel

organisation's directors, officers, employees, temporary staff or workers, and volunteers

[SOURCE: ISO 37001:2016, 3.25, modified — Notes 1 and 2 to entry have been deleted.]

3.22

plant protection products

products containing active substances that are used to protect plants or plant products from harmful organisms, control or prevent pests and diseases, regulate plant growth, preserve plant products, or destroy and control unwanted plants (weeds).

3.23

processor

a person or organisation that transforms, manufactures, treats, or otherwise processes agricultural raw materials or products into another product.

3.24

producer

A person or organisation responsible for growing, cultivating, harvesting, or otherwise producing an agricultural product or commodity.

3.25. requirement

need or expectation that is stated, generally implied or obligatory

[SOURCE: ISO 14001:2015, *Environmental Management Systems. Requirements with guidance for use*]

3.26 reprocess

to pass a food product through a treatment or handling step again to correct a problem or ensure that it meets the required safety and quality standards.

3.26 rework

to modify or adjust a food product or combined with other food to correct a defect or bring it back to the required quality and safety standards

3.27 smallholder

A small-scale agricultural producer who generally operates a relatively small area, relies substantially on family or household labour, and depends significantly on agricultural production for livelihood.

3.28. specification

a documented set of requirements and criteria that an agricultural product, raw material, process, or service must meet in relation to defined quality, safety, composition, physical, technical, or other specified characteristics.

3.29. stakeholders

individual or group that has an interest in any decision or activity of an organisation

[SOURCE: ISO 26000:2010, *Guidance on Social Responsibility*]

3.30. sustainability

state of the global system, including environmental, social and economic aspects, in which the needs of the present are met without compromising the ability of future generations to meet their own needs

Note 1 to entry: The environmental, social and economic aspects interact, are interdependent and are often referred to as the three dimensions of sustainability.

Note 2 to entry: Sustainability is the goal of sustainable development.

[SOURCE: ISO Guide 82:2019. *Guidelines for addressing sustainability in standards*]

3.31. traceability

ability to follow the history, application, movement and location of an object through specified stage(s) of production, processing and distribution

Note 1 to entry: Movement can relate to the origin of the materials, processing history or distribution of the food.

[SOURCE: CAC/GL 60-2006, modified — Notes to entry have been added.]

3.32. transparency

openness about decisions and activities that affect society, the economy and the environment, and willingness to communicate these in a clear, accurate, timely, honest and complete manner

[SOURCE: ISO/TS 26030:2019, *Social responsibility and sustainable development — Guidance on using ISO 26000:2010 in the food chain*

3.33.

workers

person who performs work, whether an employee or someone who is self-employed

[SOURCE: ISO 26000:2010, *Guidance on Social Responsibility*]

4 General requirements

4.1 Production Requirements

4.1.1 Producers shall assess the planting sites in accordance with guidance provided in CRCP 13: Coconut - Good Agricultural Practices (GAP) before establishing or restocking coconut production units, for:

- i) prior use
- ii) soil type
- iii) drainage and soil fertility
- iv) slope and erosion risk
- v) water availability and water quality
- vi) flooding, storm surge and salinity
- vii) drought and wind exposure
- viii) contamination
- ix) biodiversity value
- x) community use
- xi) access to harvesting services
- xii) access to emergency services

When risks have been identified, producers shall document control methods and periodically review for any changes.

4.1.2 Producers shall obtain planting materials selected in accordance with the recommendations of the CRCP 13: Coconut - Good Agricultural Practices (GAP) from nationally recognised and registered suppliers and keep records of receipt.

4.1.3 Producers shall develop a written plan to manage soils on their production sites, developed in accordance with the recommendations of the CRCP 13: Coconut - Good Agricultural Practices (GAP).

4.1.4 Producers should develop a documented risk-based soil and plantation management plan.

4.1.5 Producers shall ensure that where irrigation is used, the water quality risks are assessed, documented and managed to limit threats to product safety, human health and the environment in accordance with CRCP 13: Coconut – Good Agricultural Practices (GAP).

4.1.6 Producers shall follow CRCP 13: Coconut - Good Agricultural Practices (GAP) to manage soil fertility and plant nutrition for sustainable coconut production. Use of fertilisers shall be documented. Additionally, producers should develop a written nutrient management plan. Recommended fertilisation rates can be found in the Annex of the GAP document.

4.1.7 Producers shall utilise an integrated pest management approach following the recommendations found in the CRCP 13: Coconut - Good Agricultural Practices (GAP), to monitor and reduce pests and disease levels. Records of action shall be kept. Additionally, producers should develop a written integrated pest management plan.

4.1.8 Producers shall follow CRCP 13: Coconut - Good Agricultural Practices (GAP) to manage harvesting and post-harvesting activities and minimise their impact on product safety and human health. Relevant records shall be kept.

4.2 Farm Sites and Production Facility Requirements

4.2.1 Producers and processors shall implement and document good hygiene practices and comply with the requirements outlined in CRCP 5, Code of Practice – General principles of food hygiene. Additionally, producers and processors should develop written HACCP plans and meet any available coconut product standards relevant to the product they are producing.

Note: Where coconut product standards exist, those must be used in conjunction with this standard. See Annex A.

4.2.2. Producers shall assess and document potential risks of product contamination or tampering on product safety, human health, the business, and the community. Additionally, producers should develop food defence plans for mitigating the risks.

4.2.3. Producers shall assess and document potential risks of handling, receiving or trading products or raw materials that have been intentionally adulterated. Additionally, producers should develop a plan to mitigate against such food fraud risks.

4.2.4. Producers shall ensure that purchased raw materials are obtained from approved suppliers. Additionally, producers shall implement due diligence measures to verify the origin, quality, and safety of the materials. Related risks should be addressed and should not pose any threat to product safety, human health, the community and the environment.

4.2.5 Producers shall demonstrate that packaging materials used for coconuts and coconut products are suitable for intended use, food safe, free from contamination and able to contain and display the product safely, without impact to human health or product quality. Documentation to prove suitability and storage conditions shall be kept. Labels on the packaging shall comply with the relevant national and international laws and regulations.

4.2.6 Producers should ensure that the disposal of packaging materials meets the relevant national laws and regulations at the point of disposal and does not impact human health or the environment negatively.

4.2.7 Producers shall ensure that any reworked or re-processed product is appropriately recorded and does not pose any threats to product safety, human health, the community and the environment.

4.2.8 Producers shall outline a system for handling non-conforming product, ensuring adequate documented traceability (see Clause 5.2.3.4) to recall of affected product.

4.2.9 Producers should implement a written policy for the management of non-conforming products, which should include:

- i) establishing procedures to identify, isolate, investigate, withdraw or recall nonconforming products
- ii) notify affected parties and authorities where required, such as customers, the certification body and other stakeholders
- iii) test traceability and recall procedures at least annually and keep records
- iv) implement corrective actions.

5 Sustainability requirements

5.1 Governance

5.1.1 Producers should ensure that staff and management are trained in governance and related coconut industry standards.

5.1.1.1 Producers shall have the legal right to cultivate the land with coconuts and produce coconut products. No protected or environmentally sensitive lands shall be used to plant coconuts.

Additionally, producers should register the name and purpose of their organisation and maintain documentation which indicates it is a legal entity, with the right to occupy the production site. The producer should have tenure for the production site.

5.1.1.1. Producers shall document the management structure of the entity, indicating clear accountability for the responsibility of each role.

5.1.1.2. Producers should develop job descriptions for all employees, ensuring each has access to a copy of their role

5.1.1.3. Producers shall establish a documented plan with clear objectives, ensuring long-term viability of the entity, including strategies for succession planning and meeting stakeholder expectations.

5.1.1.4. Producers shall operate legally, ensuring national legal requirements are upheld, and relevant international requirements are complied with.

5.1.1.5. Producers shall demonstrate ethical behaviour when dealing with customers and suppliers, in transactions and negotiations.

5.1.1.6. Producers should document all relevant stakeholders and update the list annually.

5.1.1.7. Producers should engage stakeholders at least annually to establish and review their expectations and maintain open communication.

5.1.1.8. Producers shall establish an accessible, confidential and non-retaliatory grievance mechanism, record concerns and responses, and communicate relevant outcomes.

5.1.2. Producers shall ensure sufficient competent persons, including family workers, seasonal workers and contractors, for activities affecting safety, legality, quality and sustainability.

5.1.2.1. Producers shall ensure adequate and sufficient technical and operational personnel are available to operate the business.

5.1.2.2. Producers should document competency requirements for personnel.

5.1.3. Management shall demonstrate accountability for the safety of coconut and coconut products, minimising the environmental impacts of its operations, and considering the social and economic impacts of the business on the community, other businesses, and relevant stakeholders.

5.2. Economic (operations)

5.2.1. Producers shall ensure the production of safe, good quality coconut and coconut products for consumers or users by following:

5.2.1.1. Product Specifications developed to meet customer requirements.

5.2.1.2. Farming practices and Standard Operating Procedures (SOPs), developed to produce required products using best production practices.

5.2.1.3. Simple verbal or written Work Instructions, delivered in a language workers understand.

5.2.1.4. Simple documents and records will be kept by smallholders.

5.2.2. Producers shall optimise productivity during production and processing by:

- a) Effective planning and supervision of operations.
- b) The use of suitable equipment for production and processing. Producers should use relevant recording forms for each production operation and process to document operations.
- c) Implementing and monitoring the use of best practices and SOPs.

- d) Establishing performance and production indicators appropriate to its activities.
- e) Providing equitable access to recruitment, training, skills development and advancement for all workers. Maintain records on employee training and development activities.

NOTE: Simple records can be kept for smallholders.

5.2.3. Producers shall ensure transparency in relevant interactions with suppliers and consumers and follow fair operating practices by:

5.2.3.1. Having signed agreements stipulating the safety and legality of the product, terms and conditions of supply, fair pricing and any other requirement that is deemed necessary for trade between the parties.

5.2.3.2. Avoiding conflicts of interest.

5.2.3.3. Having an agreed and documented process for resolving conflicts and/or disagreements in a fair, timely and transparent manner.

5.2.3.4. Producers shall maintain traceability of materials in the production of sustainable coconut and coconut products, by:

- a) Assigning a unique lot identification number to every incoming raw material. Recording the supplier's name, date, quantity, and sustainability status (coming from a producer using sustainability practices).
- b) Maintaining records to show where each lot came from and where it went. The system must provide one-step backwards and one-step forward traceability.
- c) Documenting every processing or mixing step to ensure the relationship with the input and output lots remains clear.
- d) Ensuring quantities received, processed, transferred, shipped, wasted, and remaining can be reconciled. Track and authorise any changes to sustainability status.
- e) Conducting periodic mock recalls to verify that selected lots can be traced back to suppliers and forward to customers, with quantities and sustainability status fully accounted for.
- f) Documenting gaps found and corrective actions taken.

5.2.3.5. If any other coconut material with an unknown (sustainability) status is used in the processing operation, product separation shall be maintained in:

- a) processing
- b) labelling and
- c) storage

5.3 Social

5.3.1 Producers shall adhere to national labour regulations, including:

- a) Payment of wages regularly and adhering to any minimum wage, tax and social security legislation. Provide a record of payments and deductions, if any, to workers.
- b) The maximum number of hours of work per day, with break periods and overtime hours and rates.
- c) The minimum age of workers and the types of work they can engage in (non-hazardous).
- d) Providing workers with a written agreement indicating the terms and conditions of employment in a contract or job letter.

5.3.2 Producers shall ensure Freedom of Association by:

5.3.2.1 Allowing workers to join unions and other worker organisations, without fear of reprisal or discrimination.

5.3.2.2 Allowing for collective bargaining with employers on behalf of workers.

5.3.3 Producers shall guarantee:

- a) no child labour throughout the life cycle of coconut and coconut products production.
- b) no forced labour, or any evidence of such.
- c) no discrimination based on age, race, and sexual orientation. An accessible and confidential reporting system should be established to enable workers and other relevant parties to report concerns without fear of retaliation.
- d) no gender discrimination in employment by ensuring equal opportunity, such as equitable pay, equal access to advancement and professional development, and protection of workers' rights, irrespective of sex and gender, including during pregnancy and breastfeeding.
- e) no violence, harassment (of any kind), and intimidation in the workplace. Establish a confidential reporting system, with prompt, impartial investigation and protection from retaliation. Records of all reported incidents shall be maintained and reviewed to support timely inquiry, corrective action, and prevention of recurrence, in accordance with national laws.

5.3.4 Producers shall respect worker health and safety in accordance with the national competent authority, by providing:

- a) Potable water and a designated eating area.
- b) Adequate clean toilets and hand-washing facilities.
- c) First Aid supplies/kit.
- d) Trained First Aider on site or a suitable person trained in basic first aid.
- e) Training to do their jobs safely.
- f) Necessary tools to do their jobs.
- g) Safe environment to work in.
- h) Necessary Personal Protective Equipment (PPE) required for their jobs.
- i) Adequate and safe housing, if applicable.
- j) A designated person or committee for Health and Safety with a documented Health and Safety plan.

5.3.5 Producers shall assess and document risk by:

5.3.5.1 Identifying all areas within the operation that may be high risk to the health and safety of the workers and consumers and develop actions to mitigate and reduce health and safety risks.

5.3.5.2 Recording and reporting all work-related health and safety incidents which may occur, and follow up with corrective action, notifying authorities in accordance with national regulations.

5.3.6 Producers shall engage respectfully with local communities and, following appropriate consultation, contribute to local development by:

5.3.6.1 Assessing the potential legal, social, economic, environmental, and cultural impacts of its operation on the local community, with particular consideration of vulnerable groups. Where any adverse impacts following an impact assessment are identified, appropriate measures should be taken to mitigate such events.

5.3.6.2 Promoting local employment by providing training and employment opportunities with particular emphasis on members of underserved populations.

5.3.6.3 Involvement in local civil society groups.

5.3.6.4 Purchasing locally produced goods and services where possible.

5.4 Environmental

5.4.1 Producers shall meet relevant national environmental regulations.

5.4.1.1 Producers shall ensure effective waste management of all waste coming from the production and processing of coconut and coconut products by:

- a) Recording all waste produced by the operations, by type and quantity, including waste from coconut water production and oil extraction and identifying appropriate means of disposal.
- b) Storing and handling both non-hazardous and hazardous waste (if present) safely in a designated area, until appropriately disposed of.
- c) Disposing of waste that may potentially cause harm due to harbouring of pests and diseases in a manner that minimises hygiene and environmental risks.
- d) Removing debris and other physical hazards that may cause harm/injuries from the orchard before and after a storm, hurricane or other disasters.
- e) Training of workers in waste reduction and management.

5.4.1.2. Producers should develop a written waste management plan that promotes circularity and incorporates the best use of resources to reduce, recycle, re-use or minimise waste, where possible.

5.4.2 Producers shall establish water management throughout the production process by:

5.4.2.1 Identifying water sources and uses and measuring or credibly estimating withdrawals and discharges including wastewater. Significant users should establish a baseline, relevant efficiency indicators and improvement actions. Simplified records may be used for smallholders.

5.4.2.2 Assessing the changes in water availability and using rainwater harvesting techniques where possible.

5.4.2.3 Protecting local water sources from spray drift (pesticide application), effluent or wastewater discharge (such as wastewater from coconut oil production, which is highly organic and must be treated before discharge). All testing and treatment of wastewater shall be done in accordance with national regulations, if applicable and shall be documented.

5.4.2.4 Developing a water management plan which should incorporate risk assessments and mitigating actions.

5.4.3 Producers shall assess the environmental impact by:

5.4.3.1 Conducting risk assessments to determine the impact of farm and processing operations on the environment, including local biodiversity and develop mitigation plans, in accordance with national regulations.

5.4.3.2 Ensuring expansion and replanting comply with land-use laws and shall not cause unlawful deforestation or conversion of protected or high-biodiversity natural ecosystems.

5.4.3.3 Following up with mitigating actions to ensure no or limited impact on the physical environment and natural resources due to the processing and production of coconut and coconut products.

5.4.4 Producers shall train employees in the use, storage and disposal of agrochemicals (hazardous and non-hazardous) products such as synthetic fertilisers and pesticides, where used, in

the farm operations or other chemicals that may be used in processing operations. Records of use, storage and disposal of all chemicals should be available for a minimum of two years.

5.4.5 Producers shall become more energy efficient and reduce carbon emissions by:

5.4.5.1 Identifying energy sources, including renewable and non-renewable, used in coconut production and processing and establish baseline data.

5.4.5.2 Evaluating technically, environmentally and economically feasible options to reduce fossil-energy dependence.

5.4.5.3 Maintaining all equipment properly such as boilers, air conditioners, vehicles, etc. to ensure efficient energy use.

5.4.5.4 Developing an energy use plan with objectives, targets and actions to address reduction in energy use, clean energy generation and improving energy efficiency. Smallholders may develop simplified plans.

5.4.5.5 Producers should calculate their Greenhouse Gas emissions and plan to reduce. See Annex B.

**Annex A
(Informative)**

Additional food hygiene standards

A.1 Relevant International Standards

Code of Hygienic Practice for Desiccated Coconut; CXS 177-1991

Standard for Desiccated Coconut; CXS 210-1999

Standard for Named Vegetable Oils; CXS 240-2003

Standard for Aqueous Coconut Products - Coconut Milk and Coconut Cream; CXS 1-1985

A.2 General Standard for the Labelling of Pre-packaged Foods (Codex CXS 1-1985)

A.3 Relevant CROSQ Standards

Coconut Water: Specification for Packaged Natural Coconut Water CRS 3: 2022

Coconut Water - Packaged Natural Coconut Water– Code of Practice CRCP 2: 2022

Coconut Oil – Specification - Revised CRS 23: 2017

Pre-Packaged Foods Labelling of Prepackaged Foods – Specification (Revision) CRS 5: 2024

Annex B (Informative)

Greenhouse Gas (GHG) Calculator Example

A simple farm GHG Calculator template can be used so that each country can insert its own emission factors without changing the core calculator.

Recommended structure

Source	Activity (actual Use)	Emission Factor (EF)	kg CO ₂ e	tCO ₂ e
Electricity	5,000 kWh	Country EF (0.4)	2,000	2.00
Diesel	1,000 L	IPCC EF (2.68)	2,680	2.68
Fertilizer N	100 kg N	IPCC EF (1)	100	0.10
TOTAL			4,780	4.78

IPCC - Intergovernmental Panel on Climate Change

EF - Emission Factor

The basic formula is:

GHG emissions = Activity × Emission Factor

Then convert:

=GHG_kg/1000

to obtain:

GHG emissions = tonnes CO₂e

Farm Inputs (example)

Category	Activity	Quantity	Unit	Country e.g Saint Lucia	Information obtained from
Energy	Electricity	5,000	kWh	Saint Lucia	Utility bill
Energy	Diesel	1,000	Litres	Saint Lucia	Fuel receipts
Energy	Petrol	300	Litres	Saint Lucia	Fuel receipts
Fertilizer	Nitrogen fertilizer	100	kg N	Saint Lucia	Purchase records
Transport	Diesel transport	500	Litres	Saint Lucia	Farm transport
Refrigerants	Refrigerant added	2	kg	Saint Lucia	Maintenance record

Emission Factor Library

This is the most important sheet for making the calculator verifiable.

Country	Source	Activity	EF	Unit	Year	Tier	Default/Specific
Saint Lucia	National source	Electricity	X	kg CO ₂ e/kWh	2026	National	Specific
Barbados	National source	Electricity	X	kg CO ₂ e/kWh	2026	National	Specific
All Caribbean	IPCC	Diesel	X	kg CO ₂ e/L	2019	Tier 1	Default
All Caribbean	IPCC	Fertilizer N	X	kg CO ₂ e/kg N	2019	Tier 1	Default

Important: X is the Emission Factor (EF) to be researched/obtained.

Results Dashboard

FARM GHG FOOTPRINT from example

Total annual emissions

4.78 tCO₂e/year

Source tCO₂e % of total

Electricity 2.00 42%

Diesel 2.68 56%

Source tCO₂e % of total

Fertilizer 0.10 2%

Total 4.78 100%**Verification and Source sheet**

For every emission factor, record:

- Factor ID
- Country
- Emission source
- Emission factor
- Unit
- Source organisation
- Document/title
- Publication year
- Page/table number
- URL/reference
- Date accessed
- IPCC Tier/method
- Whether national, regional or default
- Person responsible for approval

Methodology hierarchy**1. National emission factor, if it exists; if not, then use**

↓

2. Caribbean/regional factor, if it exists; if not, use

↓

3. IPCC default factor

If no national or regional data exist for the emission factor, use **the Intergovernmental Panel on Climate Change IPCC 2006 Guidelines + 2019 Refinement**.

Additionally, FAO EX-ACT is a tool designed for policymakers to determine/estimating the impact of agricultural interventions on the environment. It can also be used to calculate green house gas emissions.

Source: Basic calculations originate from internationally recognised greenhouse gas accounting frameworks, the GHG Protocol and IPCC guidelines.

Bibliography

- 1) ISO 14001:2015, *Environmental Management Systems. Requirements with guidance for use*.
- 2) ISO 26000:2010, *Guidance on Social Responsibility*
- 3) ISO/TS 26030:2019, *Social responsibility and sustainable development — Guidance on using ISO 26000:2010 in the food chain*.
- 4) ISO 37000:2021, *Governance of Organisation. Guidance*.
- 5) IWA 48:2024(en) Framework for implementing environmental, social and governance (ESG) principles.
- 6) ISO 50001:2018, *Energy Management Systems. Requirements with guidance for use*.
- 7) Vieira, F., Santana, H. E. P., Jesus, M., Santos, J., Pires, P., Vaz-Velho, M., Silva, D. P., & Ruzene, D. S. (2024). Coconut Waste: Discovering Sustainable Approaches to Advance a Circular Economy. *Sustainability*, 16(7), 3066. <https://doi.org/10.3390/su16073066>

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CARICOM REGIONAL ORGANISATION FOR STANDARDS AND QUALITY

The CARICOM Regional Organisation for Standards and Quality (CROSQ) was created as an Inter-Governmental Organisation by the signing of an agreement among fourteen Member States of the Caribbean Community (CARICOM). CROSQ is the regional centre for promoting efficiency and competitive production in goods and services, through the process of standardisation and the verification of quality. It is the successor to the Caribbean Common Market Standards Council (CCMSC), and supports the CARICOM mandate in the expansion of intra-regional and extra-regional trade in goods and services.

CROSQ is mandated to represent the interests of the region in international and hemispheric standards work, to promote the harmonisation of metrology systems and standards, and to increase the pace of development of regional standards for the sustainable production of goods and services in the CARICOM Single Market and Economy (CSME), and the enhancement of social and economic development.

CROSQ VISION:

A global leader transforming lives through an innovative and sustainable Quality Infrastructure

CROSQ MISSION:

To transform lives by delivering fit-for-purpose standards, metrology, accreditation and reliable conformity assessment solutions that promote collaboration, enhance trust-in-trade, foster reliability and consistency thereby improving the quality of CARICOM's products and services.

Voting Deadline: 23 October 2026



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