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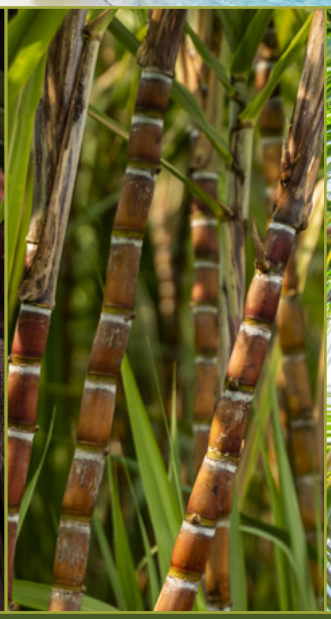
Caribbean Community (CARICOM) Export Potential to the European Union

Voluntary Sustainability Standards (VSS): Feasibility Study



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Caribbean Community (CARICOM) Export Potential to the European Union

Voluntary Sustainability Standards (VSS): Feasibility Study

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The study has been prepared by Rodrigo Rupérez, Siti Rubiah Lambert and Niematallah Elfatih Ahmed Elamin, under the leadership of Santiago Fernández de Cordoba from the Trade Analysis Branch (TAB) of the Division on International Trade and Commodities (DITC) at the United Nations Conference on Trade and Development (UNCTAD).

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This study was formatted by Jenifer Tacardon-Mercado, UNCTAD and proofread by Gwendolyn Griffith-Manasse, CROSQ.

The United Nations Forum on Sustainability Standards (UNFSS) is an initiative of five United Nations agencies: United Nations Conference on Trade and Development (UNCTAD), International Trade Centre (ITC), United Nations Industrial Development Organization (UNIDO), United Nations Food and Agricultural Organization (FAO), and UN Environment (UNEP). It was created in response to the challenges posed by sustainability standards. It helps decision-makers in developing countries source adequate information on Sustainability Standards, as well as share their experiences and get technical help.

UNFSS addresses the sustainable development value of voluntary sustainability standards by pooling resources, synchronizing efforts, and assuring policy coherence through a multi-stakeholder approach.

The UNFSS Secretariat is based at the United Nations Conference on Trade and Development (UNCTAD) in Geneva, Switzerland. It has a support group responsible for implementing its work plan and the coordination of all the activities undertaken under the UNFSS name.

It is the only forum that systematically conducts analytical, empirical and capacity-building activities in this field at an international level. It deals with the generic and strategic challenges invariably created by Sustainability Standards without endorsing or legitimizing any specific standard.

CONTENTS

EXECUTIVE SUMMARY

This report assesses the Caribbean Community's (CARICOM) agriculture and aquaculture export potential to the European Union through the utilization of Voluntary Sustainability Standards (VSS). The United Nations Forum on Sustainability Standards (UNFSS) describes VSS as "specifying requirements that producers, traders, manufacturers, retailers or service providers may be asked to meet, relating to a wide range of sustainability metrics, including respect for basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others". VSS are expected to enhance the export potentials from developing countries to developed ones, and at the same time contribute to sustainable development by safeguarding public health and safety, and ensuring consumer, environment, and social protection, as well as contributing to economic development with potential price premia.

Against this background, this report investigates the potentiality of enhancing CARICOM's exports to the European Union through VSS adoption. It then highlights a set of recommendations to pave the pathway for CARICOM to capture the potential trade benefits associated with VSS. The study was conducted in close partnership with the CARICOM Regional Organization for Standards and Quality (CROSQ).

The European Union is the second biggest market for CARICOM exports. The products covered in this report include herbs and spices, cocoa, sugarcane, coconut, and aquaculture products. From a trade perspective, these sectors are of great significance to CARICOM. Moreover, the rural population in CARICOM is mostly involved in the agricultural activities and cultivation of one or more of these products.

This report primarily aims to assist CARICOM in better understanding and benefiting from voluntary standards systems for the selected products and markets. The analysis is built upon secondary trade and standards related data, collected from the demand side (European Union) as well as the supply side (CARICOM). The investigation is not limited to data on trade and standards only; however, it goes beyond that to investigating the European legislation, exploring the market trends, and assessing the significance of certification schemes in the markets under investigation. Moreover, the report touches on the roles that can be played by standards, accreditation, and certification bodies and more specifically CROSQ in facilitating the transformation of economic activities towards more sustainable ones. Also, it addresses the benefits of establishing national and regional VSS Platforms through multi-stakeholder approach and highlights the learning takeaways from the established national platforms.

For each product, a detailed analysis of existing and potential trade between CARICOM and European Union is presented. Additionally, an overview of the main sustainability issues and concerns in the production processes of each of these products has been elucidated. A VSS market review, including opportunities, price premium, and regional importance, was also carried out as part of this study. Lastly, based on this in-depth analysis, a set of recommendations are set for each product under investigation.

These recommendations focused on four main pillars that are, promoting a sustainable export market in CARICOM, products and packaging, capacity building, and the role of CROSQ as follows:

Develop a sustainable export market in CARICOM

The study stressed the importance of the promotion of sustainable exports and specified several ways in doing so. This includes, for example, international conventions, trade fairs, online platforms. It also highlights the significance of investing in personal partnerships with potential buyers. Moreover, the report highlighted additional recommendations related to national/regional testing facilities and VSS in public policy frameworks.

Enhance knowledge of sustainability practices and standards uptake through capacity building programmes

The analysis shows the need for capacity building activities for the value chain actors in CARICOM that includes, for instance, quality assurance training workshops, establishing platforms to educate exporters in terms of buyers potential conditions and requests, transparency and treatability, and providing a space for dialogue among the VSS circle.

Products and packaging considerations

Products and packaging, on the other hand, needs to be enhanced through different ways that include increasing food safety and anti-modification requirements, promoting organic labels, and using sustainable packaging, among others.

Establishment of CARICOM´s regional VSS multi-stakeholder platform

CROSQ has a significant role as well to play in enhancing CARICOM potential exports through VSS; this includes, for instance, developing a measurement and monitoring systems, and mapping sustainability standards indicators to SDG. The report presents the role of CROSQ, and the 15 CARICOM countries collective effort to help increase the positive aspects of VSS, in line with their policy objectives that meet the broader Sustainable Development Goals (SDG) targets.

Overall, the report provides a road map, for CARICOM, towards promoting and enhancing their sustainable exports to developed markets in European Union countries through VSS adoption. Based on the outputs of the analysis, it sets recommendations and a way forward for CARICOM and their regional standards organization, CROSQ.

1. INTRODUCTION

This report is intended to assess the development of the CARICOM´s export potential to the European Union market using Voluntary Sustainability Standards (VSS). It focuses mainly on sustainability in trade and production of agro and aquaculture sectors, including the implications of European Union legislation for the CARICOM producer.

The European Union is the second most important export market for CARICOM countries, after the United States of America. It is important to note that the impact of the European Union Directives is very significant for CARICOM since the Economic Partnership Agreement (EPA) between them expressly refers to the concept of "sustainable development".

The study begins with the analysis of the demand side about the development of the EPA, European legislation, market trends and the importance of certification schemes in the markets of different sectors and the growing vertical integration in the value chain. This is then, followed by the supply-side analysis with the demand to develop VSS in the Caribbean. The study then covers the different cases of herbs and spices, cocoa, sugarcane, coconut, and aquaculture sectors. The role that can be played by the accreditation and certification bodies and more specifically, those of the CARICOM Regional Organization for Standards and Quality (CROSQ) and the National Standards Bodies (NSB) have been included in the later sections of this study, followed by the conclusions and recommendations.

1.1 MAINSTREAMING VSS AND ITS IMPACT ON DEVELOPING COUNTRIES AND EMERGING MARKETS

The exponential growth of global trade and the change in trade´s nature provides a more prominent role to VSS because the value chains are increasingly connected internationally throughout the process. The steady increase in certification since the late twentieth century reflects a demand among consumers, buyers, and producers to address common environmental and social concerns. The scenarios are very similar in developing countries and emerging markets, even if they belong to different and distant regions. For instance, many cocoa-producing countries around the world have a disorganized production base, systemic poverty and for some, resultant child labour.[1] Similarly, sugarcane, despite its global consumption growth, the agricultural activity of sugarcane cultivation has a significant effect on biodiversity amid allegations of its undesirable labour practice (International Labour Organization, 2017) that damage the reputation of this sector. Sustainable production and trade allow the stakeholders along the value chain to produce, buy and sell in a way that ensures consumer protection, social responsibility, and environmental sustainability.

There are different indicators of trends in the use of VSS. Some of the most commonly used indicator to capture coverage and intensity are the number of VSS used in sectors and countries: the certified hectares of production land, the number of certified producers, the percentage of certified production in comparison to the whole, etc.[2]

The support of public institutions to develop the potential of developing countries plays an essential role in the sustainable development and implementation of VSS. Public purchasing from ministries, town halls, public agencies, public schools, regional governments, councils can use their purchasing power to procure certified

[1] Bureau of International Labor Affairs (ILAB) at the U.S. Department of Labor and NORC (University of Chicago): *"Assessing Progress in Reducing Child Labor in Cocoa Growing Areas of Côte d'Ivoire and Ghana"* https://bit.ly/2YQbE5f ; European Parliament *"Child labour; a priority for EU human rights action"* pp 5 and 9 https://bit.ly/2LjAsjb; Cocoa Barometer 2018 report, page 5 https://bit.ly/3axbRzT and International Labour Organization (ILO) *Agreement to end child labour on cocoa farms* https://bit.ly/3oHkEo0

[2] Sustainability Map (www.sustainabilitymap.org) is predominantly developed by International Trade Centre (ITC). https://www.itcportal.com/sustainability/sustainability-report-2019/sustainability-report-2019.pdf

and truly sustainable products. This is a very interesting way to promote the use of sustainability certifications.[3] Regarding the CARICOM – the European Union trade relationship[4] ensures that public contracts with economic operators comply with a set of pre-determined criteria and obligations in the fields of environmental, social and labour.[5] The EPA refers to sustainable development[6] throughout the document to be applied throughout the entire trade agreement to contribute to the reduction and eventual eradication of poverty.

1.2 MARKET OPPORTUNITIES IN THE EUROPEAN UNION FOR "SUSTAINABLE" PRODUCTS FROM CARICOM

VSS can contribute to increasing access to markets and hence, promoting exports. CARICOM governments can, in different ways engage with VSS to facilitate better access to lucrative and high-quality, high volume and sustainable markets such as the European Union. There is a huge potential in the European market for Caribbean products as illustrated below:

Figure 1. Percentage of export potential value and unrealized export potential[7] of the Caribbean's food products with respect to European Union market

Source: *"The Export Potential Map"* tool from ITC to represent graphically the selected Caribbean products for their export potential to the European markets. https://exportpotential.intracen.org/en/.

There is also a significant potential for the increase in local demand for VSS certified products by sectors such as tourism whose clientele demands sustainable products and services. Caribbean Micro Small and

[3] Directive 2014/24/EU on public procurement, Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors, and Directive 2014/23/EU on the award of concession contracts.

[4] CF-EU EPA https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:289:0003:1955:EN:PDF

[5] PART I TRADE PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT Article 1 Objectives The objectives of this Agreement are: (a) Contributing to the reduction and eventual eradication of poverty through the establishment of a trade partnership consistent with the objective of sustainable development, the Millennium Development Goals and the Cotonou Agreement; …

[6] 39 mentions to "sustainable development" in the signed document as a whole. For instance, "Article 3 Sustainable development 1. The Parties reaffirm that the objective of sustainable development is to be applied and integrated at every level of their economic partnership, in fulfilment of the overarching commitments set out in Articles 1, 2 and 9 of the Cotonou Agreement, and especially the general commitment to reducing and eventually eradicating poverty in a way that is consistent with the objectives of sustainable development."

[7] The export potential value follows directly from the combination of supply, demand and easiness to trade factors, $EPijk = Supplyik\ EP \times Easinessij \times Demandij$. More info about Export Potential Assessments methodology in https://umbraco.exportpotential.intracen.org/media/1089/epa-methodology_141216.pdf

Medium Enterprises (MSMEs) face significant problems related to VSS, due to the high costs of implementation and certification and the prevalent lack of specialized technical and managerial competences. Governments' engagement for export promotion activities could potentially include financial incentives for product certifications to promote certain export-oriented sectors and products and providing VSS training and capacity building for Caribbean producers to open their business to the international market. Despite the great efforts already made, there is still a long way to go in terms of awareness with regards to VSS, their relevance and value to businesses as well as a general lack of information on standards by Caribbean MSMEs.

1.3 CERTIFICATION AS A CHALLENGE: TRADE AND SUSTAINABLE DEVELOPMENT

The relationship between VSS and trade, especially in the effort to reduce the burden on developing countries often marginalises smallholder producers. VSS should technically do more to actively support suppliers and smallholders in these countries. Increasing transparency is a way to help reduce transaction costs for example. The impact of VSS on trade is still a debatable topic, as developing countries' governments and producers continue to be wary about the costs of sustainability certification and non-transparent practices. In such settings, VSS are often seen as barriers rather than enablers for trade.

To measure the indirect effects of VSS, the impact on trade should be analysed with factors including the effect of trade on economic growth and the role of economic growth for sustainable development. It has been recognized how trade, in its capacity to boost economic growth, is an important instrument to achieve sustainable development. International trade is an engine for inclusive economic growth and poverty reduction. This report focuses on the first link in the chain, the relationships between VSS and trade in the CARIFORUM-European Union Economic Partnership Agreement (EPA).

VSS can be a catalyst or a barrier to trade by changing the existing level of discrimination confronting foreign products or foreign suppliers of goods and services or affecting transaction costs for producers or traders. On one side, VSS generate potential benefits as certification labels may expand demand and facilitate access to both foreign and domestic markets. The shift towards greater sustainability may be associated with productivity improvements. On the other side, all VSS require producers to incur certain costs associated with possibly changing their production techniques or mode and obtaining certification for their output. These costs vary and are affecting all producers (domestic and foreign) that have decided to adopt VSS. Additionally, VSS systems may include technical assistance that ensures there is a net benefit. What the cost effect and net benefits are, depend on the design of VSS systems and the market impact of each specific VSS. The more VSS systems exist for the same product, the higher the risk for producers in choosing a system that has little impact on the market demand, the greater the incentive to adopt multiple VSS, resulting in unnecessarily higher overall costs. Therefore, the choices of the most suitable VSS must be deliberately studied.

1.4 DEFINING INDICATIVE SECTORS

The selected products for CARICOM are herbs and spices, cocoa, sugarcane, coconut and aquaculture. These products were identified as a priority by the Council of Agriculture Ministers. They are not the largest Caribbean exports, however, were selected for the following reasons:

- Agri-food products: most frequently VSS covered products are those of agriculture. The food sector implies more of health and safety standards like **Sanitary and Phytosanitary Measures (SPS).**
- They have an enormous impact on the living standards of a large part of the Caribbean population and numerous SDGs defined by the United Nations. The vast majority of MSMEs and a large part of the rural population are affected by inadequate working conditions in these sectors, wages and other social issues.
- The production conditions are adequate for production in the Caribbean region. To obtain certification, the quality of the product must already meet some attributes required to be certified.

- The volume of consumption in the European Union is high and its level of imports is also high. However, the current volume of Caribbean exports is quite low, so the growth potential for CARICOM exports to the European Union is high. Despite production constraints due to available land, the growth potential may also include an increase in quality through VSS that could generate greater added value for producers at origin.
- In some cases, the importance of trade with the United Kingdom is an important part of the total traffic with the European Union. With the planned BREXIT, CARICOM countries, without giving up what has been achieved so far, should aim to increase their presence in European Union markets so that Caribbean products can be recognised for their quality and origin.

2. DEMAND SIDE ANALYSIS: THE EUROPEAN UNION – HOW TO EXPORT?

2.1 CARIFORUM-EUROPEAN UNION ECONOMIC PARTNERSHIP AGREEMENT CONTEXT

In 2008, the CARICOM countries[8] signed the CARIFORUM-European Union Economic Partnership Agreement (EPA) with the European Union. Haiti signed the agreement in December 2009 but is not applying it yet as it is still pending ratification.

The European Union comprises of 27 countries in 2020 after the United Kingdom withdrawal on 31 January 2020. We have included United Kingdom statistics in this report due to the strong links with CARICOM countries and because at time of writing and at least for trading purposes, the United Kingdom remains a full member of the European Union, with all rights and obligations. During the transition period, which ends on 31 December 2020, the European Union law, with a few limited exceptions, continues to be applicable in the United Kingdom.

The European Union is CARICOM's second-largest trading partner, after the United States of America:

Table 1. List of importing markets for all products exported by CARICOM

Importers	*Exported value in 2017*		*Exported value in 2018*		*Exported value in 2019*	
Total exports from CARICOM countries	**16 078 896**	**%**	**19 913 498**	**%**	**21 403 573**	**%**
United States of America	5 134 958	31.9%	6 385 782	32.1%	6 225 148	29.1%
European Union (EU 28) Aggregation	**2 362 030**	**14.7%**	**2 872 414**	**14.4%**	**4 209 050**	**19.7%**
Trinidad and Tobago	284 482	1.8%	164 169	0.8%	1 323 363	6.2%
Guyana	526 468	3.3%	771 367	3.9%	1 026 991	4.8%
Canada	703 430	4.4%	952 478	4.8%	944 636	4.4%
China	254 633	1.6%	474 112	2.4%	858 633	4.0%
United Arab Emirates	180 981	1.1%	413 903	2.1%	708 321	3.3%
Others	6 631 914	41.2%	7 879 273	39.6%	6 107 431	28.5%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

[8] The CARICOM countries include Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Saint Kitts and Nevis, Suriname, and Trinidad and Tobago.

The main exports from the Caribbean to the European Union are fuel and mining products (notably petroleum gas and oils), bananas, sugar and rum, minerals (notably gold, corundum, aluminium oxide, and hydroxide), iron ore products, and fertilisers. Trinidad and Tobago are responsible for more than half of all Caribbean exports to Europe. Guyana and the Bahamas follow at a distance. The main destination countries for Caribbean exports within the European market[9] are Spain (17%), the Netherlands (16%), Portugal (11%), Poland (10%) and Belgium (10%).

The Caribbean mainly imports boats, ships, cars, constructions vehicles and engine parts, phone equipment, milk and cream, and spirit drinks from the European Union. The net trade balance between the two regions shows a trade surplus in favour of the European Union in the last three years.[10]

Agricultural products, which are grouped in the Harmonized System (HS) Codes,[11] HSC from 01 to 24, highlighted that in 2019 they accounted for 10% of Caribbean exports to the European Union. It has reduced its specific weight compared to 2017, which represented 21%, due both to the fall in Caribbean agricultural exports to the European Union and the increase in other exports such as mineral fuels and ships.

The main agricultural products exported to Europe are beverages, spirits and vinegar; cereals; sugars and sugar confectionery; fish and crustaceans, molluscs and other invertebrates; edible fruit and nuts; peel of citrus fruit or melons. These five codes accounted for 85% of exports to European Union.

Table 2. Agricultural products with HS Codes 01-24 (including fish and meat) exported by CARICOM to the EU 28

Product code HSC	*Product label*	*Caribbean Community (CARICOM)'s exports to European Union (EU 28)*					
		Value in 2017	*% in 2017*	*Value in 2018*	*% in 2018*	*Value in 2019*	*% in 2019*
01-24	**All products (01-24 HSC)**	**494.774**	**100%**	**391.776**	**100%**	**402.214**	**100%**
22	Beverages, spirits and vinegar	76.350	15%	94.339	24%	101.446	25%
10	Cereals	55.730	11%	47.668	12%	65.252	16%
17	Sugars and sugar confectionery	193.607	39%	85.072	22%	64.937	16%
3	Fish and crustaceans, molluscs and other aquatic invertebrates	53.277	11%	61.218	16%	60.265	15%
8	Edible fruit and nuts; peel of citrus fruit or melons	50.823	10%	50.537	13%	49.537	12%
20	Preparations of vegetables, fruit, nuts or other parts of plants	17.461	4%	12.609	3%	11.747	3%
21	Miscellaneous edible preparations	8.922	2%	8.195	2%	9.373	2%
18	Cocoa and cocoa preparations	9.827	2%	7.352	2%	8.996	2%
7	Edible vegetables and certain roots and tubers	8.135	2%	4.940	1%	6.766	2%
9	Coffee, tea, maté and spices	10.901	2%	8.475	2%	6.608	2%
	Others*	9.741	2%	11.371	3%	17.287	4%

* HSC 23; 19; 24; 12; 05; 16; 15; 14; 02; 01; 11; 06;04;13

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

In 2019 Belize, Guyana and Jamaica accounted for two-thirds of agricultural product exports (HS Codes 01-24) to the European Union.

[9] Source: ITC calculations based on UN COMTRADE and ITC statistics

[10] Source: European Union CARICOM statistics; https://bit.ly/3oOEdef

[11] Harmonized System (HS) Codes https://www.trade.gov/harmonized-system-hs-codes

Table 3. Exporting CARICOM countries to European Union of agricultural products with HS Codes 01-24 (including fish and meat)

Exporters	*Exported value in 2017*	*% in 2017*	*Exported value in 2018*	*% in 2018*	*Exported value in 2019*	*% in 2019*
All countries (01-24 HSC)	**494 774**	**100%**	**391 775**	**100%**	**402 214**	**100%**
Belize	116 206	23%	96 275	25%	104 440	26%
Guyana	194 711	39%	122 195	31%	100 083	25%
Jamaica	70 372	14%	61 785	16%	63 384	16%
Bahamas	22 623	5%	19 798	5%	34 427	9%
Trinidad and Tobago	21 934	4%	23 493	6%	27 771	7%
Suriname	19 289	4%	20 899	5%	27 061	7%
Barbados	16 621	3%	15 351	4%	16 815	4%
Saint Lucia	9 641	2%	11 308	3%	10 294	3%
Grenada	8 474	2%	8 862	2%	6 263	2%
Haiti	8 698	2%	4 839	1%	5 945	1%
Antigua and Barbuda	1 721	0%	3 669	1%	2 136	1%
Dominica	3 873	1%	1 152	0%	1 813	0%
Saint Kitts and Nevis	108	0%	1 623	0%	1 030	0%
Saint Vincent and the Grenadines	437	0%	514	0%	540	0%
Montserrat	66	0%	13	0%	212	0%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

In 2019, 41% of European Union imports from the Caribbean were directed to the United Kingdom. Of the remaining 59%, the main destinations were the Netherlands and France.

Table 4. Importing European Union countries from CARICOM of agricultural products with HS Codes 01-24 (including fish and meat)

Exporters	*Exported value in 2017*	*% in 2017*	*Exported value in 2018*	*% in 2018*	*Exported value in 2019*	*% in 2019*
All countries (01-24 HSC)	**494 774**	**100%**	**391 775**	**100%**	**402 214**	**100%**
United Kingdom	266 730	54%	177 745	45%	163 669	41%
Netherlands	58 917	12%	76 736	20%	66 854	17%
France	62 580	13%	51 226	13%	60 748	15%
Portugal	13 522	3%	16 625	4%	26 442	7%
Ireland	12 813	3%	13 692	3%	16 808	4%
Spain	26 304	5%	22 285	6%	15 600	4%
Belgium	2 879	1%	4 000	1%	14 226	4%
Italy	30 238	6%	5 328	1%	12 511	3%
Germany	11 423	2%	17 815	5%	11 065	3%
Denmark	126	0%	180	0%	5 426	1%
Poland	427	0%	907	0%	4 795	1%
Greece	2 487	1%	3 300	1%	1 949	0%
Others	6 328	0%	1 936	1%	2 121	0%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

The CARIFORUM-European Union Economic Partnership Agreement (EPA)[12] was signed in October 2008. It was a remarkable milestone in the forty-year trade and development relationship between Europe and CARIFORUM. Following the negotiation process, both sides turned to a far more difficult task: implementing the many obligations in the official text; and most importantly, using the CARIFORUM-European Union EPA as a platform for trade and development, as intended under the Agreement's stated principles and objectives. The EPA aims at the following goals:

- Promoting mutual trade and investment between the two regions.
- Providing clear and predictable access to the European Union market for CARICOM signatory countries.
- Fostering the gradual opening of the European Union services market.
- Ensuring duty and quota-free market access in the European Union for all products.
- Gradual liberalization of "sensitive products" European Union exports over 25 years.
- Enabling CARIFORUM companies to establish a commercial presence in the European Union.

This EPA includes a free trade agreement (FTA) which opens trade in goods between the two regions. Unlike other FTAs, the EPA helps their development through opening trade in services and investment. It also pursues to make doing business easier in the Caribbean with financial support from the European Union to help governments to implement the agreement, and especially supporting businesses to use the EPA to increase export and attract more investment from abroad.

CARIFORUM countries have been integrating more closely with each other. The EPA helps by making it easier to export goods and services between all the countries that make up CARIFORUM. There are 17 Caribbean territories with direct links to European Union countries (four French 'outermost regions' and 13 overseas territories - six British, six Dutch and one French). Both CARICOM and European Union representatives attend regular follow up meetings[13] to evaluate and encourage EPA[14] execution.

2.2 MARKET REGULATION

European legislation

In the effort to promote global sustainable development, the European Union is taking steps to integrate environmental issues into its external relations and trade policies. It places particular emphasis on developing stronger global cooperation on environmental issues, as promoted by the United Nations. It also seeks to achieve a better balance between liberalised trade rules and multilateral environmental agreements.

The European Union's Sustainable Development Strategy[15] set out in 2010 is a framework for a long-term vision of sustainability in which economic growth, social cohesion and environmental protection go hand in hand and are mutually supportive to achieve smart, sustainable, and inclusive growth. At that time, the Europe 2020 strategy was pioneering and today many institutions are promoting this smart, sustainable and inclusive growth as an essential element of economic development.

[12] The text of the European Union-Caribbean Economic Partnership Agreement: https://bit.ly/3oUG94Y

[13] Meeting and documents EPA: https://trade.ec.europa.eu/doclib/press/index.cfm?id=1986

[14] Monitoring the Implementation and results of the Economic Partnership Agreement (EPA) https://bit.ly/3tuhaZt

[15] Europe 2020 strategy for smart, sustainable and inclusive growth COM/2014 https://bit.ly/3jeVcFk

Trade instruments integrating sustainable development objectives

At the multilateral level:

- The European Union participates actively in the work of the World Trade Organization (WTO) Committee on Trade and Environment on the liberalisation of environmental goods and services.
- Green Goods Initiative in the context of the WTO, whose main objective is to eliminate tariffs on a wide range of green products.
- The still ongoing Environmental Goods Agreement (EGA) negotiations would assist in trade liberalization by making access to environmental goods and technologies available at a lower cost and greatly benefiting the environment by removing barriers to trade in products that are crucial to environmental protection and climate change mitigation.

At the bilateral and regional levels:

- Negotiation and implementation of environmental provisions, as part of the chapter "Trade and Sustainable Development" in trade agreements: the European Union closely follows and monitors the implementation of the environmental provisions reflected in this chapter where civil society has an important role to play.
- Additionally, the European Union ensures that environmental considerations in its trade policies are guaranteed through the systematic use of impact assessments.

At the unilateral level:

- The "Generalised System of Preferences" (GSP) established by the European Union allows exporting developing countries to pay lower taxes on their exports to the European Union. This gives them better access to the European Union market and supports economic growth and job creation in those countries.
- Under this scheme, the "GSP+" agreement is a flagship instrument of European Union trade policy to support sustainable development and good governance in developing countries. It provides additional trade preferences to vulnerable countries that ratify and implement international conventions related to human and labour rights, the environment and good governance.
- Trade policy measures are also used in many environmental instruments. Trade restrictions, including for example biodiversity (endangered animal and plant species), chemicals of regional or global interest and ozone layer depletion. The most prominent examples of European Union instruments with environmental objectives that include trade measures are the Timber and Forest Law Enforcement, Governance and Trade licensing scheme (FLEGT),[16] and the Illegal, Unreported and Unregulated fishing (IUU)[17] regulation.

The European market is highly regulated

The individual European Union Member States maintain strict control over the food market. The decisions of the European Union and its member states can have a great influence on their market. Recent examples of European interventions are:

- Compensation and subsidies for farmers in Europe.
- Phytosanitary restrictions.
- European policy against genetically modified fruit and vegetables.

[16] Forest Law Enforcement, Governance and Trade licensing scheme: https://ec.europa.eu/environment/forests/flegt.htm; https://bit.ly/3jiRXwy

[17] Illegal, Unreported and Unregulated fishing (IUU) Regulation: http://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en/

It is necessary to keep up with European rules and regulations on food safety, genetic modification and phytosanitary requirements. Such is the importance of the quality of food coming from agriculture and aquaculture and the high demands of border controls, that they may be rejected by the European market or ultimately be subject to import bans.

The Trade Helpdesk – One stop shop

The Trade Helpdesk[18] set out in is the "one-stop-shop" for access to the European market. It is a guide that every exporter to the European Union countries should know to get his products onto the European market. It provides information on:

- The European Market: basic rules, procedures, how to classify products[19] and the documentation needed to access the European internal market.
- Trade agreements such as the one signed with the CARIFORUM, rules of origin and the Generalised System of Preferences.
- Statistics since 2002
- Import duties, collection of duties, and exemption from import duties or discounts.
- Regulations with technical, safety[20] and labelling requirements as defined by European Union laws for goods imported into Europe, general supporting rules.
- Internal taxes, value added tax and excise duties – Different in the 28 European Union member states.

Requirements to be met for commercialization within the European market

Food safety is fundamental within the European Union. Below is an overview of the most common requirements and standards, as well as specific requirements that apply to niche markets, such as sustainability in production, organic or fair-trade food products.[21]

- **Limited use of pesticides, food control and traceability**

  To avoid damage to health and the environment, the European Union has set Maximum Residue Levels (MRLs)[22] for pesticides in foodstuffs. A MRL is the highest level of a pesticide residue that is legally tolerated in or on food or feed when pesticides are applied correctly. Products containing more pesticides than allowed will be withdrawn from the European market. Some Member States or supermarket chains have even stricter standards than the MRLs.

  Pesticide and chemical legislation are part of the non-tariff measures (NTMs) that both directly and indirectly, influence international trade in goods by determining who trades what and how much. For exporters, importers and policymakers, NTMs represent a major challenge. While many NTMs are primarily aimed to protect public health or the environment, they also substantially affect trade through information, compliance and procedural costs.[23]

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18 The Trade Helpdesk – One stop shop for exporters to European Union: https://trade.ec.europa.eu/tradehelp/

19 The Trade Helpdesk – How the European Union classifies products: https://trade.ec.europa.eu/tradehelp/eu-product-classification-system

20 The Trade Helpdesk – Food and Feed Safety: https://trade.ec.europa.eu/tradehelp/policy-areas-product-legislation

21 The Trade Helpdesk – Complete list of product-specific requirements for every specific product code: http://trade.ec.europa.eu/tradehelp

22 European Commission Maximum residues level: https://bit.ly/39KQf3Y; European Food Safety Authority: https://bit.ly/2YLVcTC

23 UNCTAD's NTM Hub provides information on classification, data, research and analysis, and policy support. Information

It is becoming increasingly common for buyers to ask their suppliers to provide information in advance about their pesticide spraying programs and records.[24] Shipments are verified before they are sent to the retailer.

To ensure food safety and prevent environmental damage, the European Union has restricted the use of certain chemicals (MRLs) in several regulations and directives. Therefore, products will be subject to official controls. These controls are carried out to ensure that all food placed on the European market is safe and complies with all applicable regulatory requirements.

Contaminants, which are substances not intentionally added to food, but which may be present as a result of different stages of production, packaging, transport or storage, are limited by the European Union. The use of food additives, defined as "any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food, whether or not it has nutritive value" is also regulated by the European Union legislation.[25]

There are three types of controls to ensure food safety and prevent environmental damage, based on MRLs: documentary, identity and physical. They are carried out at all stages of import and marketing in Europe, although they are usually done at the points of entrance.

The European Union requires mandatory traceability of any food product for importers, which must include all stages of the production chain without exception.

- ## Marketing standards

European legislation lays down general and specific marketing standards for the minimum quality and minimum durability of products. Imports of products for processing are not subject to compliance with European Union marketing standards. However, they must be marked on their packaging with the words "intended for processing" or other equivalent wording.

The Food and Agriculture Organisation of the United Nations (FAO) publishes the Codex Alimentarius.[26] This guide is a comprehensive compendium of all marketing standards for agro and aquaculture products and is, therefore, a compulsory reference.

- ## Labelling and packaging

Food placed on the European Union market must comply with food labelling legislation.[27] The agro and aquaculture products must be labelled following the legislation on food labelling. It must include complete information containing the name and address of the packer or dispatchers, the name of the product, the country of origin, the class and size, the lot number for traceability or GG number (if Global G.A.P certified), the official control mark to replace the packer's name and address (optional) and the

on target 12.4 *"sound management of chemicals"* and its impact on imports is available at: http://unctad.org/en/Pages/DITC/Trade-Analysis/Non-Tariff-Measures/NTMs-and-SDGs.aspx

[24] European Union Pesticides Database for relevant MRLs by commodity: https://bit.ly/3cAwdei; Integrated Pest Management (IPM) information to reduce the number of pesticides in agricultural pest control, through natural control practices in https://bit.ly/3tswGVF

[25] Food Additives European Commission: https://bit.ly/3jhmN8C sets the rules on food additives: definitions, conditions of use, labelling and procedures: https://bit.ly/3jfnm33

[26] Codex Alimentarius, FAO: http://www.fao.org/docrep/010/a1389e/a1389e00.htm

[27] Regulation (EU) No 1169/2011 on the provision of food information to consumers entered into force on 13 December 2014. The obligation to provide nutritional information applies from 13 December 2016. Regulation (EU) No 1169/2011; Verification of package size and weight. Tolerable errors: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1976L0211:20090411:EN:PDF; Buyer requirements for the use of 100% green and recyclable packaging https://bit.ly/3rpSiAa; All packaging and labelling information available at http://tradehelpdesk.europa.eu

name and address of a seller established within the European Union with the words “Packed for” or an equivalent mention.

- **Additional requirements usually imposed by buyers**

  European buyers often have specific requirements, depending on their sales channels and product segments. Common buyer requirements include the following:

  - **Certification as a guarantee**

    It is common practice in the European market for most buyers to ask for additional guarantees in the form of certification.[28]

    The most widely used pre-standard covering the entire agricultural production process, from before the plant is in the ground to the unprocessed product is GLOBAL G.A.P, but it is not the only one. Management systems must be recognized by the Global Food Safety Initiative (GFSI),[29] and are generally accepted by major retailers. Compliance with certification schemes varies according to countries, trade channels and market situations. All information on Food Safety Management Systems (FSMS) and hygiene standards are available in ITC’s Standards Map tool.[30]

  - **Quality specifications**

    While quality is already integrated into food safety requirements and marketing standards, buyers use their specific quality specifications. In the case of perishable products, buyers keep a close eye on the quality of fresh fruit and vegetables. There is thus, volatility in price, depending on shortages or advanced stages of ripeness. The standards most widely used by European Union importers and traders are those developed by the United Nations Economic Commission for Europe (UNECE) and the FAO Codex Alimentarius Commission mentioned above.

  - **Social and environmental compliance: Corporate Social Responsibility (CSR)**

    There is increasing attention from all parts of European society, including final consumers, retailers and importers, to social and environmental conditions in production areas. Social compliance has become a necessary but not sufficient requirement for success, as product quality remains the top priority for European buyers.

  - **Organic, a growing niche market**

    More and more European consumers prefer food products that are produced and processed using natural methods. Organic products usually have a higher production cost but are also of better value on the European market for a higher profit. Organic production methods established by the European Union are required on the farm for at least two years before the goods can be marketed as organic.

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[28] Many require the implementation of a food safety management system based on Hazard Analysis and Critical Control Points Regulation (EU) No 852/2004 of 29 April 2004: https://bit.ly/3cCpXCR The most commonly requested food safety certification scheme, essential for exporting fresh produce to Europe, is GLOBALG.A.P, which has become a minimum standard for most European supermarkets. http://www.globalgap.org/es/index.html. Others are International Featured Standard (IFS); British Retail Consortium Global Standard for Food Safety (BRC); Safe Quality Food Program (SQF); Food Safety System Certification (FSSC 22000).

[29] Global Food Safety Initiative (GFSI) http://www.ideafoodsafetyinnovation.com

[30] ITC Standards Map: http://www.standardsmap.org

The European Commission promoted in 2014 the updating of the legislation to simplify the existing one and improve the electronic certification systems, but it is still an ongoing process. These changes would benefit consumer confidence in organic products through improved traceability, reduced fraud, less administrative burden and availability of organic import statistics. In general, organic regulation and testing are expected to become more stringent.

IFOAM Organics Europe[31] is the European umbrella organisation for organic food and farming. They represent organic in European policymaking and advocate for a transformation of food and farming, following the principles of organic agriculture – health, ecology, fairness and care, along the entire organic food chain. Compliance with the certification of a VSS involves the fulfilment of the regulations mentioned in this section. Therefore, obtaining a VSS for a Caribbean producer enables and increases the potential of its exports to European Union markets, which are often more demanding than the legislation itself.

2.3 MARKET TRENDS

Consumption trends in the European market in 2019/2020

The total value of European trade in VSS certified products is gradually increasing year on year. There are opportunities in the European Union for Caribbean exporters thanks to consumption trends among which healthy, natural and sustainable products are becoming increasingly popular. European consumers are looking for a good and tasty product that has been produced in a way that respects people, society and the environment. The importance of certifications favours the flow of information throughout the entire supply chain, which is tending towards the specialisation and integration of those who make up the chain.

While locally grown products are initially perceived as higher quality, the import of exotic and off-season products also continues to grow.

The importance of communication about the health benefits of the products is increasingly being stressed in developed societies such as Europe. Many healthy foods remain specific to relatively wealthy consumer groups and specialist import companies.

Organic products are a good example of this, as they are particularly linked to the idea of good health and better taste. The European consumer values them and is willing to pay a higher price for them as it is shown in relatively wealthy European Union countries like Germany and France, where organic food consumption is developing exceptionally well. A sign of this growing trend in consumption is also that domestic European production area under organic farming continues to increase, especially in Spain, France and Italy.[32] Demand for certified products often exceeds supply, making it easier to find buyers and better margins. It is a challenge for exporters from tropical climates to meet the increasing standards in Europe. For instance, the new regulations of 2020[33] by the European Council aim to ensure fair competition, prevent fraud and improve consumer confidence. The applicable regulation is the same for both internally and imports from third countries.

Some actors in the sector have shown their concern for small producers in developing countries who would not be able to meet the requirements foreseen by the different socio-economic and geographical conditions.

The development of a good brand associated with quality, which takes into account taste preferences by country or region is a commercial tool to be exploited. In the case of the CARICOM products, there is a chance

[31] IFOAM Organics Europe https://www.organicseurope.bio

[32] Eurostat (org_cropar) https://ec.europa.eu/eurostat/statistics-explained/index.php/Organic_farming_statistics#Total_organic_area

[33] Amending Regulation (EC) No 1235/2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries: https://bit.ly/3pNMyQF

to develop quality origin brand within the European Union market. Also, the adaptation to the often-changing habits and customs in the different regions of the European Union, for example in the case of convenience meals, for those looking for healthy and easy to eat foods for snacks or products prepared for individual consumption.

Below are some of the main consumer trends in the European market in 2019 on fresh and processed foods, value chains and value perception in the food market:

- Transparency: clean and clear labelling is the new global standard. The demand for full transparency now incorporates the entire supply chain. The consumer demands to know the path taken by the product from its origin
- Organic market growth: organic foods such as plant-based “milks”, meat alternatives and vegan offerings have quickly become the hottest trend. Consumers are looking for innovative options to integrate the benefits of these products into their daily lives
- Sweetener: sugar is under suspicion. It is highly sought after but remains the key ingredient that provides the sweetness and great taste that consumers are looking for
- Products for “relaxation” and associated with specific and unique moments for the consumer
- Personalised nutrition: personalised diets have become commonplace on European shelves Different foods have different effects on different consumers
- Reducing food loss and waste
- Fresh fruits and vegetables, which can be presented in various formats
- Products with “veggie” ingredients and fruits
- Innovation in presentation, especially in the design and format of packaging
- Sustainable initiatives become more important
- Recyclable packaging
- Growing retailer requirements
- Low-calorie and other “low” or “no” certain ingredients
- Increased consumer awareness of food
- Locally grown products
- Vertical integration in the food value chain
- Herbs and spices: in Europe there is a rising popularity of certified spices amongst the consumers as these spices are made out of natural ingredients and are free from pesticides. There is also an increasing awareness of the medicinal properties of sustainable herbs and spices that would drive the market growth in the forthcoming years by rising its demand spices.
- Cocoa, a rise in product innovation: Leading companies in the European chocolate market, are focusing on new and innovative product solutions to attract more consumers in terms of flavours, packaging, and ingredients. New innovative chocolates have been launched in response to the rising demand for natural and pure chocolates.
- Sugar is under suspicion for its effect on health. Many European consumer awareness campaigns have been carried out in different countries, both public and private. Despite this, it is still a widely used ingredient in the food industry and its consumption over the last five years has remained stable although with a slight downward trend.

- Coconuts in Europe have moved from being a traditional exotic product to a fashionable health food. The European market is gradually growing. Health awareness and a stable supply can boost consumption. Convenience and innovation contribute to a larger consumption of fresh mature and young coconuts. Opportunities are diverse, both in mature markets such as the United Kingdom and Italy and growth markets such as France and Spain.
- Fisheries and aquaculture products are an important source of protein and a crucial component of a healthy diet. This is particularly true for the average person living in the European Union, who consumes 24.3 kg of fish or seafood per year (4 kg more than in the rest of the world). Consumption, however, varies greatly across the European Union: from 5.6 kg per person per year in Hungary to 56.8 kg in Portugal.[34] Three quarters of the fish or seafood consumed in the European Union come from wild fisheries, while the remaining quarter comes from aquaculture. The most popular species are tuna, cod and salmon.
- Higher food safety standards
- Plant alternatives to animal products
- Consolidation of the retail segment
- Dietary and ingredient trends
- Healthy snacks
- Sane and healthy, but also tasty
- Products with proteins
- Products specifically aimed at certain diets.
- Fashionable ingredients: plant proteins, cocoa (raw) and coffee, coconut, chilli pepper / pink pepper, ginger/turmeric/maca, natural colours, goldenberry berries, macqui, goyi, moringa, yacon, monk, stevia, spices

The marketing principles of the European market indicate that food products must ensure health and safety for human consumption, once the physiological factors are broadly covered (i.e hunger, appetite). Therefore, the European market requires transparency on the claims of the natural products that are used. The production of these natural products must also be in compliance of the basic ethical and environmental measures. Beyond health-related provisions, food product exporters to the European market should also consider food products that are targeted to benefit personal care (e.g aloe vera for dry skin) and/or tastes that resonates a wider European lifestyle.

2.4 CERTIFICATION OF PRODUCTS

The certification of the product to be exported has been transformed from an advisable requirement to an indispensable one for the exported products to the European Union. Along with food safety, the certifications required by the European market sometimes seem to be given as much importance as the product itself. This aspect requires professionals in the sector to have a good knowledge of them.

The United Nations Forum on Sustainability Standards (UNFSS) highlights in its reports the interaction of these certifications (VSS, voluntary sustainability standards) and the management of public administrations. They reflect the competition between standardization efforts led by governments and the private sector. All of this is done to favour the effective fulfilment of sustainability objectives.

[34] Eumofa, The EU Fish Market, 2019 edition. https://bit.ly/36JgpCc

The correct application of these requirements demanded by the certifications results in an improvement of the competitive position of the exported product. It is, therefore, necessary to encourage exporters and importers to work together on an ongoing basis to find the best way to comply with food safety standards. It is essential to certify the production before exporting it to Europe. Certification is not a guarantee of success, but it can be said that it has now become a prerequisite for success.

The consumption of sustainable products is one of the main market trends. All those involved in the value chain, from the farmer to the end consumer, are showing increasing interest in more sustainable and responsible production. This trend is inseparably linked to people's working conditions, water use, the use of renewable energy and waste management, among other aspects.

European customer awareness is growing thanks to greater transparency. Some initiatives aim to make all European imports from Africa, Asia and South America 100% sustainable.[35]

It is important to adapt and anticipate this development by preparing exportable products to a form of production that is sustainable, both socially and environmentally. This requires a lot of work and investment, which can be transformed into an increase in the value of the products to be exported.

More information on sustainability certifications applied to food production can be found in section C of this report.

2.5 INTEGRATION IN THE EUROPEAN CHANNELS: DISTRIBUTION, MARKETING

To be competitive, control over the entire value chain is essential, as large retailers demand "just-in-time" delivery from importers and distributors, to reduce their storage costs. Vertical integration is necessary, and exporters and importers must adapt their specialization to the characteristics of their products and market demand.

Importers and distributors play a key role and have lightened their structures as much as possible, offering their services as intermediaries with a lighter internal structure, which tends to sub-lease facilities and services when necessary.

The role of supermarkets as large retailers is growing throughout the European Union. They choose a limited number of suppliers of products, or value-added services such as ripening or packaging. Quality and hygiene procedures are essential to ensure that product quality is maintained and that certifications are met.

Supermarkets dominate the sales to the consumer and therefore enjoy great purchasing power. This strength is increasing and is expected to increase further soon. Generally, their requirements are higher than the legal ones in terms of quality and the importers are the key to supply them. Full transparency is required in the supply chain from start to finish. The extra work involved in being audited regularly becomes productive as a guarantee of good operations and reliable product traceability.

Supermarkets have a market share of between 60% and 90% in food retail sales,[36] depending on the country. The market share of supermarkets tends to be higher in north-western Europe than in southern Europe. This overwhelming dominance makes it difficult for small exporters from developing countries to enter, especially if the products are undifferentiated.

[35] Sustainability Initiative of Fruit and Vegetables (SIFAV) develops SIFAV Basket of Standards to mainstream and promote sustainable sourcing of fruit and vegetables in the areas of social and environmental practices https://www.idhsustainabletrade.com/initiative/sifav/; CBI - What trends offer opportunities or pose threats on the European fresh fruit and vegetables market?

[36] Statista "Distribution of grocery sales in Europe in 2018 and a forecast in 2023, by channel" https://www.statista.com/statistics/1103169/grocery-sales-in-europe-by-channel/; Eurostat statistics explained Retail trade volume index overview https://ec.europa.eu/eurostat/statistics-explained/index.php/Retail_trade_volume_index_overview

Traditional retail shops have seen their market shares decline to around 10% in most countries (Eurostat, 2020). However, there are successful shops that focus on a specific niche market; either exotic or ethnic products or organic shops that are expanding. They can become an entry channel for exporters supplying differentiated products in smaller volumes.

The channels are continually changing, and Europe is experiencing a growing boom in "online" fresh food shopping, driven by supermarket chains and other e-commerce giants supermarkets, specifically in the northwest and southern Europe, demanding almost exclusively Class I products. The quality requirements for street markets and retailers in Eastern Europe are sometimes lower, providing market opportunities for products that do not meet the highest standards. However, quality requirements are also increasing in Eastern Europe. It is also important that exporters can deliver large quantities of products of uniform quality.

The European market can be divided into approximately three geographical areas with different consumption patterns and purchasing behaviour.

Northwest Europe: has the highest average purchasing power. The market has the highest demand for tropical and exotic products, as well as off-season fruits and vegetables. Consumers in Northwest Europe buy most of their purchases in supermarkets. Specialised shops are a little more expensive than supermarkets but have a wider range of products. The trend is towards supermarkets having more and more specific weight. In this segment, almost all products sold are Class I, the highest quality.

Southern Europe: fish, fruits and vegetables represent a larger proportion of the diet. Consumers have a greater preference for taste and traditional local products. Although they are the main producers within the European Union, local supply is not sufficient to meet total demand throughout the year. The supermarket channel is also gaining importance in this geographical area.

Eastern Europe: the quality requirements for the product are somewhat lower (Class I and Class II) than in the rest of Europe. Supermarkets have a lower market share, but the trend is upwards.

3. SUPPLY SIDE ANALYSIS: VSS LANDSCAPE IN CARICOM

3.1 CARICOM INSTITUTIONS PROMOTING SUSTAINABLE DEVELOPMENT

The Caribbean Agricultural Health and Food Safety Agency (CAHFSA)[37] was founded in 2010 as an Inter-Governmental Organization within CARICOM states with a mandate to perform a coordinating and organizing role for the establishment of an effective and efficient regional sanitary and phytosanitary (SPS) regime. Its mission is "to enhance regional development in agricultural health and food safety through the application of SPS measures that meet the expectation of all stakeholders and contribute to the welfare of our citizens".

The CARICOM Regional Organization for Standards and Quality (CROSQ) was founded in 2001 by the CARICOM Member States, as the regional centre for promoting efficiency and competitive production in goods and services, through the process of standardisation and the verification of quality. Its members are the National Standards Body (NSB) of all CARICOM countries:

- Antigua and Barbuda Bureau of Standards (ABBS)
- Bahamas Bureau of Standards and Quality (BBSQ).
- Barbados National Standards Institution (BNSI), a joint undertaking between the Government of Barbados and the private sector.

[37] Caribbean Agricultural Health and Food Safety Agency: https://www.cahfsa.org/

- Belize Bureau of Standards (BBS)
- Dominica Bureau of Standards (DBOS)
- Grenada Bureau of Standards (GDBS)
- Guyana National Bureau of Standards (GNBS)
- Haiti Bureau of Standards (BHN)
- Bureau of Standards Jamaica (BSJ)
- QI desk in the Ministry of Trade of Montserrat
- Saint Kitts and Nevis Bureau of Standards (SKNBS)
- Saint Lucia Bureau of Standards (SLBS)
- Saint Vincent and the Grenadines Bureau of Standards (SVGBS)
- Suriname Standards Bureau (SSB)
- Trinidad and Tobago Bureau of Standards (TTBS)

CROSQ is helping the Caribbean region to face unique trade challenges, supporting international competitiveness for the enhancement of social and economic development of the region. The small size of the countries, high production of some products concerning the national level of demand and especially transport costs all hamper their export competitiveness despite their proximity to the large markets of the United States and Canada and the desire of increasing trade with the European Union.

CROSQ promote quality involving food chain controls, checks and balances, traceability, guidelines and standards, monitoring, verification of quality and accredited processes "from farm to fork",[38] through the promotion of established bodies partnering in expertise and technical knowledge. One of these initiatives to improve food chain control and quality is the European Union's support to get more laboratories with links to food chains accreditation. Its purpose is to strengthen the capabilities of testing laboratories to offer testing services to exporters. To do this, the testing labs need to be reliable, affordable and internationally recognised.[39]

CARIFORUM,[40] the Forum of the Caribbean Group of African, Caribbean and Pacific (ACP) States, intends to promote the coordination of policy dialogue, cooperation and regional integration, mainly within the framework of the EPA with the European Union (European Union). The EPA Implementation Unit is subsumed under the CARIFORUM Directorate at the Headquarters of the CARICOM Secretariat. The EPA emphasizes sustainability in general and trading specifically concerning agriculture and fisheries, tourism, environment, eco-innovation and energy, among others. Standards and conformity assessment schemes will be expected to support this principle of sustainability for acceptance and in conformance with European Union laws and policies on trade.

CARICOM, CARIFORUM, CAHFSA and CROSQ are the main organisations to cooperate in the VSS development in the region. There are other international institutions that support the work of these mentioned CARICOM institutions. For example, the International Trade Centre (ITC)[41] joins a project with the Organization of Eastern Caribbean States Export Development Unit (OECS EDU) with the support of the Caribbean Development Bank (CDB) to build capacity among selected micro, small and medium enterprises (MSMEs) to respond to international market demands, particularly with regard to product design and development.

38 CEO of CROSQ, Mr. Deryck Omar. June 2020: https://bit.ly/3q3lSv2

39 CEO of CROSQ, Mr. Deryck Omar. June 2020: https://bit.ly/3jlg9OS

40 CARIFORUM https://www.carib-export.com/businessforum/

41 ITC and CDB announce scaled-up partnership https://www.intracen.org/ITC-and-CDB-announce-scaled-up-partnership/

Some CARICOM countries have signed on to meet the Sustainability Development Goal's (SDGs) of the United Nations, to include them in their national development planning. Trinidad and Tobago[42] is a good example of including sustainability and quality standards in many different areas of their society and economy.

3.2 VSS IN CARICOM

The increase in demand and use of sustainability standards and certification schemes is a fact among Caribbean countries, following the global trend. The sustainability standards can be fostered both publicly (sustainability and trade policies) and privately (consumer awareness and preference). The current actors in the field like CROSQ and the NSB within CARICOM and private players should be aware of this trend, being proactive to seize opportunities and mitigate against risks that may arise.

The International Trade Center (ITC)[43] Sustainability Map identifies 54 VSS for agriculture products of Central America and the Caribbean region being exported to the European Union, and 27 VSS for aquaculture.

Some of the main VSS[44] being used in CARICOM countries in agro and aquaculture are the following:

- ### Agriculture

  Fairtrade: focused on farmers and workers in developing countries to improve their lives and invest in their future helping to reduce poverty and instigating change through everyday shopping. End-consumer awareness. Different certified products can be found in Antigua and Barbuda, Bahamas, Barbados, Belize, Jamaica, Saint Lucia, Saint Vincent and the Grenadines and Suriname.

  The Institute for Market ecology (IMO):[45] its core is organic, environmental and social standards. Inspection, certification and quality assurance from agriculture and aquaculture to forestry and fair trade. It can be found in Haiti producers.

  Rain Forest Alliance (Sustainable Agricultural Network): intends to help farmers produce better crops, adapt to climate change, increase their productivity, and reduce costs. These benefits provide companies with a steady and secured supply of certified products. Certified products also help businesses meet consumer expectations and increase their brand's credibility. It can be found in Jamaica production.

  Coffee and Farmer Equity (C.A.F.E.): SCS Global Services (SCS) teamed up with Starbucks and Conservation International to develop this certification. This practices standard ensure that Starbucks is sourcing sustainably grown and processed coffee. Starbucks defines sustainability as an economically viable model that addresses the social and environmental needs of all the participants in the supply chain from farmer to consumer. Bahamas and Jamaica have certified coffee plantations.

- ### Aquaculture

  Aquaculture Stewardship Council (ASC): this programme aims to transform the world's seafood markets and promote the best environmental and social aquaculture performance- Seafood chain custody. Belize is a successful example of implementing this certification. A farmer organisation like The Belize Shrimp Farmers Association have actively participated in the development of this standard.

42 Trinidad and Tobago Vision 2030: https://bit.ly/36JkSoe

43 ITC Sustainability Map VSS for agriculture products: https://bit.ly/2L7Xj0M

44 Ecolabel Index http://www.ecolabelindex.com/

45 Ecolabel Index http://www.ecolabelindex.com/ecolabel/imo-certified

There are some other standards used in the region such as GLOBAL G.A.P, mainly due to requirements in export markets. Training of farmers has been conducted in Belize, Jamaica, Suriname and Saint Vincent. Jamaica operates a Certification Programme[46] for good agricultural practices, to increase consumption and acceptance of Jamaican products but implementation has been low up to now. Regarding fisheries in both Suriname and Guyana are certified by the Marine Stewardship Council (MSC), which are internationally recognized as sustainably managed.

To access the European market, many private buyers determine the type of private standard they consider appropriate for their suppliers use. Most fast-food chains and large retail chains supermarkets[47] require that specific food safety standards should be followed. In some cases, these companies have either developed their standards or rely on a standard developed and owned by independent food safety standard organisations such as GLOBALG.A.P,[48] the British Retail Consortium (BRC), the Global Aquaculture Alliance (GAA) or the Safe Quality Food Institute (SQFI). There are now hundreds of private standards and certification schemes. The private food standard describes what must be done. The certification scheme describes how it must be done. Company auditors or an accredited independent third party known as a certification body, are who certifies that the producer has met the requirements of the standard.

CARIFORUM producers in the processing sector can find that certification for different schemes is required. For instance, one shrimp farming operation required certification of more than five different schemes, depending on the destination of their products. The Global Food Safety Initiative (GFSI) supports some standards aiming at the development of food safety management systems to ensure food facilities are processing safe food for consumers. They assume that once a product is certified, it should be accepted everywhere. This is far from the real world in practice. There is more work to be done to realise this objective and to eliminate the major resource burden placed on suppliers.

Agricultural and Fisheries VSS in some of the key markets in CARICOM (McDonell, 2016)

Belize

There is a positive awareness of VSS and private certification schemes within the government and among sugarcane and shrimp farmers and producers in Belize. Shrimp farming is one of the most successful sectors where most of the industry has become certified to the Aquaculture Stewardship Council standards. The banana industry had adapted reasonably well to private standards, with most farmers being certified under Fair Trade standards.

Agricultural and Fisheries product exports may take the form of fresh, frozen or processed product and may include bananas, beans, cacao, citrus, corn, fish, hot peppers, papayas, shrimp and sugar. The domestic market is too small to absorb all domestic agricultural production and so maintaining access to the export market with its foreign exchange benefits is critical to the survival of farmers and the general economy of Belize. The Ministry of Agriculture has carried out voluntary training programmes in GLOBAL G.A.P, targeted at farmers and processors to modernise their production methods and as a first step towards promoting the use of standards to help improve product safety and quality. As in most Caribbean countries, certification is mostly focused on the export markets, and MSME finds the private certification requirements for export too exigent and costly. They hesitate because there is no price premium received.

The exigence of many different certification schemes compliance in the major shrimp production facility is another barrier to initiate the certification process.

[46] Jamaica Agriculture Certification Program: http://www.ncbj.org.jm/certification-agricultural-produce-programme

[47] Carrefour product safety and quality certification: http://www.carrefour.net/en/articles.html?a=22438

[48] Walmart Brazil Requires GLOBALG.A.P. Certification from its Fruit & Vegetable Suppliers: https://bit.ly/3jrrk8Q

Belize is the first developing country in the world to achieve Aquaculture Stewardship Council (ASC) certification, with 90% of its shrimp farms output fully certified.[49] In 2015, five shrimp farms in Belize attained ASC shrimp certification. This process was facilitated by the World Wildlife Fund (WWF) and included "Compete Caribbean"[50] and Belize Shrimp Growers Association.[51] This certification implies a competitive advantage in high-quality international markets since it shows that shrimps were produced with minimal impact on the environment and communities where farms are located. More sustainable impacts are the reduction of adverse environmental effects through wetland and mangrove preservation, an improvement on water management, use of feed, disease control and addressing biodiversity issues; encourages improvements to the coastal zone and fisheries management; future food security; improved social conditions; and improved production methods and technology. Nevertheless, it is still a fragile industry, as shrimp farms suffered considerable loss following bacterial infection in early 2015, leading to all major farms in the country being drained and dried, and restocked in 2016.

Some producers in Belize have their own laboratories, but complex diagnosis and analysis requiring specialised equipment and expertise are often done by accredited labs in the United States or Canada.

Guyana[52]

The sugar industry has long been the bedrock of Guyana's agricultural sector. However, there has been a great deal of uncertainty around global sugar prices in recent years: for example, the European Union, which was the primary export destination for much of Guyana's sugar, recently reduced their guaranteed prices. As a result of these changes in the global trading environment, the government of Guyana has decided to cease operations on many of the country's sugar estates. Nevertheless, there are still opportunities for development in the sugar sector, such as processing raw sugar into crystallized and brown sugar and manufacturing sugar-based by-products such as ethanol.

The organic agriculture sector in Guyana is still very much in development, but its growth potential is significant. The country has large tracts of land that have never been developed for modern agriculture and are therefore free from agricultural chemicals. Consequently, the organic certification process for these areas could potentially proceed more quickly, without the traditional three-year waiting period. Guyana is already growing organic cocoa, pineapple, and heart of palm, but there are opportunities to explore many other crops.

Seafood and aquaculture sub-sectors: Guyana boost ideal conditions for a thriving seafood and aquaculture industry. The country currently has significant fishery resources in the Atlantic Ocean, with many highly productive marine fisheries for prawns, shrimp, and commercial finfish. Also, commercial aquaculture, particularly for tilapia and shrimp, is growing rapidly, thanks to increasing attention and support from government and private investors alike. Most seafood exports from Guyana are bound for the United States, but in 2004, the country received certification to export seafood to the lucrative European Union market.[53]

Grenada

Agricultural and Fisheries Products Commodities for local consumption and export include cocoa beans, nutmeg, seasoning peppers, coconut, avocadoes, breadfruit, mace, golden apples, plantain, pumpkins, mangoes, sour oranges, soursop and breadfruit.

For some commodities, cocoa, for example, testing of the product is the main method of conformity assessment and this is verified according to the International Standards for Fine Flavoured Cocoa. There are preparations

[49] UNCTAD - Belize Aquaculture; Evidence-based and policy coherent Oceans Economy and Trade Strategies: https://bit.ly/36lZMqk

[50] https://www.competecaribbean.org/compete-caribbean-continues-support-to-belize-shrimp-producers-cluster/

[51] http://www.shrimpgrowers.org/service/asc-certification/

[52] The Guyana National Bureau of Standards (GNBS): https://gnbsgy.org/

[53] GBTI Spotlight on the Growing Agriculture Industry in Guyana https://bit.ly/3jkn7DG

taking place, such as Hazard Analysis Critical Control Points (HACCP) certification[54] to meet the demands of the Food Safety Modernization Act (FSMA).[55] Technical guidance and access to third-party auditors is necessary for these advances to occur. For most other commodities produced in Grenada, no VSS has been undertaken yet.

Jamaica

Agricultural and Fisheries Products Commodities for local consumption and export include among others- bananas, cocoa, coffee, conch, dasheen, ginger, lobsters, peppers, pimento, spices and sugar. Most farmers sell a product for both the domestic and the export market in some manner, either directly or through cluster arrangements or food processors.

Some larger companies in Jamaica started seeking HACCP certification in the 1990s and have worked their way through various iterations of Good Agricultural Practices (GAP) since. The development of a National Food Policy in Jamaica is now helping to drive the process towards recognition of the importance of food safety along the complete value chain, from the farm to the consumer. The Inter-American Development Bank provided funding for a Jamaican Agricultural Competitiveness Programme. One of the three pillars of that programme is assistance for small and medium-size farms to adapt to certification requirements. There have been cost-sharing arrangements between the Jamaican government and private processing facilities with funding from the European Union. Despite government efforts, there is still work to be done to improve knowledge, understanding and capacity to implement GAP at the farmer level in Jamaica.

Small farmers are more vulnerable to the impacts of certification costs due to their small volume of production. In Jamaica there is also a lack of laboratory support for food safety programmes, thus complicating the compliance with private standards.

Saint Lucia

Agricultural and Fisheries Products Commodities for local consumption and export include cocoa, coconut, coconut oil, fish, herbs and spices. Saint Lucia also export bananas and farmers are certified to Fair Trade. The Government of Saint Lucia offers a farmer certification programme[56] to support farmers to meet international market standards. Farmers are trained in GAP for the environment and economic sustainability, which result in safe and healthy agricultural and fisheries products. The Trade and Export Promotion Agency is working with the Bureau of Standards to support HACCP training.

Lack of resources to enforce the maintenance of HACCP plans and compliance with GAP is a barrier for farmers and public institutions. As in other adjacent countries, trade in the domestic and Caribbean market seems to be independent of certification processes, which seem to be only granted for exports.

Saint Vincent and the Grenadines

Agricultural and Fisheries Products Commodities for local consumption and export include bananas, fish, ginger, pumpkin, sweet potato, and vegetables. The banana industry is well versed in the certification requirements of private standards, including those for Fair Trade. Farmers of other crops, however, have not followed suit as quickly in adapting to private standards. The banana[57] trade was required to comply with private certification long before demands for certification of other crops came into play.

Despite the reduced contribution to the national economy in the past, the agricultural sector's importance to rural life is still critical. Income from farming may currently need to be complemented by other work but the rural

[54] HACCP certification https://safefoodalliance.com/food-safety-resources/haccp-overview/

[55] United States Food & Drug. Food Safety Modernization Act (FSMA) https://bit.ly/2MtgiUA

[56] The Government of Saint Lucia offers a farmer certification program: http://www.govt.lc/services/farmer-certification

[57] The Banana Accompanying Measures (BAM), a five-year European Union fund was focused mainly on increasing banana, livestock, fruit and vegetable production. https://ec.europa.eu/commission/presscorner/detail/en/MEMO_10_83

way of life remains important both culturally and politically. If small and medium-sized farmers are to survive, they know although do not fully accept, the need to comply with private certification schemes if they want to develop their export markets.

3.3 IMPACT OF VSS ON SMEs AND MSMEs

The Micro, Small and Medium Enterprises (MSME) sector is a substantial contributor to economic and social development in the Caribbean, accounting for more than 50% of regional enterprises, and over 50% of Gross Domestic Product (GDP) (Caribbean Development bank, 2016). The agricultural sector represents an important source of income and employment for the rural population. It plays a vital role in achieving the region's food security objectives as well as alleviating rural poverty and can contribute immensely to rural growth and development. In Jamaica, for example, the sector supports an estimated 150,000 rural families and is the country's second-largest employer of labour (International Labour Organization, 2016). Production of a wide variety of crops, fisheries, livestock and forestry is characterised by a large number of small farmers, the majority (approximately 85.6%) of whom operate on small farm holdings averaging less than 5 hectares in size (Food and Agriculture Organization, 2013). In smaller islands, such as Barbados and the Organisation of Eastern Caribbean States (OECS), the sector is characterised by limited access to suitable land for production, due not only to the small physical size of the islands but also competition for lands with tourism, housing, services and other facilities. As a result, there is a high number of landless farmers, and a prevalence of small scale, uneconomic, fragmented farming units.

Despite these significant contributions, MSMEs face many major constraints, including inadequate access to financial resources for investment and working capital, gaps in training in business skills, high cost of infrastructure services, inadequate physical infrastructure support (for example, warehousing, factory and commercial space, industrial parks, etc.), low levels of technology used to improve productivity and lack of competitiveness. Fish farms share these same problems with agricultural farmers. There is a controversy over water rights, lack of trained staff, few research facilities, and most feed and specialised hatchery equipment has to be imported.

The challenges and incentives faced by MSMEs (UNFSS, 2018) concerning sustainability standards leave room to manoeuvre through VSS platforms and the global governance of standards as set out below:

1. Drivers and constraints for MSMEs in adopting sustainability standards: there are three broad categories-demand, political environment, and firms and business environment. Among the incentives for standards implementation, the demand for sustainably produced goods and services is found to be the key driver. Technical and financial assistance by lead firms or government programs and national regulations are other important aspects. However, regulations and legal enforcement are a double-edged sword as it may obstruct the implementation of standards if poorly designed and managed. The most binding constraints for standards adoption are implementation and certification costs, which are essentially fixed costs and thus weigh particularly heavy on smaller firms. Against this background, access to finance and the size and productivity of firms are also identified as relevant constraints. Equivalently, lacking awareness about sustainability standards, their relevance and value to businesses as well as a general lack of information on standards by MSMEs.
2. The role of national VSS platforms[58] in mitigating challenges of MSMEs in standard adoption: governments, donors, standard setters, large corporations and financial institutions can all contribute to facilitating the adoption of sustainability standards by MSMEs. National VSS platforms also have a crucial role to play as they address several of the challenges that MSMEs face concerning sustainability standards, most

[58] NATIONAL MULTI-STAKEHOLDER PLATFORMS are supported by UNFSS in several emerging countries. These national initiatives, created and shared by stakeholders under each country's designated coordinating body, reflect local priorities. They are organized and structured in a transparent, inclusive and demand-driven way. https://unfss.org/

importantly awareness and information issues. Also, it can shape the perception of MSMEs concerning standards by highlighting the value that standards can bring to businesses, underlining the benefits of certification so that MSMEs may perceive standards compliance as a business case rather than just purely additional costs.

Historically, developing countries have rejected standards conceived sometimes in the industrialized world as protectionist tools which are designed to serve the interests of foreign corporations by erecting new barriers to trade. Developing countries have particularly complained about the discriminatory effects of VSS on small and medium-sized enterprises (SMEs).[59] Thanks to the establishment of multi-stakeholder forums, the perception of VSS is slowly changing to benefit the MSMEs.[60]

Simultaneously, the diffusion of standards that aim at enhancing environmental sustainability may undermine the socioeconomic situation of smallholders. This is a matter that raises concern about the practicality of VSS for SMEs.

As described in B.2, the experiences of individual CARICOM member states with regards to the implementation of VSS are not necessarily similar. The Jamaican government play its role by investing in the infrastructure and creating Agro Parks. Agro Parks have been created to form groupings, or 'clusters' of farmers to generate efficiencies by using shared infrastructure, post-harvest and packaging facilities. The banana industry of both St Lucia and St Vincent and the Grenadines are both involved in the compliance of Fairtrade VSS.

The common challenges for Caribbean MSMEs are related to the lack of resources already mentioned: infrastructure, human and financial aspects of implementation and maintenance of certification.

For instance, the provision of sanitary and handwashing facilities and properly equipped restroom stations often pose problems for small farmers or MSMEs in general. Human Resource challenges include training persons to meet requirements such as record keeping, integrated pest management systems, mixing of chemicals, observing harvesting times after application, etc. Additionally, supervisors are required to be competent to review and the firm must implement a system of training and retraining. Financial Resources are required to address infrastructure requirements and to hire an appropriate number of qualified persons, paying for the initial and surveillance assessments to achieve and maintain certifications every year. All these challenges are closely linked to the characteristics of MSMEs, which are predominant in the Caribbean.

[59] German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE). MGG program facilitates multi-stakeholder forums, linking actors from the national level with international institutions playing a role in less industrialised economies https://www.die-gdi.de/en/managing-global-governance/

[60] Sustainability Standards: effects for developing countries' SME trade. Challenges of Sustainability Standards for developing countries SMEs trade and what are the options for the WTO system to address it. There is a reasonable concern amongst SMEs that this new regulatory mechanism could bring arbitrary and illegitimate barriers to trade in costs reducing their competitiveness in international markets. International trade has experienced a rise in quantity and level of requirements in sustainability standards. The role of the WTO should be to assess the legitimacy, effectiveness and accountability of such standards if the WTO wants to stand for inclusive trade. https://www.wto.org/english/tratop_e/msmesandtra_e/msmesandtra_e.htm

4. VSS AS A TRADE INSTRUMENT FOR CARICOM EXPORTS TO THE EUROPEAN UNION

INDICATIVE SECTORS: VSS CASE STUDIES

4.1 AGRI-FOOD

4.1.1 Herbs and Spices

The global market for seasonings, spices and herbs reached $10.551 billion in 2019.[61] Globalization strongly contributed to the growing demand for food service, home cooking and the emerging consumer enthusiasm for exotic cuisines. Overall flavouring markets continue to trend upward in both volumes and values worldwide. However, when it comes to a wide range of spice and herb origins and markets, there are different features and dynamics of performance. There are different production environments from multiple origins, trends in global trade conditions and changing tastes in demand from faraway markets.

Herbs and spices are part of the Harmonized System (HS) Code 09, which includes coffee, tea, mace and spices. We focus on herbs and spices that are produced in CARICOM member countries for this study. More specifically on the following HS codes:

- **0904** Pepper of the genus Piper; dried or crushed or ground fruits of the genus Capsicum or the genus pimenta pepper.
- **0908** Nutmeg, mace and cardamoms.
- **0910** HS codes of Ginger, saffron, turmeric (curcuma), thyme, bay leaves, curry and other spices

The recent outbreak of the coronavirus has greatly affected people's behaviour. On the demand side, industry and consumers are buying more and more shelf-stable food, including spices and herbs.[62] On the supply side, the largest producing countries are not able to export due to border closures. The sharp decline in demand due to COVID-19 has caused the prices of several spices to drop. For instance, within a week the price of Indian cardamom dropped by 50%, and the price of Vietnamese pepper decreased by about 10%.[63]

Table 5. Exports from Caribbean Community (CARICOM) for product HS Codes 0904, 0908, 0910 Herbs and Spices to European Union (EU 28)

		CARICOM's exports to European Union 28		
Product code	*Product label*	*Value in 2017*	*Value in 2018*	*Value in 2019*
'0908	Nutmeg, mace and cardamoms	6 214	5 440	3 489
'0904	Pepper of the genus Piper; dried or crushed or ground fruits of the genus Capsicum or of the ...	1 191	970	1 134
'0910	Ginger, saffron, turmeric "curcuma", thyme, bay leaves, curry and other spices excluding pepper	595	384	552
0904+0908+0910	**Total Herbs and Spices**	**8 000**	**6 794**	**5 175**

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

[61] ITC Trade Map https://www.trademap.org/Index.aspx

[62] The fear of scarcity became widespread across Europe, so people started to buy huge amounts of shelf stable food, including condiments and spices. As an example, demand for spices used for baking, sweet spices such as cinnamon, all spice, ginger and nutmeg, surged.

[63] CBI "Supply of spices and herbs seriously affected by COVID-19": https://www.cbi.eu/news/supply-spices-herbs-seriously-affected-covid- 19No; Mintec Coronavirus insights: https://www.mintecglobal.com/top-stories/tag/coronavirus.

Herbs and Spices 1. Market share to European Union / share of standard-compliant

The European Union offers interesting opportunities for companies that export spices and herbs. The increasing interest in international ethnic cuisines combined with the healthy living trend offers opportunities for exporters of CARICOM countries. European importers are also looking for high-quality and sustainably sourced spices and herbs, which can provide opportunities for suppliers interested in following production and sustainability standards.

More than 90% of imports from outside Europe come from developing countries. Virtually all the intra-European trade consists of re-exports of spices and herbs that originally came from developing countries.

While imports are likely to increase in the next years, growth in Europe is forecast to remain lower than in other regions worldwide, such as South America and South-East Asia, where economic growth is much higher and markets are expanding rapidly.

Global main exporters for HS codes 0904, 0908 and 0910 are the following:

- 0904: India, Viet Nam and China. Spain (European Union member) is the fourth but very far from the first three
- 0908: Guatemala is the outstanding world leader. Far behind are the Indonesia and India
- 0910: China leads followed by India, the Netherlands and Germany at a great distance

The European continent does not have suitable climate conditions to cultivate most spices and herbs. It depends heavily on imports from tropical and semi-tropical countries. Only some specific spices and herbs are produced in Europe, mainly in Eastern Europe but also in some Southern European countries. Romania, Hungary, Bulgaria and Spain are the leading producers within Europe, most notably because they produced dried paprika and chillies (genus capsicum), but some other spices are produced in these countries as well.

Production of dried herbs is also taking place in Europe, most notably in France, Italy and Greece. Parsley is the most popular dried herb; others are basil, bay leaves, celery leaves, chives, coriander, dill tips, chervil, fennel, juniper, marjoram, oregano, rosemary, sage, savoury, tarragon and thyme.[64]

Following the product perspective, ginger, uncrushed pepper, dried capsicum/pimenta, curcuma, cinnamon and cloves have the largest potential. These spices are thought to contribute to a healthy lifestyle and these imports will therefore continue to grow in the years ahead.

Nutmeg plays the most important role in CARICOM exports to the European Union.

Table 6. Exports from Caribbean Community (CARICOM) for product HS Codes 0904, 0908, 0910 Herbs and Spices to European Union (EU 28)

Product code	Product label	CARICOM's exports to European Union 28			% CARICOM's exports to European Union 28			% European Union 28's imports from CARICOM		
		Value in 2017	Value in 2018	Value in 2019	2017	2018	2019	2017	2018	2019
'0908	Nutmeg, mace and cardamoms	6 214	5 440	3 489	63.99%	61.53%	59.20%	4.87%	4.23%	2.29%
'0904	Pepper of the genus Piper; dried or crushed or ground fruits of the genus Capsicum or of the ...	1 191	970	1 134	36.42%	32.59%	33.67%	0.10%	0.10%	0.13%
'0910	Ginger, saffron, turmeric "curcuma", thyme, bay leaves, curry and other spices excluding pepper	595	384	552	8.54%	5.47%	7.56%	0.06%	0.04%	0.05%
0904+ 0908 + 0910	**Total Herbs and Spices**	**8 000**	**6 794**	**5 175**	**40.11%**	**36.08%**	**31.24%**	**0.35%**	**0.33%**	**0.25%**

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

64 CBI: What is the demand for Spices and Herbs on the European market? ; Exporting spices and herbs to Europe; https://www.cbi.eu/market-information/spices-herbs

Grenada is the exporter of nutmeg to the European Union market. Destination countries are basically the Netherland and Germany that together represent more than 90% of European Union market imports.

Table 7. List of exporting markets in CARICOM to European Union and List of importing markets in European Union from CARICOM for product HS Codes 0908 Nutmeg, mace and cardamoms

Importer countries	*2017*	*2018*	*2019*	*% of total 2019*
European Union (EU 28) Aggregation	**6 382**	**5 494**	**3 470**	**100%**
Netherlands	2 135	2 410	1 893	55%
Germany	3 180	2 686	1 305	38%
Estonia	121	136	149	4%
Others	946	262	123	4%

Exporter countries	*2017*	*2018*	*2019*	*% of total*
Caribbean Community (CARICOM) Aggregation	**6 214**	**5 440**	**3 489**	**100%**
Grenada	6 208	5 436	3 468	99%
Saint Vincent and the Grenadines	5		17	0%
Others	1	4	4	0%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

Nutmeg, neither crushed nor ground is the only product with a high volume and represents an important percentage (10.7%) of the total European Union imports of this product from the world.

Table 8. Exports from Caribbean Community (CARICOM) for product HS Codes 0908 Nutmeg, mace and cardamons to European Union (EU 28)

Product code	*Product label*	*CARICOM's exports to European Union 28*			*% CARICOM's exports to European Union 28*			*% European Union 28's imports from CARICOM*		
		Value in 2017	*Value in 2018*	*Value in 2019*	*2017*	*2018*	*2019*	*2017*	*2018*	*2019*
'090811	Nutmeg, neither crushed nor ground	5 162	5 060	3 206	83%	84%	72%	14.8%	17.3%	10.7%
'090821	Mace, neither crushed nor ground	329	233	139	83%	87%	36%	4.0%	2.9%	1.5%
'090812	Nutmeg, crushed or ground	722	99	82	25%	4%	9%	1.7%	0.3%	0.2%
'090822	Mace, crushed or ground	169	101	34	88%	56%	40%	2.1%	1.3%	0.3%
'090832	Cardamoms, crushed or ground	0	0	6	0%	0%	100%	0.0%	0.0%	0.1%
'090831	Cardamoms, neither crushed nor ground	0	0	0	-	-	-	0.0%	0.0%	0.0%

Jamaica is virtually the only exporter of HS0904 to the European Union. The German market receives more than half of the Jamaican exports and the rest goes to Estonia, the United Kingdom and the Netherlands.

Table 9. List of exporting markets in CARICOM to European Union and List of importing markets in European Union from CARICOM for product HS Codes 0904 Pepper of the genus Piper; dried or crushed or ground fruits of the genus Capsicum

Exporter countries	*2017*	*2018*	*2019*	*2019 % of total*
CARICOM Aggregation	**1 191**	**970**	**1 134**	**100%**
Jamaica	1 183	959	1 127	99.4%
Saint Lucia	8	2	7	0.6%
Others	0	9	0	0.0%

Importer countries	*2017*	*2018*	*2019*	*2019 % of total*
European Union (EU 28) Aggregation	**1 917**	**1 397**	**1 092**	**100%**
Germany	436	302	561	51.4%
Estonia	287	203	196	17.9%
United Kingdom	406	243	188	17.2%
Netherlands	659	639	144	13.2%
Others	129	10	3	0.3%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

HS Code 090421 is in practice the only product exported to the European Union.

Table 10. Existing and potential trade between CARICOM and EU 28 for products with HS Codes 0904 Pepper of the genus Piper, dried or crushed or ground fruits of the genus Capsicum

Product code	Product label	CARICOM's exports to EU 28			% CARICOM's exports to EU 28			% EU 28's imports from CARICOM		
		Value in 2017	Value in 2018	Value in 2019	2017	2018	2019	2017	2018	2019
'090421	Fruits of the genus Capsicum or of the genus Pimenta, dried, neither crushed nor ground	852	757	1.040	41%	41%	45%	0.51%	0.49%	0.61%
'090412	Pepper of the genus Piper, crushed or ground	310	123	86	41%	21%	15%	0.13%	0.07%	0.06%
'090411	Pepper of the genus Piper, neither crushed nor ground	28	25	8	8%	6%	2%	0.01%	0.01%	0.00%
'090420	Fruits of the genus Capsicum or of the genus Pimenta, dried or crushed or ground	0	0	0	0%	0%	0%	-	-	-
'090422	Fruits of the genus Capsicum or of the genus Pimenta, crushed or ground	0	65	0	0%	80%	0%	0.00%	0.03%	0.00%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

Jamaica and Suriname are the main exporters of HS0910 to the European Union. United Kingdom is the main destination market of CARICOM exports of HS0910 to the European Union.

Table 11. List of exporting markets in CARICOM to European Union and List of importing markets in European Union from CARICOM for Product HS Codes 0910 Ginger, saffron, turmeric "curcuma", thyme, bay leaves, curry and other spices

Exporter countries	2017	2018	2019	2019 % of total
CARICOM Aggregation	**595**	**384**	**552**	**100%**
Jamaica	350	205	241	44%
Suriname	162	61	192	35%
Dominica	59	32	56	10%
Guyana	6	48	47	9%
Grenada	1	2	5	0.9%
Others	17	36	11	2.0%

Importer countries	2017	2018	2019	2019 % of total
(EU 28) Aggregation	**595**	**384**	**552**	**100%**
United Kingdom	301	245	299	51%
France	75	47	69	13%
Netherlands	111	25	51	19%
Belgium	0	0	38	0%
Germany	0	0	5	0.0%
Others	108	67	90	18.2%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

Table 12. Existing and potential trade between CARICOM and the European Union (EU 28) for product HS Codes 0910 ginger, saffron, turmeric "curcuma", thyme, bay leaves, curry and other

Product code	Product label	CARICOM's exports to European Union 28			% CARICOM's exports to European Union 28			% European Union 28's imports from CARICOM		
		Value in 2017	Value in 2018	Value in 2019	2017	2018	2019	2017	2018	2019
'091099	Spices (excluding pepper of the genus Piper, fruit of the genus Capsicum or of the genus Pimenta…	496	281	448	13.8%	7.5%	11.1%	0.2%	0.1%	0.1%
'091011	Ginger, neither crushed nor ground	60	36	53	44.4%	52.2%	23.8%	0.0%	0.0%	0.0%
'091030	Turmeric "curcuma"	1	2	37	0.1%	0.1%	2.2%	0.0%	0.0%	0.1%
'091012	Ginger, crushed or ground	22	42	13	4.3%	15.4%	2.2%	0.1%	0.1%	0.0%
'091091	Mixtures of different types of spices	10	23	1	10.6%	17.8%	0.6%	0.0%	0.0%	0.0%

Unit: Thousands of United States dollars. *Sources:* ITC calculations based on UN COMTRADE and ITC statistics.

Herbs and Spices 2. Concerns in the sector and key sustainability issues

Unfortunately, beyond the COVID-19 crisis, other potential disasters are causing major risks to spice and herbs supply chains. As an example, the devastating impact of cyclones on nutmeg plantations in Grenada, or the effects of high temperatures causing spike shedding in black pepper.

The possible consequences of climate change in production regions are something to take into account. Helping spices and herbs farmers to improve their crop management includes water conservation, irrigation, organic management, planting of shade trees and situation-specific cropping systems. Generally speaking, climate-smart production systems should be supported. Stimulating spice production in an agroforestry setting, provide farmers with a more diversified source of income and may help preserve biodiversity. They could be an excellent buffer between natural ecosystems and forms of land use with little room for biodiversity. Spices such as cassia/cinnamon, nutmeg and cloves can provide diversity in such systems. Meanwhile, other spices, such as pepper, grow well in their shade. In this sense, there are very successful experiences around the world that can prove to be very inspiring.[65]

In the production of spices, smallholder farmers often face poverty and food insecurity. Depending on the spice and country around the world, the production of spices itself often faces labour issues (women, migrant and/or child labour) (Food and Agriculture Organization, 2020) and environmental issues, particularly excessive agrochemical use. Poor agricultural practices, lack of adequate processing facilities and growers switching to high-value crops or jobs, have caused an increase in the number of concerns around spices production especially over long-term supply, food safety and traceability. Sustainability issues such as uncontrolled pesticide use, poor wastewater management and indecent labour conditions are also part of this sector. Avoiding all these bad practices that are common in the main producing countries[66] and being certified, can be a good strategy to differentiate the products of the CARICOM countries.

The interest in sustainably produced spices[67] is growing. For many front-runners, sustainable sourcing has proved to be important, increasing companies' credibility and position in the supply chain.

European buyers have increased attention on corporate responsibilities regarding the social and environmental impact of business, and this trend is expected to keep growing in the future. European buyers may expect their suppliers to comply with their codes of conduct regarding social responsibility. CARICOM producers can communicate their efforts in the area of climate-smart production or agroforestry with European clients. This may give their products a clear added value.

Without sustainable practices, some well- known spices could face an uncertain future. These could be the cases of:

- Black Pepper: the most widely used spice in the world is manufactured in different countries with different farming standards. However, significant fluctuations in its trading price have made it an unreliable income source for its farmers.
- Cardamom: heavy flooding in production regions in India have caused a large supply shortage, damage to the crops, raising prices and in some cases, irreversible environmental damage.
- Cumin: in high demand for the past few years, particularly as an export item bound for Europe. However, climate change has affected crop growth and resulted in short supply. Hence, cumin has become more expensive and sustainability standards have taken a back seat to increasing supply growth.

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[65] Initiatives to make spice production more climate-flexible and biodiversity-friendly: white pepper production in Indonesia, vanilla farming in Madagascar, black pepper, cinnamon and vanilla farming in Tanzania and nutmeg production in Grenada.

[66] UNRISD Revisiting Sustainable Development: UNCTAD https://bit.ly/3cFblCF ; Sustainable Spice Initiative https://bit.ly/2MXVCnu

[67] Sustainable Spices Initiative

Herbs and Spices 3. VSS in practice

Legal requirements for spices and herbs on the European market is on food safety and quality, and especially on avoiding contamination. The Caribbean exporters of spices and herbs entering the European market should comply with legal requirements regarding the following:

Food safety – hygiene, traceability and control

The General Food Law[68] is the legislative framework regulation for food safety. Besides this law to guarantee food safety and to allow appropriate action in cases of unsafe food, spices and herbs must increasingly be traceable throughout the entire supply chain. This implies awareness of where the products come from. To strengthen the implementation of this law there is a tool for Hazard Analysis Critical Control Points (HACCP)[69] and if European companies or authorities find out safety is not guaranteed, they will take the product off the market and register in the European Union's Rapid Alert System for Food and Feed.[70]

Repeated non-compliance, spices and herbs from certain Asian countries have been frequent over the past years. At the moment, spices and herbs are not subject to additional controls but frequent problems with excessive levels of aflatoxins and pesticides, are likely to make controls become a fact.

Avoid contaminants and substances that may be present in spices and herbs as a result of the various production stages: growing, processing, packaging, transport and storage. Common forms of contamination are pesticides,[71] mycotoxins, salmonella, polycyclic aromatic hydrocarbons and food additives.

Pesticides

The European Union[72] has set maximum residue levels (MRLs) for pesticides in and on food products. A problem for European buyers is that a large share of spice and herb crops worldwide do not comply with European Union limits.[73] As a result, this issue is very important for them and controlled use of pesticides by farmers is crucial. This also means that farmers at all times should stay in close contact with their European buyer on which pesticides and what amounts to use to comply with European limits. There is specific legislation for additives[74] and flavourings.[75]

General requirements on packaging and clear labelling[76] for both bulk and pre-packed consumer products. Product labels should inform about composition, manufacturer, storage methods and preparation.

Apart from legal requirements many players often request extra guarantees in the form of certification, like the Voluntary Sustainability Standards (VSS). Requirements by the retail sector and consumers regarding food safety and traceability are becoming stricter.

European spices and herbs companies are subject to stringent checks, as standards are becoming more detailed and demanding and compliance needs to be demonstrated by certification. Many buyers in the

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68 General Food Law https://ec.europa.eu/food/safety/general_food_law_en. Others: EUR-Lex; European Union Rapid Alert System for Food and Feed

69 Hazard Analysis Critical Control Points (HACCP)

70 European Union's Rapid Alert System for Food and Feed

71 General Food Law https://ec.europa.eu/food/safety/general_food_law_en. Others: EUR-Lex; European Union Rapid Alert System for Food and Feed

72 General Food Law https://ec.europa.eu/food/safety/general_food_law_en. Others: EUR-Lex; European Union Rapid Alert System for Food and Feed

73 European Union DG Trade. Access2Markets to Trade Helpdesk users. https://bit.ly/2ZFx85A

74 additives

75 flavourings

76 European labelling legislation; allergen legislation; https://trade.ec.europa.eu/tradehelp/

European Union (for example, traders, food processors and retailers) require the implementation of a HACCP-based food safety management system.[77]

As mentioned before, the European consumers want to know about the social and environmental impact of the products. Common requirements for exporters include signing a suppliers' code of conduct in which you declare that you responsibly do your business. This procedure means that you (and your suppliers) respect local environmental, stay away from corruption, the correct use of pesticides, child labour, healthy and safe working conditions, and fair payment.[78]

Voluntary Sustainability Standards on the European market could offer a competitive advantage and make finding a buyer easier

Sustainable certification in the spices and herbs sector is still a niche market. However, European demand for sustainably produced food products continues to increase and is expected to grow in the future. There is a growing market for certified products with well-known consumer logos. A price premium needs to be paid for spices and herbs with a certificate to compensate for certification costs. These premiums are paid on some niche markets, but in large parts of the mainstream market, buyers are unwilling to spend more.

Each certification addresses different issues (social, environmental, economic) and serves different niches. Social and environmental issues are increasingly being integrated into various certifications.[79] Most common certifications are the following:

- **Rainforest Alliance and UTZ:** Rainforest Alliance and UTZ are mainstream sustainability schemes in which social and environmental issues are addressed. In January 2018, the two organizations merged, forming one of the biggest.

  Although interest in Rainforest Alliance from buyers is reportedly growing, the volume of spices and herbs that are Rainforest Alliance certified is still relatively low. The main reason is that food processors cannot certify composite processed food products according to a Rainforest Alliance standard.

  In contrast, composite food products with Organic and Fair-trade certification are sold on the European market. Rainforest certified spices and herbs are therefore hidden ingredients with no added marketing value for food processors. Therefore, buyers are less willing to pay price premiums for Rainforest Alliance certified products.

- **Organic:** Organic herbs and spices are produced and processed using natural techniques. To market herbs and spices in the European Union as organic, they must be grown using organic production methods. Some importers are opened to pay more for organic herbs and spices because they consider this method better for the environment and healthier for the consumer.

  Although relatively small, the market for organic products in Europe is still growing and will continue to grow in the future. With this future growth, stricter organic regulation and testing are also expected. Demeter[80] is a biodynamic certification label and regarded as the highest grade of organic farming in the world.

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[77] Main food safety management systems in the European Union are: BRC (British Retail Consortium); IFS (International Food Standard); FSSC 22000 (Food Safety System Certification); SQF (Safe Quality Food Standard). All of them recognised by the Global Food Safety Initiative (GFSI).

[78] European buyers include these issues in their supplier audits. Common standards are: SEDEX, ETI and BSCI.

[79] ITC explanation and comparison of VSS: https://www.standardsmap.org/standards_intro

[80] Demeter: Certification is difficult to acquire and must be renewed annually. Currently, around 500 producers of spices and herbs worldwide are Demeter certified.

- **Fair-trade certification:** Herbs and spices traded according to fair-trade principles ensure a certain price and premium for smallholders. This should help them make a living. There are good positive experiences of Fairtrade[81] and FairWild[82] standards, for spices and herbs collected in the wild.

  Although growing, the market for fair-trade certified spices and herbs is still small. The largest share is sold as spices and herbs in the retail channel. The largest user of spices and herbs, the food processing industry, is currently not a big buyer of certified spices and herbs. There is increased cross-over between organic and fair trade.

  A large share of the fair-trade products is also certified organic. Fair trade has different standards depending on the place in the supply chain.[83]

- Additionally, **Gluten-free labelling**[84] and **Allergen-free**[85] spices and herbs are increasingly important topics within the European spices and herbs market. Although herbs and spices do not contain gluten naturally, contamination can still take place due to seasonings that contain gluten. There is no clear European Union regulation on this and each country has its interpretation and sets different maximum levels. Particularly in countries where the requirements are strict as the Netherlands, it is expected that buyers will pass part of the responsibility to their suppliers or at least work together with their suppliers to make sure that issues such as cross-contamination are limited to a minimum. This situation that is a barrier can become an opportunity and allergen-free spices and herbs turn into an interesting niche market.

Herbs and Spices 4. VSS market review in this sector – Regional Importance/pricing and premium

The main importer markets of herbs and spices within Europe are Germany, France and the Netherlands. The United Kingdom and Spain, as well, are important markets with substantial values of imports from developing countries.

On average, almost 80% of these European imports came from developing countries, while imports from within Europe reached 20%.[86] Exports of European countries predominantly go to other European countries.

Most of the small importing countries in Europe come from the Central and Eastern European region. Of these smaller markets, Poland is the largest importer of herbs and spices from developing countries. Despite its smaller size, it might be substantial enough to make it worthwhile to explore opportunities to export from CARICOM to these countries directly, as they may be somewhat less demanding and, above all, there are fewer competitors than in countries with larger consumption volumes in Europe.

Competition from local production is limited. The most important producing countries are Bulgaria, Romania and Hungary mainly for pepper, and also anise, badiane, fennel and coriander. Spain also produces chillies and peppers.

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81 Fairtrade

82 FairWild

83 For traders and processors the Smallholder Producer Standard for Spices and Herbs and Trade Standard are used. The Standard for Herbs and Herbal Teas for Hired Labour is specifically for herbs destined for herbal teas grown by producers with numerous workers.

84 European Commission Regulation (EU) no. 828/2014 for harmonised requirements for the provision of information to consumers on the absence or reduced presence of gluten in food. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014R0828

85 Pre-packed food products should state clearly whether they contain allergens: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32011R1169

86 ITC Trade Map. *Trade statistics for international business development*. 2018.

The products from developing countries with the highest potential on the European herbs and spices market are ginger, uncrushed pepper, dried capsicum/pimenta and curcuma.

Organic certified herbs and spices can be interesting too as already mentioned. Chillies, ginger and even garlic are also the most relevant spices in the organic market segment and are expected to grow, along with the trend of the fast-growing organic food market. The medicinal properties of spices could be a segment to be developed. Mainly those from organic farming, since those with pesticides are not well perceived and are not associated with the characteristics that contribute to healing.

If the Caribbean producers want to increase their value-add of this offer, they have to consider the European-based companies as their strongest competitors. They produce value-added herbs and spices products under their brand or for private labels.

The European processing industry adds value to imported spices and herbs through processing, packing and branding. Processing steps include cleaning, sterilization, grinding, blending and packing. They perfectly know the consumer taste preferences and buyer requirements, and they take advantage of their proximity to their buyers and a strong reputation among buyers of producing unmodified products that comply with European food safety requirements.

However, processing costs in Europe are relatively high, thus, this is the strongest advantage for Caribbean companies to supply similar quality products at competitive prices.[87]

The main suppliers of the herbs and spices to the European Union markets are from Asia. China is the main supplier of crushed/ground spices and herbs, mainly paprika and ginger. India, the largest supplier of all types of mixtures to Europe,[88] is the second-largest supplier of crushed/ground spices and herbs. Other suppliers are Pakistan for spice and curry mixtures, Indonesia for crushed and ground spices, and smaller but significant Viet Nam and Thailand.

It is particularly difficult to enter the market with consumer-packaged herbs and spices because it is dominated by European companies that set the standards for cleanliness, quality, sterilization, branding, marketing, packaging and price.[89]

Regarding the distribution channels to be used to put value-added herbs and spices on the European market, buyers of value-added herbs and spices have a strong negotiating position, especially large retailers. There is an opportunity with relatively small buyers from niche market segments, such as ethnic food channels. These require smaller volumes more suited to the volume of the Caribbean producer, and they may be more willing to buy directly from developing countries.

Herbs and Spices 5. Recommendations

The Caribbean exporters should know what the trends in Europe are, in order to know how to take profit of the different opportunities that can be adapted to their production. Some of the main trends are the following:

- Popularity of ethnic cuisines drives demand for new spices and spice blends, due to the increasing popularity of ethnic cuisine and healthy foods and the increasing consumption of convenience, processed and ready-to-eat dishes. HS codes used for blends can be “091091 – Mixtures of different types of spices”, and also “09109999 – undefined spices”. None of these codes clearly describe which specific spices or blends are measured, except curry.
- Spices are increasingly promoted as a superfood with health benefits or salt replacers.

[87] Successful experiences entering European markets with consumer-packaged spices and herbs: Laziza and Shan Foods from Pakistan.

[88] Indian company selling ground and mixed spices in Europe: M.V. Spices.

[89] Source of consumer-packaged spices and herbs prices on the market: https://www.orientalwebshop.nl/?___store=en

- Sustainable sourcing of spices is becoming one of the leading trends. Sustainable Development Goals[90] covers not only environmental, but also social and ethical issues. VSS can be a very useful tool.[91]
- Spices are used to create meat substitutes. European consumers increasingly use protein products based on soy, wheat and pea protein as an alternative to meat. Salt, peppers (white, black and red), garlic, onion, celery powder and other savoury spices will contribute their familiar taste to plant-based meat products.
- Turmeric[92] (curcuma) is advancing on the European market as a superfood with plenty of health benefits, although not always based on scientific research.
- Chilli spices combinations are in demand. While consumers are still incorporating heat into their consumption patterns, heat is taking on more complexity, such as sweet heat combinations or ethnic cuisines that combine a variety of herbs and spices with some type of chilli pepper.
- Increasing food safety and anti-modification requirements.
- New origins are appearing on the supply side of the market. An opportunity for Caribbean producers. The tropical climate allows migration of the spices and herbs production across the globe.
- Packaging innovations appearing on the market: switch to sustainable materials,[93] smaller portions in consumer packaging.
- Demand for organic spices is increasing: The demand for organic spices is expected to grow by 5-7% annually.[94] Currently, India, China and Viet Nam are the key exporters of organic spices. The organic spices segment is dominated by commodities like chilli, ginger and garlic.
- Fair Trading Practices are becoming a semi-official European request.[95]
- Taking into account these trends, the potential Caribbean exporter should think about the best strategy to reach the market identifying potential buyers among the many players in the sector.
- Before searching for buyers, it is important to define the product in measurable terms, such as product description, exact quality, quantity, relevant technology, certificates, prices and delivery terms, and to create a unique selling proposition.
- Specialised importers are the most dominant type of buyers within the herbs and spices sector. They are particularly relevant for new suppliers, as supplying the retail segment directly is very demanding and requires a lot of quality-related and logistical investments. However, for the well-equipped and price competitive producers, packing for private labels can be an option. Still, private label packing is often done by importers that make contracts with retail chains in Europe.[96]

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90 Sustainable Development Goals.

91 SAN-Nestlé Spices Responsible Sourcing Partnership programme for chilli, coriander, cumin and turmeric.

92 The British online health food store Healthy Supplies announced that their sales of turmeric have dramatically increased by 765% over the past two years.

93 Nov 2018, more than 250 organisations signed the new commitment to eliminate plastic when it is problematic or unnecessary and to shift to reusable packaging. By 2025, they plan to make all plastic packaging either reusable, recyclable or compostable.

94 ITC Trade Map. Trade statistics for international business development. 2018

95 The European Union is officially progressing toward fairer sourcing of food products. On 12 April 2019, the European Parliament formally adopted the Unfair Trading Practices Directive.

96 Examples of large European spices and herbs companies include: Fuchs Group (Germany), Solina (France), Albarracin (Spain), Nedspice (the Netherlands), British Pepper and Spice (the United Kingdom), European Spice Services (Belgium), Sabater (Spain), Husarich (Germany), Euroma (the Netherlands), Santa Maria (Sweden/Finland), Isfi (Belgium) or Saran Enterprises (Poland).

- Another way to get closer to the European Union market is to be present on the internet with a simple but clear and attractive website to make a selling proposition as unique as possible visible on the internet. Other instruments are attending trade fairs[97] to find buyers, membership of spices and herbs associations,[98] use of company databases,[99] business matchmaking platforms,[100] and looking for organizations that provide export support.[101]

4.1.2 Cocoa

Sustainability has become a key factor in the European cocoa market, both for consumers and for every value chain player. The growing demand makes Europe the most important market for certified cocoa in the world, especially in Western Europe where the most important import markets can be found. Large chocolate companies often participate in the sustainable cocoa market with their sustainability programs. Governments' procurement policies in Europe have also added to the demand for certified cocoa.

Almost 90% of the cocoa Caribbean exports to the European Union are cocoa beans (whole or broken, raw or roasted),[102] which corresponds with HS Code 1801. The processing of cocoa beans at the origin countries is a highly debated topic on the European chocolate market. Although the manufacture of semi-finished cocoa products is interesting from the perspective of developing countries, the European market for this type of local value addition is still limited. European companies are looking into processing at the origin, but mostly under their supervision. The exigence to process locally cocoa products is high and requires proper quality management, long-term commitment and close cooperation with European companies unless a unique offer worldwide is made. Main cocoa bean derivatives are cocoa paste, cocoa butter and cocoa powder.

As may be noted, the main cocoa-exporting countries are not true producers but transformers of cocoa beans. The most importing countries in Europe, Germany, the Netherlands and Belgium, are also the main exporters because its chocolate processing and manufacturing industry is strong, requiring high volumes of cocoa beans Côte d'Ivoire and Ghana are the main producers and exporters of cocoa beans. Europe imports more than 2.5 million tonnes per year and has been on a clear upward trend in recent years. Asia and beyond, America, are well below the European figures.[103]

Cocoa 1. Market share to European Union / share of standard-compliant

Europe is an interesting market not only for being the world's largest chocolate manufacturer and exporter but also for being a very diverse itself. European importers buy cocoa beans from different origins and qualities to supply the broad demand of its chocolate and cocoa industry. Across Europe, the exporter can find opportunities for both mainstream and speciality cocoa.

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97 Trade fairs: Anuga; SIAL; Spices and Herbs Global Expo; Food Ingredients Europe ; Biofach; Natural & Organic Products Europe; PLMA;Alimentaria; FOODEX Japan; World Food Moscow; is Food Africa (Cairo, Egypt), and German trade fair organiser fairtrade Messe organises

98 European Spice Association (ESA) - list of members; World Spice Organisation (WSO); Culinaria Europe – member associations; Association of the German Spice Industry - spice processing and refining companies ; Dutch Spice Trade Association - the list of member companies; Seasonings and Spice Association - members list; Association of Processors and Packers of Spices and Seasonings (AEC) in Spain - spice member companies; Waren-Verein

99 The most popular company databases relevant for spices and herbs: EUROPAGES -condiments and spices; Wer liefert was; Organic-Bio; Food Companies ; Kompass

100 Online marketplace for organic food: GreenTrade.

101 Centre for the Promotion of Imports from developing countries (CBI); The Swiss Import Promotion Programme (SIPPO); The Import Promotion Desk (IPD); International Trade Centre (ITC); Enterprise Europe Network (EEN)

102 See Table 13: Exports from CARICOM to EU 28. Product: HS Code 18 Cocoa and cocoa preparations; Code 1801 Value in 2019. Cocoa beans. Sources: ITC calculations based on UN COMTRADE and ITC statistics

103 Sources: ITC calculations based on UN COMTRADE and ITC statistics; CBI Market Information Trade statistics. "What is the demand for cocoa on the European market?"

Caribbean cocoa exports to the European market represent a very small share of total European procurement. Regarding HS1801 Cocoa beans, they are well below 0,2 % as shown in Table 13. However, this amount represents about half of the total exports of the Caribbean to the global market. This should be an opportunity to go deeper into the huge potential of the European Union market.

Table 13. Exports from CARICOM to EU 28 for product HS Codes 18 Cocoa and cocoa preparations

Product code	Product label	CARICOM's exports to European Union 28			% CARICOM's exports to European Union 28			% European Union 28's imports from CARICOM		
		Value in 2017	Value in 2018	Value in 2019	2017	2018	2019	2017	2018	2019
'1801	Cocoa beans, whole or broken, raw or roasted	9 162	6 709	7 980	71.31%	54.54%	46.75%	0.15%	0.12%	0.14%
'1806	Chocolate and other food preparations containing cocoa	569	629	1.004	4.41%	5.34%	7.73%	0.00%	0.00%	0.01%
'1805	Cocoa powder, not containing added sugar or other sweetening matter	0	1	11	0.00%	2.33%	11.34%	0.00%	0.00%	0.00%
'1804	Cocoa butter, fat and oil	98	2	2	83.76%	33.33%	28.57%	0.00%	0.00%	0.00%
'1802	Cocoa shells, husks, skins and other cocoa waste	0	0	0	0.00%	0.00%	-	-	-	-
'1803	Cocoa paste, whether or not defatted	0	12	0	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%
18	**Total Cocoa**	**9 829**	**7 353**	**8 997**	**37.73%**	**30.45%**	**29.73%**	**0.04%**	**0.03%**	**0.03%**

Unit: Thousands of United States dollars. *Sources:* ITC calculations based on UN COMTRADE and ITC statistics.

Of their nine cocoa-exporting countries to the European Union, the three that stand out the most are Haiti, Grenada and Trinidad and Tobago, representing 84% of exports to Europe. The Netherlands, France and Germany are the most frequent destinations of Caribbean cocoa.

Table 14. List of exporting markets in CARICOM to European Union and List of importing markets in European Union from CARICOM for productHS Code 18 Cocoa and cocoa preparations

Exporter countries	2017	2018	2019	2019 % of total
CARICOM Aggregation	**9 827**	**7 352**	**8 996**	**100%**
Haiti	3 139	2 266	4 207	46.8%
Grenada	1 452	2 612	1 986	22.1%
Trinidad and Tobago	1 408	1 107	1 532	17.0%
Jamaica	438	558	472	5.2%
Belize	132	375	273	3.0%
Dominica	3 165	233	261	2.9%
Saint Vincent and the Grenadines	3	115	194	2.2%
Others	82	86	71	0.8%

Importer countries	2017	2018	2019	2019 % of total
(EU 28) Aggregation	**9 827**	**7 352**	**8 996**	**100%**
Netherlands	3 653	2 460	3 309	36.8%
France	4 546	2 095	1 897	21.1%
Germany	762	1 061	1 401	15.6%
Italy	33	568	946	10.5%
Ireland	471	304	945	10.5%
Belgium	167	194	257	2.9%
United Kingdom	140	388	240	2.7%
Others	0	0	1	0.0%

Unit: Thousands of United States dollars. *Sources:* ITC calculations based on UN COMTRADE and ITC statistics.

Cocoa 2. Concerns in the sector and key sustainability issues

The cocoa sector is suffering from several interconnected problems: the over-aged tree stocks, the effects of pest infestation, the lack of agricultural professionalism, and what is even more important, the working and living conditions of cocoa farmers and their families are extremely difficult. Extreme poverty is a threat to Cocoa sector and sustainability as the own World Cocoa Foundation underlines.[104]

Around 90 per cent of cocoa is grown by small farmers with an average area under cultivation from two to five hectares.[105] Other challenges include abusive child labour, which is a consequence of poverty, the loss of forest land due to cocoa cultivation, and the observance of human rights along the supply chain.

The average ageing of cocoa trees leads to a significant decline in yields. Together with the effects of rising temperatures in major producing countries in Africa, might undermine production levels and encourage shifts in production sites and further deforestation (Götz, S. et. al., 2016).

To fight these conditions of deep injustice on cocoa farms, some private and multi-stakeholder initiatives[106] have been formed within the cocoa sector aimed at creating greater economic wealth and fairness, supporting social justice in the producing countries, as well as social responsibility and ecological sustainability along the global value-added chain.

To this end, VSS are increasingly being applied in cocoa production. As demand for raw cocoa will continue to rise, the sector needs to promote trainings, improved production methods, increase productivity and promotion of diversification. A consistent guarantee of high-quality cocoa and the proper volume that the market demands, will help to secure the long-term livelihoods of farmers. If properly implemented as part of effective sustainable development strategies, VSS can be an essential catalyst to improve the livelihoods of cocoa farmers and contribute to poverty alleviation in cocoa-producing countries regardless of their development status. With the rapid proliferation of VSS in the cocoa sector, the volume of sustainably produced cocoa is growing faster than conventionally produced cocoa, in addition to signs of growth in VSS-compliant production within the lower degree of development.[107]

Cocoa 3. VSS in practice

Certified cocoa refers to cocoa that has met the standards of a certification scheme, related to environmental, social and/or economic aspects, and has been certified by a certification body. Certification shows whether the various stakeholders in a supply chain meet the environmental, social and economic standards required. Certification schemes are not directed to the quality of cocoa, so the buyer can find certified cocoa both on the bulk and speciality market. Certification on the bulk market is increasingly used as an entry requirement, due to stricter sustainability protocols of manufacturers and retailers in Europe. This makes it increasingly difficult for non-certified suppliers to access the European market.

Speciality cocoa is associated with niche certification segments, such as fair-trade and organic cocoa. The main reasons for obtaining certification for a player along the value chain are:

- Final consumer demand
- Ensuring transparency and traceability

[104] World Cocoa Foundation: https://www.worldcocoafoundation.org/focus-areas/farmer-livelihoods/

[105] https://www.kakaoforum.de/en/our-work/challenges-in-the-cocoa-sector/.

[106] The VOICE Network, a global network of organisations in the cocoa sector, recently rejected certification as a long-term solution to poverty and sustainability. In general, third-party certification schemes have received a great deal of criticism over the years. In response, certification schemes are constantly finding ways to stay relevant. New recent developments include the release of the new ISO standard for sustainable and traceable cocoa in May 2019. In addition, Fairtrade raised its Minimum Price and Premium for cocoa late 2018, while

[107] According to the Global Market report: Cocoa released by the International Institute for Sustainable Development (IISD). https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf

- Improving brand reputation
- Adding credibility to their sustainability claims

VSS emerged in the cocoa sector over 20 years ago. These standards are intended to provide consumers with more sustainable cocoa purchasing options. VSS offer producers a label or means to distinguish their products in the marketplace, so that consumers can identify them and their attributes more easily. To earn that label or distinguishing feature, the producer must adopt specified practices that are more socio-economically equitable and environmentally sound than conventional production and have those practices assessed and verified. Several companies that purchase cocoa have relied on VSS compliant cocoa to meet their sustainable sourcing commitments, improve the reliability of their cocoa supplies and mitigate reputational risks. Doing so provides them with a competitive edge on multiple levels. In particular, VSS labels have allowed companies to differentiate their products in the marketplace, where they aim to appeal to consumers who want to address sustainability challenges such as income disparities, child and forced labour and deforestation through their purchase decisions.

The majority of VSS-compliant production comes from Africa, at approximately 75%, (led by Côte d'Ivoire, Ghana and Nigeria) with some important volumes coming from the Dominican Republic, Ecuador, Indonesia and Peru (Julia L., et al., 2018). VSS can be an important catalyst to improve the livelihoods of cocoa farmers and contribute to poverty alleviation in cocoa-producing countries.

Within the sector, sustainably produced cocoa is also expected to grow faster than conventionally produced cocoa, with the rapid proliferation of VSS in the sector. In 2016, 29% of the market was made up of VSS-compliant cocoa while cocoa that was potentially VSS-compliant represented 18% and conventional cocoa production accounted for 53% of the market (IISD, 2019).

Table 15. Leading international certification schemes for cocoa

Label	*Area harvested (hectares)*	*Change 2013/2017*	*Change 2016/2017*	*Share of total area havested*
Fairtrade	1 170 612	174%	62%	10%
Organic	362 800	74.1%	13.3%	3.1%
Rainforest	740 822	-11.6%	7.0%	6.3%
UTZ	2 706 596	125.7%	29.1%	23.0%

Source: ITC Sustainability Map Trends.

- **Fairtrade:**[108] This is a certification, which requires adherence to a set of environmental and social standards. Fairtrade mostly focuses on cooperatives made up of smallholder farmers. Products that carry the Fairtrade label indicate that producers are paid a Fairtrade Minimum Price. The current minimum prices and premiums for cocoa, whether organic certified or conventional, can be found in the Fairtrade Minimum Price and Fairtrade Premium Table.[109]

  Regarding the market for Fairtrade-certified[110] cocoa, the largest in the United Kingdom. The United Kingdom registered general Fairtrade retail sales of over €2.0 billion.[111] Sales are expected to keep growing as in the case, for instance, driven by Waitrose commitment,[112] a British supermarket chain, to only source Fairtrade cocoa by the end of 2019 for its private label products.

[108] Fairtrade International: https://www.fairtrade.net/

[109] Fairtrade Minimum Price and Fairtrade Premium Table: https://www.fairtrade.net/standard/minimum-price-info

[110] Fairtrade importers: https://www.flocert.net/about-flocert/customer-search/

[111] Fairtrade https://www.fairtrade.net/library/2018-19-annual-report-choosing-a-fairer-future-through-trade

[112] Waitrose https://www.edie.net/news/7/Waitrose-pledges-to-source-100--Fairtrade-cocoa-by-the-end-of-2019/

Germany is the second-largest Fairtrade market in Europe. Fairtrade represents about 12% of total German cocoa imports where Fairtrade-certified in 2019 reached 79000 Tons.[113] The market for Fairtrade cocoa in Germany is expected to keep growing in coming years, partly driven by the agreement in 2018 of to only use Fairtrade-certified cocoa beans for its private-label chocolate products.

Sales of Fairtrade cocoa in Europe are growing in general. German discounters such as Lidl and Aldi, which are present in most European countries, agreed to increase the use of Fairtrade cocoa in their private label chocolate products as they did in the German market. Industry sources also indicate that the demand for Fairtrade-certified cocoa in combination with organic certification is growing. There has already been a steep increase in cocoa beans sales that are both organic and Fairtrade certified.[114]

- **Organic:** This certification aims to sustain the health of people, soils and ecosystems. Certification requires cocoa to have been grown without the use of synthetic nutrients, in addition to requiring the use of methods and practices for plant protection and soil conservation. In the European Union, organic certification is laid down in the legislation regarding products from organic production.[115]

  The market for organic-certified[116] cocoa Europe accounts for 36% of the global organic products consumption.[117] The popularity of organic certification for cocoa in specific countries follows the general market for organic products in Europe. The largest national are Germany (28% of the European market), France (20%) and Italy (8%). In France, the organic chocolate market has shifted from a niche to a mainstream market as in Germany previously, and in both markets, this trend is expected to become stronger.

  Cocoa confectionery products like chocolate, are expected to be the fastest-growing categories in organic food sales. Also, industry sources indicate that organic certification is growing among high-quality and specialized chocolate makers.

  Some of the most important players on the European organic chocolate market include Green & Black's United Kingdom and Alter Eco from France.

- **Rainforest Alliance:**[118] This is the most commonly used mainstream certification scheme for cocoa. In 2018, Rainforest Alliance merged with UTZ.[119] In 2019 a new single standard was launched, aimed at achieving a greater social, environmental and economic impact. Rainforest Alliance/UTZ works with both small and large farms and is focused on conserving biodiversity and supporting sustainable livelihoods by transforming land-use and business practices.

  The market for Rainforest Alliance-certified cocoa (merged with UTZ) has its largest cocoa market in Europe. Europe accounts for over 80% of its licensed supply chain actors.[120] Most Rainforest/UTZ-

[113] Fairtrade Germany. https://www.fairtrade-deutschland.de/produkte-de/kakao/hintergrund-fairtrade-kakao.html

[114] Fairtrade Foundation. https://www.fairtrade.org.uk/media-centre/news/uk-consumers-continue-to-embrace-fairtrade-as-market-grows/; CBI "The market for Fairtrade-certified cocoa": https://www.cbi.eu/market-information/cocoa-cocoa-products/certified-cocoa/market-potential; Research Institute of Organic Agriculture (FiBL) and IFOAM – Organics International: "The World of Organic Agriculture 2020": https://www.fibl.org/en/shop-en/5011-organic-world-2020.html

[115] European Union sets out rules and regulations governing the production, distribution and marketing of organic products in the European Union: https://ec.europa.eu/info/food-farming-fisheries/farming/organic-farming/organics-glance#legislation

[116] Specialized importers in organic products: https://www.organic-bio.com/en/directory/

[117] Organic: https://shop.fibl.org/CHen/mwdownloads/download/link/id/1093/?ref=1

[118] Rainforest Alliance https://www.rainforest-alliance.org/. Rainforest Alliance and UTZ merged in 2018 to form a stronger, more effective organisation together. These developments bring opportunities for cocoa growers and exporters and shows how important it is to certify your cocoa according to market demand and buyer requirements, and to keep up to date with sustainability initiatives.

[119] https://utz.org/

[120] UTZ: https://utz.org/wp-content/uploads/2018/06/UTZ_Cocoa-Statistics-Report-2017.pdf

certified cocoa actors are found in Germany, followed by the Netherlands, Belgium, Italy and the United Kingdom.[121]

Generally speaking, the most certified operators are chocolate confectionery manufacturers, such as Barry Callebaut and Nestlé, and traders like August Töpfer & Co., Daarnhouwer and Dutch Cocoa.

There are smaller certification schemes for cocoa producers and exporters like Small Producers' Symbol (SPP) (IISD, 2019),[122] a fair-trade certification for organised small fair-trade producers/cooperatives, or Demeter (IISD, 2019),[123] is a private organic certification organisation, focused on biodynamic agriculture.

Besides some of the big companies in the sector have developed their sustainability commitments in addition to sustainability certification, such as Nestlé: The Nestlé Cocoa Plan;[124] Mars: Cocoa for Generation;[125] Mondelez: Cocoa Life;[126] Lindt & Sprüngli: Farming Program;[127] Barry Calleaut: Forever Chocolate;[128] Cargill: Cocoa Promise.[129]

Cocoa 4. VSS market review in the sector. Regional importance/pricing and premium

The cocoa sector is expected to grow annually at 7.3 % from 2019 to 2025. However, there are important risks on the cocoa supply side that can limit this potential expansion (IISD, 2019).[130] Market price volatility has been a major challenge for cocoa producers over the years. This has recently been exacerbated by uncertainty about the timing and conditions of the Brexit, given the importance of the United Kingdom in the cocoa trade. Fortunately, Caribbean cocoa exports to the United Kingdom account for only 2.7% of total exports to Europe.

Across the last decade, there was a slight decrease in conventional production. Meanwhile, VSS-compliant cocoa experienced a significant compound annual growth rate. As mentioned before, income disparity across the value chain, reduction in yields and the effects of rising temperatures in producing countries are among the challenges that need to be faced despite the growing demand for cocoa-based products, including premium and sustainably sourced cocoa.

In the European market, a Caribbean producer can find opportunities for certified cocoa mainly in the following countries within Western Europe, as they drive industry demand for sustainable cocoa and have high consumer demand for sustainable chocolate: Germany, the Netherlands, Belgium, the United Kingdom, and France.

There are remarkable differences between these markets that make each certification scheme in Europe varies significantly from one country to another. As there is currently an abundant offer of certified cocoa,[131] the Caribbean producers should check in advance if the certification is economically viable for them and it

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121 European countries UTZ https://utz.org/wp-content/uploads/2017/05/List-of-UTZ-certified-cocoa-supply-chain-actors.pdf

122 IISD (2019). "Global Market Report: Cocoa". The International Institute for Sustainable Development, Canada. https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf

123 IISD (2019). "Global Market Report: Cocoa". The International Institute for Sustainable Development, Canada. https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf

124 Nestlé: The Nestlé Cocoa Plan

125 Mars: Cocoa for Generations

126 Mondelez: Cocoa Life

127 Lindt & Sprüngli: Farming Program

128 Barry Callebaut: Forever Chocolate

129 Cargill: Cocoa Promise

130 IISD (2019). "Global Market Report: Cocoa". The International Institute for Sustainable Development, Canada. https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf

131 Ana Ionova. London Reuters: https://uk.reuters.com/article/uk-cocoa-sustainability-farmers-analysis/ethical-cocoa-schemes-no-panacea-for-struggling-farmers-idUKKBN1HQ1UK

guarantees a long-term relationship with European importers. Before engaging in any certification schemes, they should verify whether certification is required and if it provides a competitive advantage over other origins supplying the European market.

In the case of semi-finished cocoa products, these are usually not sold as consumer products. There are exceptions, however, since products such as roasted cocoa nibs, cocoa butter, cocoa powder and couvertures are also available through retail outlets. For Caribbean exporters, selling directly to retailers is not a feasible strategy. However, being aware of end-market prices can help to consider the price structure of the products within the European market. Good sources for price information are the websites of supermarket chains, chocolate speciality stores and chocolate webshops.[132]

Cocoa 5. Recommendations

Analysing the actual performance of the Caribbean producers respecting the potential of the European market, we could say we are facing a real "land of opportunity". An opportunity not only because of its volume but also because of its economic capacity to pay more money for cocoa with the attributes that Europeans consider to be superior.

As said before, Europe is the world's leading market for certified cocoa with a growing consumer awareness about VSS and a changing industry attitude towards sustainability. Although there are no European-wide data available on certified cocoa imports, the World Cocoa Foundation estimated that around 22% of globally traded cocoa is certified.[133] Europe is the world's largest cocoa bean importer.

The Caribbean exporters should consider if they have enough volume of products available, how they can make the Caribbean offer better valued by the European consumer. In other words, how can they get a higher income from every tonne of cocoa sent to Europe.

The European market is huge and constantly growing in volume and quality demand, so the best thing to do is to be aware of its trends and adapt to them.. The following are the trends as it relates to the industry:

- Sustainability, the strongest European consumer trend also supported by different national cocoa platforms.
- Global attitudes toward certification in the cocoa sector.
- Healthy living regarding food is a growing demand for organic cocoa

European buyers are constantly looking for new ways to secure supplies of good-quality cocoa, so to improve the outstanding performance of Caribbean cocoa exporters, they can focus their efforts on the following issues to grow that partnership with the European buyers.

- Be ready to inform about the product they offer. Transparency and traceability are paramount. Buyers in Europe will expect to have access to updated and reliable data on the farm and people producing cocoa beans of the previous years. This required information includes cocoa varieties, characteristics and figures of the Caribbean region, agro-climatic context, features of the cooperative, kilograms or tons of cocoa per farmer annually, per quality grade, post-harvest protocols, analysis of cadmium levels[134] in cocoa beans or samples[135] to be analysed (European importers consider <0.5 ppm of cadmium in cocoa beans an acceptable level. Up to 0.8 ppm may still be accepted Level above 1 ppm will be rejected).

[132] Specialized Chocolatiers, Chocoladeverkopers, World of Sweets, Chocolats-de-luxe and Pittenweem.

[133] CBI Ministry of Foreign Affairs. (2019). Exporting certified cocoa to Europe: https://www.cbi.eu/ market-information/cocoa/certified-cocoa; World Cocoa Foundation: https://www.worldcocoafoundation.org/in-the-news/accelerating-developments-in-certified-chocolates/

[134] International Cocoa Organisation: recommendations on how to reduce cadmium levels in cocoa beans. http://www.icco.org/sites/sps/documents/Cadmium%20Workshop/CABI.pdf

[135] Methods of sampling and analysis for the official control of cadmium: https://eur-lex.europa.eu/legal-content/EN/

- A coalition of farmers to better meet the cost of certification as well as to reduce costs and present a geographical indication based on unique parameters of Caribbean Cocoa.
- Continuous supply of high-quality cocoa in steady volumes, to ensure the producer can meet the quality requirements of the European buyer. Regular information forecast of expected production volumes.
- The quality of the cocoa beans[136] is linked to pre-harvest, harvesting, post-harvest, processing, and storage methods. High-quality cocoa beans require good trees, good agricultural practices, harvesting the right beans at the right time, dedicated fermenting and drying, good storage and adequate transportation. Some European chocolate makers are experimenting with new techniques themselves and may be willing to involve the producer in product development. Exporters should be open to change and willing to invest time in additional processing to meet the specific requirements, all of which could later become a competitive advantage.
- Preparing cocoa samples according to the buyer's requirements.[137]
- Invest in personal partnerships. The European buyer[138] appreciates dealing with the producer personally rather than through agents. Particularly the speciality segment is very much a people's market. Some ideas: inviting potential buyers for a personal visit to the Caribbean producing region, offering samples of micro-lots they can test themselves, demonstrate on the field knowledge and control of the value chain as traceability is a key point in the European cocoa market, offering a slightly different product, adapted to their requirements and particularities, communicating, quickly, personally and regularly, being aware of the cultural differences within Europe.
- Creating unique storytelling[139] and distinguishing from the other competitors. Both buyers and consumers love to see the story behind a product. Origin plays a big role. A website (simple but accurate, relevant and up to date) telling the uniqueness of a cocoa variety, the history of the farm and the terroir (soil) where the land is situated. Furthermore, giving the story a face by providing good-quality photos of the farmers, their families if authorized and the plantations. Chocolate makers will use the story to help market their products to consumers.
- Meet buyer requirements and implement traceability. European Union's requirements for food safety are strict. Buyers also value certification for social responsibility and sustainability. Many larger European companies publish their sustainability claims and policies on their websites.
- Being aware of the differences in business culture[140] through contact with exporters from your own country or Caribbean region.
- Being well informed on prices and flexible on financing.[141] To establish a selling price, it is important to know the real production costs, thinking about the margin to make well-informed business decisions, such as when to sell how much and for what price.

ALL/?uri=CELEX:32007R0333

136 Chocolate & Cocoa Industry Quality Requirements: http://www.cocoaquality.eu/

137 Cocoa sampling protocol: https://chocolateinstitute.org/wp-content/uploads/2017/05/FCCI_protocol_english_1_0.pdf ; Fine Cacao and Chocolate Institute (FCCI) for guidelines on how to prepare a sample https://www.cocoaqualitystandards.org/protocols-for-review/download

138 CBI Finding the European buyer: shttps://www.cbi.eu/market-information/cocoa/finding-buyers

139 Pacari (Ecuador). https://www.pacari.com/?lang=en and Ingemann (Nicaragua) are succesful examples in this regard.

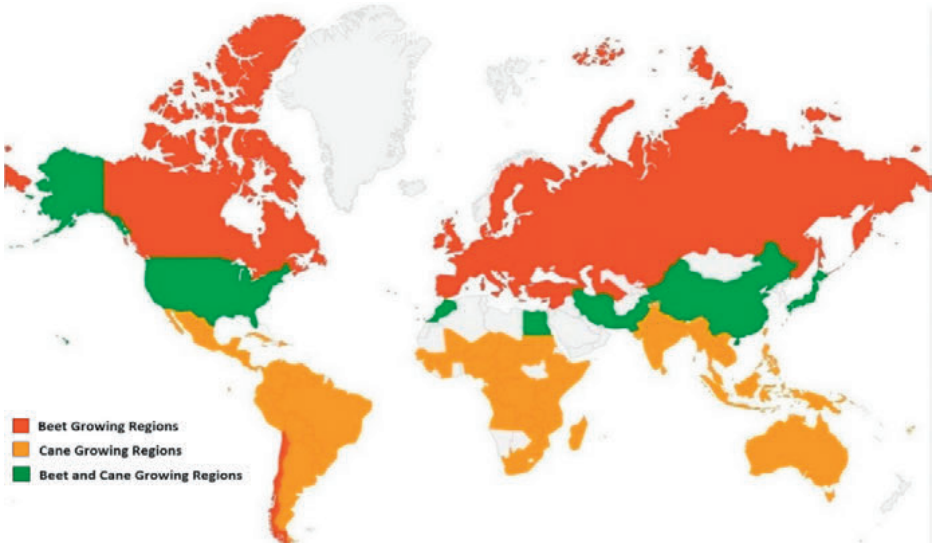
140 SME Business culture for exporters: https://businessculture.org/

141 Daily prices for bulk cocoa on the website of the International Cocoa Organisation: https://www.icco.org/; Price of cocoa usually depending on the futures market of New York or London. https://www.theice.com/products/37089076/London-Cocoa-Futures

4.1.3 Sugar Cane

Sugarcane is primarily grown in developing countries with warm climates. It is not only used for food purposes but also as a biofuel source, as a way of transforming the energy coming from the sun into energy[142]. Although sugar is produced in most regions of the world, more than half of the world's sugar production comes from the American continent. Asia and Africa each produce about one-quarter.

Figure 2. World´s Sugar Production



Source: International Sugar Organization (ISO).

Along with supplying 86% of the world's sugar (the remaining coming from beet), 75% of the sugarcane produced globally is consumed by the food manufacturing sector.[143] Value-added sugar by-products[144] are sucrose, blackstrap molasses, bagasse, ethanol and electricity.

Raw cane sugar is made from the extracted juice of sugar cane. After harvesting, the canes are pressed to extract the juice. The sugar cane juice is then evaporated by heating, and the remaining product is raw cane sugar. European buyers distinguish between different types of raw cane sugar. These differences are based on the differences in origin and whether the raw cane sugar is partially centrifuged or not at all. The lighter the raw cane sugar, the more it has been centrifuged and the fewer molasses it contains.

Sugar Cane 1. Market share to European Union / share of standard-compliant

In October 2017, the European Union put into practice the reform of its sugar policy. This decision resulted in sugar prices within the European Union becoming more closely aligned with world prices. As a result, the incomes for industries with preferential access to this market were significantly reduced. That was the case of Caribbean producers. They require support following European Union policy reform because there is a hard price competition on the world sugar market, extremely volatile and mainly set by the world's dominant producer, Brazil.

142 https://live-bioenergy.ws.asu.edu/content/why-study-photosynthesis

143 According to the "Global Market report: Sugar" released by the International Institute for Sustainable Development (IISD). https://www.iisd.org/system/files/publications/ssi-global-market-report-sugar.pdf; OECD Agriculture Statistics: https://www.oecd-ilibrary.org/agriculture-and-food/data/oecd-agriculture-statistics/oecd-fao-agricultural-outlook-edition-2019_eed409b4-en; Ceres. Engage the chain, page 2: https://engagethechain.org/sites/default/files/commodity/Ceres_EngageTheChain_Sugarcane.pdf

144 https://www.agmrc.org/commodities-products/grains-oilseeds/sugarcane-profile

Brazil's costs, and therefore world prices,[145] have changed massively over the past 15 years, in large part because of huge swings in the value of Brazil's currency.[146] All of this significantly affects the sector. Besides the Caribbean farms are limited by the region's tropical agro-climate and the small size of factories. This is a strong handicap to replicate the productivity of bigger countries production.

Sugarcane is part of the Harmonized System Code "17: Sugars and sugar confectionery". In this report, the focus is on the codes produced and exported from the CARICOM member countries. They include:

- 1701 Cane or beet sugar and chemically pure sucrose, in solid form
- 1704 Sugar confectionery not containing cocoa, incl. white chocolate
- 1703 Molasses resulting from the extraction or refining of sugar
- 1702 Other sugars, incl. chemically pure lactose, maltose, glucose and fructose...

Sugarcane cultivation and processing currently provide livelihoods for 100 million people across the world (IISD, 2020; Jenkins, B. et. al., 2015). Looking at the country level, the sugarcane industry employs over 1 million people in Brazil, nearly 25% of its rural workforce. The Thai sugarcane supply chain employs 1.5 million people, including 107 000 smallholders. HS Code "1701 Cane or beet sugar and chemically pure sucrose, in solid form", had an export value of US$19.97 billion in 2019, after having reached its maximum in 2017 with US$29.7 billion.

Exporting raw cane sugar to Europe is an opportunity as it is becoming more popular in Europe as consumers grow increasingly interested in natural and unrefined food products. The market is highly competitive and CARICOM producers must be able to offer competitive prices to gain access. Despite the European reform and price volatility, around 60% of the Caribbean exports of HS Code 17 goes to the European market. As from the figures of the year 2018, we can see the drastic effect of the application of the European Union sugar policy reform in the CARICOM exports to the European Union:

Table 16. Exports from CARICOM to EU 28 for product HS Code 17

Product code	Product label	CARICOM's exports to European Union 28			% CARICOM's exports to European Union 28			% European Union 28's imports from CARICOM		
		Value in 2017	Value in 2018	Value in 2019	2017	2018	2019	2017	2018	2019
'1701	Cane or beet sugar and chemically pure sucrose, in solid form	188 828	84 776	63 564	74.0%	58.9%	67.8%	3.8%	2.0%	1.6%
'1703	Molasses resulting from the extraction or refining of sugar	4 433	1	1 240	19.4%	0.0%	23.7%	1.1%	0.0%	0.3%
'1704	Sugar confectionery not containing cocoa, incl. white chocolate	247	175	93	3.4%	2.2%	1.6%	0.0%	0.0%	0.0%
'1702	Other sugars, incl. chemically pure lactose, maltose, glucose and fructose, in solid form; ...	98	121	41	5.5%	5.8%	2.1%	0.0%	0.0%	0.0%
17	**Total Sugar**	**193 606**	**85 073**	**64 938**	**67.4%**	**52.7%**	**60.9%**	**1.5%**	**0.7%**	**0.6%**

Unit: Thousands of United States dollars. *Sources:* ITC calculations based on UN COMTRADE and ITC statistics.

145 International Sugar Organization (ISO): https://www.isosugar.org/prices.php; The United States Department of Agriculture (USDA): "World Raw Sugar Prices: The Influence of Brazilian Costs of Production and World Surplus/Deficit Measures": https://www.ers.usda.gov/webdocs/outlooks/39371/37658_sssm29701.pdf?v=827.2

146 European Central Bank (ECB): https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-brl.en.html

The main Caribbean exporter to the European Union market is Belize, although Guyana had a very relevant role until 2017. Guyana and Jamaica, traditionally both big players in the cane export market, experienced particularly poor export campaigns in 2018/19. Before the EPA/EBA, Guyana was a consistent supplier of between 175,000 and 200,000 tonnes of raw sugar to the European Union, but in 2018/19 only 49,733 tonnes of import licenses were issued. Similarly, Jamaica used to export between 125,000 and 145,000 tonnes of raw sugar to the European Union before EPA/EBA, but only managed 6,600 tonnes in 2018/19 – a reduction of well over two thirds from 2017/18 (21,025 tonnes), as we can see in the following chart. From the other side, the United Kingdom virtually monopolises all the Caribbean exports of sugarcane to Europe.

Table 17. List of exporting markets in CARICOM to European Union and List of importing markets in European Union from CARICOM for Product HS Code 17 Sugars and sugar confectionery

Exporter countries	*2017*	*2018*	*2019*	*2019 % of total*
CARICOM Aggregation	**193 607**	**85 072**	**64 937**	**100%**
Belize	64 326	48 238	57 807	89.0%
Guyana	116 475	27 890	4 675	7.2%
Jamaica	9 150	8 625	2 162	3.3%
Barbados	3604	235	240	0.4%
Trinidad and Tobago	50	80	52	0.1%
Saint Lucia	2	4	1	0.0%

Importer countries	*2017*	*2018*	*2019*	*2019 % of total*
(EU 28) Aggregation	**193 607**	**85 072**	**64 937**	**100%**
United Kingdom	173 564	84 684	63 444	97.7%
Portugal		74	715	1.1%
Germany	0	48	348	0.5%
France	170	226	183	0.3%
Spain	0	0	123	0.2%
Others	0	0	1	0.0%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

Sugar Cane 2. Concerns in the sector and key sustainability issues

The sugarcane sector faces important challenges affecting both its overall economic prospects and its sustainability. World sugar prices (raw and white sugar) have historically been highly volatile, and often the price falls below production costs, making sugarcane farmers vulnerable to falling into debt and losing their properties.[147] Government interventions with subsidies or import tariffs, oil price movements, which in turn have an impact on ethanol prices, weather patterns, methods adopted towards mechanization, and export fluctuations from Brazil and India due to their large domestic demands (FAO, 2009; Kiezebrink V et al., 2015; Kelloggs, 2017). All these issues influence sugar prices greatly.

Other important challenges for this sector are the poor labour rights record and documented occurrences of forced labour and child labour, additionally, occupational health and safety issues at plantations and mills are not uncommon, even in some of the largest producing countries, such as Brazil, India and Thailand.[148]

Sugarcane cultivation can also have harmful environmental impacts, such as air pollution and greenhouse gas emissions that result from sugarcane field burning before manual harvesting. Water use contributes to over withdrawal from aquifers and surface water, the poor management practices erode soil, polluting water, affecting biodiversity, and therefore making it more vulnerable to flooding. Excessive application of fertilizer combined with poor irrigation practices can lead to nutrient pollution and algal blooms that deprive water of oxygen and are a growing concern around the world. Approximately 30% of sugarcane production takes place in high or extremely highwater stress areas, and agricultural runoff coupled with the overapplication of fertilizers and pesticides have polluted water bodies (Ceres, 2017). To overcome all these sustainability challenges that sooner or later end up interfering with supply and demand, VSS should be utilised strategically.

147 Fairtrade Foundation - Fairtrade and sugar (p. 26, 2013). https://www.fairtrade.org.uk/~/media/FairtradeUK/Farmers%20and%20Workers/Documents/Fairtrade%20and%20Sugar%20Briefing%20Final%20Jan13.pdf

148 ILO International Labour Organization May 2017: Child labour in the primary production of sugarcane. Chapter 3 Decent work deficits in sugarcane production, page 29. https://www.ilo.org/ipec/Informationresources/WCMS_IPEC_PUB_29635/lang--en/index.htm

Sugar Cane 3. VSS in practice

Since the end of last century, retailers of the sugarcane industry have been using VSS to provide consumers with a product that they can identify as sustainably produced. These standards are comprehensive and focus on measuring improvements across environmental and social issues. For instance, sugarcane production that meets these standards needs to limit air pollution and gas emissions, while also conserving water resources. Compliance also implies respecting labour rights and worker health and safety, not engaging in land grabbing and taking steps to improve producer profitability.

Four major international third-party standards apply to sugarcane production: Bonsucro, ProTerra, Fairtrade international, and the Organic Standard. Also, the International Sustainability and Carbon Certification (ISCC) and the Roundtable on Sustainable Biomaterials (RSB).

The market development of VSS in the sugarcane sector is still very modest. VSSs were almost non-existent among sugarcane farms and mills about a decade ago- in 2016, for instance, just 3.2% of the market was made up of VSS compliant (IISD, 2020).

By providing sugarcane-based product consumers with some assurances that their choices can support more sustainable sugarcane farming practices, VSS are creating a virtuous cycle of increasing investment in sugarcane farming operations that addresses many of the sector's socio-environmental challenges. In the five years from 2013–2017, sugarcane experienced a high growth rate of its certified area (+80%) (Helga W et al., 2019).

In 2013, a few years before Bonsucro's establishment, a single-sector initiative focused on enabling more sustainable sugarcane production. Fairtrade, Organic, Rainforest Alliance and ProTerra are the main VSS in the sugarcane sector when ranked by production size. These are the leading international certification schemes for sugarcane.

Table 18. Leading international certification schemes for sugar cane

Label	*Area harvested (hectares)*	*Change 2013/2017*	*Change 2016/2017*	*Share of total area havested*
Bonsucro	942 875	2.6%	9.5%	3.6%
Fairtrade	146 388	-3.8%	-4.3%	0.6%
Organic	83 650	56.4%	-10.4%	0.3%
ProTerra	1 115 470	-	-	4.3%

Source: ITC Sustainability Map Trends.

Bonsucro, Fairtrade International, organic and ProTerra Foundation, which reported sugarcane for the first time in 2017, certified a minimum of 2 million hectares and a maximum of 2.3 million hectares in 2017 (average: 2.1 million hectares). In terms of the certified share of the global sugarcane area, the minimum is 7.6%, the maximum is 8.8% and the average is 8.2%. ProTerra had the largest sugarcane area (1.1 million hectares), while organic increased the most (more than 50%) in 2013–2017.

- **Bonsucro** - Bonsucro is a non-profit organization setting standards for sustainable production of sugarcane, with more than 540 members, from farms, mills, non-governmental organizations and civil society to traders, retailers and end-users. Its vision is a sugarcane sector with thriving, sustainable producer communities and resilient, assured supply chains. Its mission is to ensure that responsible sugarcane production creates lasting value for the people, communities, businesses, economies and ecosystems in all cane-growing countries. Bonsucro-certified products include sugar, ethanol, molasses and bagasse.

  In 2018, Bonsucro launched a version of its Production Standard tailored to a smallholder farming context and is being revised in 2020. A revised version of the Chain of Custody Standard was published in 2019.

In addition to its standards, Bonsucro offers tools and programmes, such as performance improvement through certification acceleration programmes, benchmarking schemes, providing market-based value via productivity and professionalism, assisting smallholder farmers, technical support, monitoring and evaluating. Bonsucro certified 1,161,100 hectares in 2017, of which 943,000 hectares were sugarcane, representing 3,6% of global sugarcane area. Brazil had the largest certified sugarcane area, more than 812,000 hectares.

- **ProTerra Foundation** - This non-profit organization was created in 2006 and became an independent foundation in 2012, is registered in the Netherlands and operates in 39 countries. Focused on soy and sugar cane, the ProTerra standard has been applied primarily to the sustainable production of soy and soy-derived consumer products but it is also being used in the sugar cane, tapioca and tree nut sectors.

  Its seal of "identity-preserved" means there is full traceability, and the raw material comes from certified production. The protection of the rights of communities, indigenous people and smallholders; the promotion of good labour practices such as workplace safety, equal opportunities and particular attention to preventing child and forced labour; the promotion of good agricultural practices, especially regarding soil fertility, water management and continuous efforts to reduce the use of fertilisers and pesticides; and the protection of biodiversity.

  The ProTerra standard reported sugarcane data for the first time in 2017 representing 4.3% of the global sugar cane area, and its producers were active in 18 countries (Helga W et al., 2019).

- **Fairtrade International** - This is a global network working to share the benefits of trade more equally – through standards and certification, producer support, focused programmes, advocacy and awareness-raising. Three Fairtrade producer networks co-own the international Fairtrade system, representing more than 1.7 million farmers and workers in 75 countries in Latin America and the Caribbean, Africa and the Middle East, and Asia and the Pacific. More than 25 organizations promote Fairtrade on a national level, supporting and challenging businesses and governments to increase commitments to sustainable production and consumption, as well as connecting farmers and workers with the people who buy their products.

  The first Fairtrade label was launched in 1988 in the Netherlands and in 1997, the Fairtrade International was founded to unite the national Fairtrade organizations under one umbrella and harmonize worldwide standards and certification.

  Fairtrade International sets standards for smallholder farmers, for plantations that use hired labour and for traders, setting out social, economic and environmental requirements. All entities along the supply chain must be certified for the end product to carry the Fairtrade label. The standards require buyers to pay a set Fairtrade minimum price to producers for most goods. That price is based on the average cost of sustainable production and acts as a safety net when market prices fall. Producers also receive a Fairtrade premium, a required additional amount on top of the selling price, which farmers and workers decide how to invest in their businesses and communities. Fairtrade partners with other stakeholders on solutions to issues that affect producers, including climate change, human rights such as tackling child and forced labour, and enabling farmers and workers to earn a decent living (Fairtrade, 2019).[149] More than 2.6 million hectares were Fairtrade-certified in 2017, representing 0.05% of the global agricultural area (Helga W et al., 2019).

[149] Fairtrade International: "How Fairtrade contributes to the SDGs" https://www.fairtrade.net/issue/sdgs

Sugar Cane 4. VSS market review in the sector. Regional Importance/pricing and premiums[150]

The Economic Partnership Agreement (EPA)[151] and Everything But Arms (EBA)[152] scheme were created by the European Union to promote trade with Less Developed Countries (LDCs). To do this, it was agreed that all imports to the European Union from these countries (except arms) would be duty and quota-free. As sugar cane grows in many of the hot, tropical countries that benefit from the initiatives, they have a direct bearing on the global sugar market.[153] The United Kingdom is the main importer and through the Brexit[154] process will still uphold the terms of the EPA/EBA.

Theoretically, the scrapping of the quota system under EPA/EBA should provide growers in LDCs with greater opportunity to adjust their production methods, explore new markets and drive commercial benefits. And as trade is a two-way process, the agreement should also provide importers with more choice.

However global sugar prices (raw and white) have been very unstable in the last decades, mainly because of Brazil´s hegemony on production and the instability of its currency, which led to great volatility in world sugar prices.

Additionally, in the period 2019/2020, before COVID-19 crisis, there has been a production global deficit of 9.3 million tonnes.[155] The biggest deficit in the previous decade of the sugar market.

An important part that an exporter should know is the breakdown for raw cane sugar (panela, in consumer bags or cubes/blocks) for the end consumer. There is not always a direct relationship between the first raw material price and the price paid by the consumer. In approximation, the raw sugar cane constitutes 5% of the price, processing and export 25%, shipment 5%, import, packaging and distribution to wholesalers 25%, distribution to retailers 15% and retail 25%.[156]

EPA/EBA sugar will always be in demand because sugar cane is used to produce specialised sugar products, such as demerara sugar, that cannot be produced with sugar beet. Guyana and Jamaica, traditionally both big players in the cane export market, experienced particularly poor export campaigns in 2018/19. There will also always be a demand for EPA/EBA sugar because it is extremely difficult to produce organic sugar from sugar beets.

However, the increase of EPA/EBA imports in 2018/19 can also be explained by the strong drop in European Union sugar production in this period. With just enough beet sugar produced to make the European Union self-sufficient in 2018/19, demand for EPA/EBA sugar has increased as European nations have turned to LDCs for additional imports.

The main takeaway from the last three years of import data is that the EPA and EBA initiatives have not increased sugar trade to the extent they hope to, with the struggles of Jamaica and Guyana notable examples of this shortfall. The main driver behind this has been price.

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150 Bloomberg Sugar prices: https://www.bloomberg.com/quote/SB1:COM; For more information on worldwide prices for conventional sugar, see the International Sugar Organisation: http://www.isosugar.org/prices.php?pricerange=2020-07-01

151 European Union version Top 10 benefits of these partnerships for development.

152 EPA agreement and the countries involved: https://ec.europa.eu/trade/policy/countries-and-regions/development/economic-partnerships/index_en.htm

153 A full breakdown of the EPA agreement and the countries involved: https://www.ragus.co.uk/2018-19-sugar-imports-epa-eba/

154 How could Brexit affect the sugar market? https://www.linkedin.com/feed/update/urn:li:activity:6611240230303465472/

155 International Sugar Organization (ISO): "Quarterly Market Outlook - May 2020". https://www.isosugar.org/publication/194/quarterly-market-outlook may-2020.

156 CBI Ministry of Foreign Affairs The Netherlands: "What are the end market prices for raw cane sugar?". https://www.cbi.eu/market-information/honey-sweeteners/raw-cane-sugar

In the past, it was often cheaper to import sugar from EPA/EBA countries than from other European member states, or other cane sugar-producing Developing Countries (DCs) such as Brazil or India. But because of the global surplus, sugar prices have been consistently low, and this has coincided with the removal of the quota system.

Prices are now so low that it is no longer cheaper to import from EBA/EPA countries. Therefore, imports in 2018/19 were considerably lower than in 2016/17 because some European countries chose to import sugar cane from countries not under the two agreements. Additionally, some growers in LDCs are stopping growing sugar cane and starting to grow other more profitable crops. The knock-on effect of this is a reduction in the number of sugar cane growing nations to import from.

The EPA/EBA initiatives were created to promote free trade between the European Union and LDCs. Although they set out an environment in which this could thrive, it would not automatically happen.

Raw cane sugar is becoming more popular in Europe as consumers grow increasingly interested in natural and unrefined food products. However, the market is highly competitive. Regarding the organic and Fairtrade cane sugar, opportunities are also increasing. Consumers are increasingly interested in healthy and natural products, so this provides particularly interesting opportunities for organic and ethically sourced products. At the same time, Fairtrade sugar exporters should be aware of increasing competition from European sugar producers due to the decrease in sugar prices following a change in European regulations.

In the Caribbean region there are eleven active plantations and mills:[157]

- **Belize:** Tower Hill, Orange Walk (ASR Belize Sugar Industries), Santander Factory, Belmopan (Santander Sugar Group)
- **Guyana:** Albion-Rose Hall, Blairmont, Uitvlugt-Wales (Guysuco)
- **Jamaica:** Appleton (Gruppo Campari), Frome (Pan Caribbean Sugar Co), Monymusk (Pan Caribbean Sugar Company), Golden Grove (Seprod), Worthy Park (Clarke Family)
- **Barbados:** Portvale (Barbados Agricultural Management Company Limited)

Caribbean sugar producers offer sugar which can be used for 98% of domestic and industrial use. They produce the following types of sugar:[158]

- Food-grade white sugar (Plantation-White)
- Food-grade added value brown sugars (Demerara sugars etc)
- Food-grade brown sugar
- Raw sugar for refining

The Caribbean food-grade sugar is sold around the region, in Europe, the United States and Canada.

Depending on the origin of the sugar, it can also be called jiggery (South Asia), panela or rapadura (Latin America), muscovado (the Philippines) or Barbados sugar (Barbados). Demerara sugar and turbinado sugar are partially centrifuged raw cane sugars. Demerara sugar is a light brown raw cane sugar originally produced in Guyana, with relatively large granules. Due to its increasing popularity, demerara sugar is now also produced in other countries such as Mexico and India.

It should be noted that there are no legal definitions for these specific types of raw cane sugar, and manufacturers use them freely for different types of sugar.

157 https://www.caribbean-sugar.org/projects

158 https://www.caribbean-sugar.org/projects

Sugar Cane 5. Recommendations

There are significant differences between the European Union countries because of its different demand and capacity of production. The purpose is to approach the European markets where raw cane sugar is growing in popularity despite the mass media campaign to reduce consumption of sugar. The United Kingdom is the leading market for raw cane sugar in Europe, with a long history of importing and processing raw cane sugar,[159] so British consumers are therefore more familiar with raw cane sugar compared to consumers in the rest of Europe.[160] Europe does not produce any raw cane sugar and has to import all of the raw cane sugar it uses from other countries. The Caribbean exporter should know the trends offering opportunities on the European market for raw cane sugar such as the following:

- **Demand for natural ingredients:** product unrefined and natural. A growing group of consumers perceive brown and unprocessed sugar to be healthier and more natural than white. Underline the fact that Caribbean product is unrefined to promote it. Aspartame, originally introduced as 'healthier' artificial sweetener substitute for refined sugar, is not so well regarded among European consumers these days.
- **Ethical sourcing:** the growing interest in ethically sourced products provides opportunities for Fairtrade certified raw cane sugar. Consumers in Europe are increasingly concerned about suppliers and circumstances such as working conditions at farms and factories.
- **Organic certification**[161] is also a trend between European consumers looking for products with a small environmental impact. This trend has stimulated the market for organic-certified products.
- **Sustainability and the SDGs are gaining importance**: This stimulates European buyers of raw cane sugar to become stricter in their requirements for the sustainability of raw cane sugar production.

The Caribbean exporter should also be updated about the strict requirements must raw cane sugar meet to be allowed onto the European market.[162] This is about food safety – traceability, hygiene and control, pesticide residues, Genetically Modified Organisms (GMOs), certification, documentation, samples, labelling, packaging. The main quality requirement is that raw cane sugar mainly consists of types of sucrose, fructose and glucose (<95-98%).

Concerning the competition, raw cane sugar producers find the producers of refined brown sugars and palm sugars which have several properties in common with raw cane sugars. Palm sugars are also natural and unrefined sweeteners, with a higher price but a lower glycemic index. This is particularly relevant in the segment for diabetics. Direct competition from high-intensity sweeteners such as aspartame, sucralose and stevia are limited. These sweeteners mainly target the large-scale food and drink manufacturing industry. At the same time, competitors are based in many different countries: India, Brazil, Colombia,

It is certainly recommended not to compete directly with low priced conventional sugars, but to do it with palm sugars and other brown sugars by promoting the natural, unrefined properties and relatively low price of raw cane sugar compared to palm sugars. A strong point to differentiate the Caribbean product will be investing in a professional processing line that improves product quality and minimizes the risk of the presence of foreign particles.

159 Some tradtional refineries and sugar trading companies are Tate & Lyle, Billington's.

160 The website Food Drink Europe can be an interesting source for information on consumption patterns of various food products, including raw cane sugar, across different European countries: https://www.fooddrinkeurope.eu/

161 https://www.organicseurope.bio/?redirect=1

162 The General Food Law is the legislative framework for food safety in Europe. https://ec.europa.eu/food/safety/general_food_law_en
Food safety hazards: (HACCP) in sugar cane production and sugar processing include contamination by physical elements (plastic residues, metals and dirt) and chemical elements (cleaning agents): http://www.fao.org/3/y1579E/y1579e03.htm

Finally, a brief comment about commercial distribution and the channels to be used to get Caribbean raw cane sugar onto the European market. The consumer market is the largest segment for raw cane sugars. This segment requires retail-packed raw cane sugar in granules or cubes of high quality, generally packed for retail in Europe by importers. They supply retailers that need small and frequent deliveries. Moreover, suppliers need to be able to take back products if a food safety issue is identified.

Raw cane sugar is imported through four main channels: specialized importers of natural products, specialized importers of organic products, specialized importers of Fairtrade products, and sugar companies. Manufacturers of fair trade and organic products from other important segments.[163] Then the specialized importers[164] are of the most interest to raw cane sugar exporters. It is more advisable to focus sales efforts on importers that supply directly to end-users, than supplying directly to food manufacturers. They prefer to purchase from importers because food manufacturers prefer to focus their activities on the development, manufacturing, and marketing of foods.

4.1.4 Coconut

The coconut-based products have increasing popularity within Europe. Coconut-based foods and personal care products that include oil, cream, water, and charcoal have all become popular cooking and cosmetic choices. Popularity despite this narrow supply chain certification schemes for coconut-based products, meaning little traceability and a high likelihood that coconuts are being produced unsustainably, or with the use of unfair labour practices including child labour. The global coconut industry still lacks a unified certification process.

The momentum for the Caribbean coconut industry is set to continue with the continuation of the Alliances[165] for the Coconut Industry Development Expansion and Enhanced Support for the Caribbean project, known as Coconut II.[166] The project will run until 2023. The European Union funds, while the Caribbean Forum and the International Trade Centre (ITC),[167] steering committee member of the UNFSS,[168] aims to ensure that the Caribbean region recovers greater economic benefits from the growing international trade in coconuts.

The countries participating in Coconuts II are Antigua and Barbuda, Barbados, Belize, Dominica, Dominican Republic, Grenada (Phase II), Guyana, Jamaica, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago.

Coconut 1. Market share to European Union / share of standard-compliant

Coconuts are included within the Harmonized System Code 08 named “Edible fruit and nuts; peel of citrus fruits or melons”. One of its derivatives, coconut oil, is included in **HS Code 15**: “Animal or vegetable fats and oil and their cleavage products; prepared edible fats; animal or vegetable waxes”. We focus on the fresh coconut and the coconut oil, that currently are the products with potential export in CARICOM member countries to the European markets. More specifically on the following HS codes:

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163 CBI market report organic and Fairtrade cane sugar: https://www.cbi.eu/market-information/honey-sweeteners/organic-fairtrade-cane-sugar

164 Examples of specialised importers are: Rapunzel (natural) https://www.rapunzel.de/; Do-It (organic) https://www.organic.nl/ and Alter Eco (Fairtrade) https://www.alterecofoods.com/

165 About Alliances for Action - Alliances for Action (A4A) is a participatory partnership model implemented by ITC that engages smallholder farmers and MSMEs in order to manage risk and facilitate networks that provide the required technical expertise and capacity building. A4T targets catalytical investment to address systemic challenges.

166 http://www.cardi.org/blog/phase-ii-of-the-regional-coconut-project-launched/?highlight=coconut

167 ITC - The International Trade Centre is the joint agency of the World Trade Organization and the United Nations. ITC assists small and medium-sized enterprises in developing and transition economies to become more competitive in global markets, thereby contributing to sustainable economic development within the frameworks of the Aid-for-Trade agenda and the United Nations’ Sustainable Development Goals.

168 UNFSS | United Nations Forum on Sustainability Standards: https://unfss.org/

- HS Code 0801: Coconuts, Brazil nuts and cashew nuts, fresh or dried, whether or not shelled or peeled
- HS Code 1513 Coconut "copra", palm kernel or babassu oil and fractions thereof, whether or not refined.

The exports from CARICOM to Europe have been extremely low in the previous years. The main exporter to Europe of fresh coconut (HS Code 0801) is Viet Nam that exports more than Côte d'Ivoire, India, Indonesia and the Philippines together, that also exports to European Union. Meanwhile, the Asian producers are the main exporters to Europe of coconut oil (HS Code 1513), especially Indonesia, Philippines and Malaysia.

The European Union has a moderate volume of imports of fresh coconut (HSC 080119), but a much bigger volume of imports of coconut oil (HSC 151319) from the rest of the world. The percentage of European imports coming from the CARICOM countries is virtually irrelevant at the current time:

Table 19. Exports from Caribbean Community (CARICOM) to European Union (EU 28) for product HS Codes 0801 Coconuts, Brazil nuts and cashew nuts, fresh or dried and 1513 Coconut "copra", palm kernel or babassu oil and fractions thereof

Product code	Product label	CARICOM's exports to European Union 28			CARICOM's exports to world			% CARICOM's exports to European Union 28		
		Value in 2017	Value in 2018	Value in 2019	Value in 2017	Value in 2018	Value in 2019	2017	2018	2019
'080112	Fresh coconuts in the inner shell "endocarp"	24	11	8	32	61	632	75.00%	18.03%	1.27%
'080132	Fresh or dried cashew nuts, shelled	0	7	6	34	21	48	0.00%	33.33%	12.50%
'080119	Fresh coconuts, whether or not shelled or peeled (excluding in the inner shell "endocarp")	9	31	2	11 204	8 636	6 341	0.08%	0.36%	0.03%
'080121	Fresh or dried brazil nuts, in shell	0	0	0	0	1	4	-	0.00%	0.00%
'080122	Fresh or dried brazil nuts, shelled	0	1	0	0	1	0	-	100.00%	-
'080131	Fresh or dried cashew nuts, in shell	0	1	0	19	3	0	0.00%	33.33%	-
'080111	Desiccated coconuts	43	0	0	99	41	23	43%	0%	0%
8	**Total Coconut**	**76**	**51**	**16**	**11 388**	**8 764**	**7 048**	**0.67%**	**0.58%**	**0.23%**
'151329	Palm kernel and babassu oil and their fractions, whether or not refined, but not chemically ...	0	0	5	4	0	10	0.00%	-	50.00%
'151311	Crude coconut oil	0	0	0	54	31	69	0.00%	0.00%	0.00%
'151319	Coconut oil and its fractions, whether or not refined, but not chemically modified (excluding ...	0	1	0	4 281	4 181	3 867	0.00%	0.02%	0.00%
'151321	Crude palm kernel and babassu oil	0	0	0	0	0	4	-	-	0.00%
15	**Total Oil**	**0**	**1**	**5**	**4 339**	**4 212**	**3 950**	**0.00%**	**0.02%**	**0.13%**

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

Guyana is the main exporter of fresh coconut HSC 0801 to the rest of the world but is not currently exporting to the European Union. Neither does Trinidad and Tobago, the main exporter of coconut oil HSC 1513 to the rest of the world.

Coconut 2. Concerns in the sector and key sustainability issues

The concerns of the Caribbean coconut sector are those that the "Coconuts II" project tries to help to arrange: improving the competitiveness of farmers and strengthening the coconut value chain, climate change, disaster risk reduction, health and nutrition, increasing investments and value-added product development. All of which is deeply linked to sustained and sustainable development, inclusive and equitable economic growth with decent work conditions for everybody, water and sanitation, food security and nutrition, Waste Management. All these objectives can be found in the United Nations SDGs:

- GOAL 1: No Poverty
- GOAL 2: Zero Hunger
- GOAL 3: Good Health and Well-being
- GOAL 6: Clean Water and Sanitation
- GOAL 8: Decent Work and Economic Growth
- GOAL 9: Industry, Innovation and Infrastructure
- GOAL 16: Peace and Justice Strong Institutions

Central to "Coconut II" project is empowering family farmers across the Caribbean with relevant knowledge and production skills aimed at boosting their competitiveness to improve their access to local, regional and global value chains. Also, the project partners are working with governments, farmers and exporters to overcome technical, structural and financial bottlenecks preventing the Caribbean region from fulfilling its coconut export potential.

The environmental and human rights worldwide concern facing the coconut sector is real. There are widespread allegations of child labour on coconut farms. Moreover, low wages are persistent across this industry. Coconut farmers very often toil in terrible poverty especially in the Philippines, one of the world's top coconut producer.[169]

The truth is, unless there is traceability, from consumer to farmer, it is nearly impossible to know whether or not coconut oil, water, or cream is being sourced from an environmentally or socially irresponsible player, or if any of the high prices you are paying are ending up in a farmer's pocket or get lost in the way. This is true for any supply chain: opacity breeds abuses. That´s why VSS should be a path towards transparency and fairness for coconut farmers.

Coconut 3. VSS in practice

In the case of organic certification, the asymmetry of power and knowledge in the value chain requires the development of institutional capacity, including cooperatives which allow to aggregate supply and strengthen the power of producers. In the coconut oil value chain, oil producers and brokers tend to be much more informed, interested, and optimistic concerning organic certification than coconut farmers.

There are no official marketing standards for fresh coconuts so they must comply with the same basic standards as any other fresh fruit, which means they have to be intact and sound, clean, free of any visible foreign

[169] The World Bank. "Employment and Poverty in the Philippines". http://documents1.worldbank.org/curated/en/979071488446669580/pdf/113101-WP-P150535-PUBLIC-ACS.pdf; International Labour Organization (ILO): "Traceability and sustainable coconut: Learning from a recent digital traceability and responsible supply chain initiatives" https://www.ilo.org/manila/projects/WCMS_717793/lang--en/index.htm; Coconut Industry Development for the Caribbean; Coconut Industry Development for the Caribbean https://sustainabledevelopment.un.org/content/documents/23111Coconut_Industry_Development_for_the_Caribbean.pdf

matter, pests, abnormal external moisture, any foreign smell and taste.[170] For mature coconuts, the varieties with high flesh content are preferred, but the price also plays an important role. Exporters can get the best returns on high-yielding and disease-resistant varieties, often hybrid varieties. For young coconuts, the quality of the coconut water is the most important feature. Fresh, young coconuts are meant for direct and natural consumption without processing and they are a luxury fruit. Therefore, the aromatic coconut varieties are the most preferred.

Regarding certification, coconut production in most countries often involves small farmers. VSS for small coconut producer implies high certification costs to be obtained. But to get their product in major retail chains it is almost mandatory. Sustainability and social responsibility are taking a leading role in the European market. Supply chains are becoming more transparent and consumers better informed about environmental and social issues.[171]

Buyers act on this by requiring transparency and certifications from exporters. Social and environmental certification schemes include actions to strongly reduce and register the use of pesticides, act on the safety of employees or even include price guarantees for producers. For fruit collectors and exporters, it is important to show they are engaged in the well-being of their production sources, both socially and environmentally.[172]

- **Organic** can be a requirement in fresh coconuts because these fit very well in the growing consumer attention to health and natural foods. That is why there is a relatively strong focus from buyers on organic cultivation. Fresh organic coconuts are most in-demand by supermarkets and specialised organic buyers. Processed products, such as bottled coconut water and virgin coconut oil, are also popular as organic products. In ethnic channels, organic certification is less required. The demand for organic products is strongest in Germany, the Alpine region and Scandinavia.[173]
- Consumer labels for sustainable and fair-trade coconuts. Health benefits have put coconuts in the spotlight for conscious consumers and food media. But this attention can easily be directed to potential negative sides in cultivation practices, such as concerns with poor labour conditions. Consumer labels such as **Fairtrade**[174] and **Rainforest Alliance**[175] are most common for coconut products. They are usually on processed products, but they also touch the fresh coconut trade as a niche requirement providing additional value to the product.[176]
- Before looking into getting certification from social and environmental consumer labels, it is advisable to focus on complying with the **Business Social Compliance Initiative (BSCI) Code of Conduct**[177] or **Ethical Trade Initiative (ETI)** Base Code and do the **Sedex Self-Assessment questionnaire (SAQ).**[178] Positive experiences are being certified such as the experience of how Rainforest Alliance can

[170] For young coconuts (six to nine months old), the exporter can follow the guideline of the Association of Southeast Asian Nations (ASEAN): https://www.asean.org/storage/images/archive/AMAF%2031%20asean%20standard%20young%20coconut.pdf

[171] Campaigns such as the FairFood coconut campaign underline the importance of social responsibility in coconut production: https://fairfood.nl/en/commodities/coconut/

[172] Basket of Standards of the Sustainability Initiative of Fruit and Vegetables (SIFAV). https://www.idhsustainabletrade.com/uploaded/2017/07/IDH_SIFAV_Benchmarking_10102017.pdf; an example of social and https://www.globalgap.org/uk_en/search/index.html#q=coconut&sort=score+descis GlobalG.A.P. https://www.globalgap.org/uk_en/search/index.html#q=coconut&sort=score+desc

[173] For non-European suppliers, it is important to show compliance with the European legislation for organic Products: https://www.organicseurope.bio/?redirect=1

[174] https://www.fairtrade.net/

[175] https://www.rainforest-alliance.org/

[176] AgroFair, importing company, commercialise Fairtrade coconuts from Ivory Coast: https://www.agrofair.nl/fairtrade-organic-coconuts/

[177] AgroFair, importing company, commercialise Fairtrade coconuts from Ivory Coast: https://www.agrofair.nl/fairtrade-organic-coconuts/

[178] AgroFair, importing company, commercialise Fairtrade coconuts from Ivory Coast: https://www.agrofair.nl/fairtrade-organic-coconuts/

help a smallholder farm to produce coconut implementing techniques of sustainable agriculture in the Philippines.[179]

- Regarding the virgin coconut oil, complying with the standards can be essential in accessing specific market segments and buyers in Europe. Certificates such as **International Featured Standards (IFS)**[180] or **British Retail Consortium Global Standards (BRCGS)**[181] might be required by some buyers.

They are also an interesting strategy to differentiate the product from other suppliers. Organic certification[182] is likely to be an extra selling point or even a demand for virgin coconut oil. Fairtrade certification[183] is not as common and remains concentrated in specific countries in Western Europe as the United Kingdom and Switzerland, both outside of the European Union.

Coconut 4. VSS market review in this sector – Regional Importance/ pricing and premiums

There are many producing countries that could participate in the European fresh coconut market. Production volumes went down since 2017, but new plantations will help meet future demand. In mature coconuts, producers from Côte d'Ivoire will be the main competitors due to their traditional presence in Europe with affordable coconuts and to their relative geographical closeness. In the other side, young coconuts are mainly imported from Asia. Viet Nam is the largest exporter.

The competitor countries are the following:

- **Côte d'Ivoire:** Europe's largest supplier of coconuts, almost exclusively mature brown coconuts in the inner shell. Not the largest producer but it has the logistical advantage of the shorter distance to Europe. Competitive price and large industrial plantations established in the past. These are the best arguments for European buyers to continue sourcing mature coconuts in Côte d'Ivoire, However, not everything is so straightforward. Its main weaknesses are the poor infrastructure and organization of this sector and a large number of small collectors and exporters. For Caribbean producers high yielding plants should be accompanied by closeness to logistical exit points or seaports.
- **Viet Nam:** almost a new supplier to the European market. Viet Nam's main coconut export product is young coconut. They have already proven to be commercially competitive and exporters are improving their standards to get better accepted in Europe. Their presence in Europe helps them to reduce China dependency and price volatility. Currently, the Netherlands and Spain are their main European destinations.
- **Thailand:** the preferred origin of young coconuts for European buyers, especially the aromatic Nam Hom variety. The Thai coconut is often considered superior to other coconuts in Asia. They have struggled with crop shortages in recent years and exports to Europe decreased in 2017 and 2018. Therefore, Vietnamese producers knew how to benefit from the opportunity of extending their exports to Europe.
- **India:** a relatively stable coconut supplying country. CARICOM countries will find the strongest competition from Indian exporters when working with the United Kingdom. Of all 4100 tonnes of coconuts, India exported to Europe in 2018, an estimated 3400 tonnes went to the United Kingdom. Caribbean countries have also a long trade relation with the United Kingdom and a Caribbean community so it may focus on the ethnic market, which mostly purchases mature coconuts. A few Indian suppliers entered the European Union supplying fresh-cut, mature coconut via their Dutch distribution channel
- **Costa Rica:** is an important supplier of fresh coconuts to Europe. Its coconut production is not large but producers in the country profit from their commercial experience in other tropical fruit, such as pineapples

179 https://ra-training-library.s3.amazonaws.com/Coconut%20Implementation%20Guide%202015.pdf

180 https://www.ifs-certification.com/index.php/en/

181 https://www.brcgs.com/

182 CBI, Buyer requirements for vegetable oils: https://www.cbi.eu/market-information/vegetable-oils/buyer-requirements

183 https://ra-training-library.s3.amazonaws.com/Coconut%20Implementation%20Guide%202015.pdf

and bananas. Another key point to take advantage in organic coconuts is that it is one of the few developing countries that have standards considered similar to those of the European Union, allowing it to perform inspection and certification at the origin. They have higher costs of production and logistics than those coming from Côte d'Ivoire but for some European buyers the quality and the larger sized coconuts from Costa Rica can make up for the difference.[184]

Indonesia, the Philippines and India are the world's largest producers of coconuts and dominate the supply of desiccated coconuts and coconut oil to Europe. In 2018, India produced 11 million tonnes of coconuts, the Philippines 14 million and Indonesia 19 million tonnes.[185] The Philippine government announced a push to stimulate massive replanting of coconut trees, which should be enough to maintain the country's position as the second-largest supplier of coconut derivatives. The distance between these leading producing countries and Europe makes it more difficult for their exporters to compete with fresh sea-freighted coconuts. But improving preservation techniques[186] and logistics can potentially improve their competitive position. Until now, these countries have not convinced European buyers of the quality of their fresh coconuts.

The European market considers several characteristics with regards to coconut import such as coconut variety, volume and the organization of its operational and production methods. Thus, small producers in the Caribbean are at a disadvantage when it comes to volume. For this reason, it would be advisable for them to organize the supply chains through gathering several producers, while ensuring all the producers maintain the same production methods.

The concurrence is fierce but only a few companies are managing to get large volumes to Europe. This shows that for an exporter, it is not enough standing out in quality and presentation, but also, they need a dedicated partner or strong presence in the European market. An example is Zatwa Impex the leading source of mature coconuts to Europe from Côte d'Ivoire. It stands out as an exporter for sourcing fresh, mature coconuts of the GOA and Hybrid varieties in an efficient way and using only reefer transportation to assure quality. With internet presence, they are easily found by buyers. Their website[187] provides easy-to-access information about the company and its products. They publish news about their coconut assortment on the news site Freshplaza and they are active on LinkedIn. These initiatives help them build a good reputation and show they are open to communicating with potential buyers, both of which are crucial in the fresh trade.

INI Farms[188] with a branch office located in Amsterdam to service customers in Europe is another example. It is not mandatory to have an office in Europe to sell coconuts, and not always wise, as importers may see you as a competitor, but it is more beneficial having a trusted partner.

An example of developing an attractive brand is "Import Coconut"[189] from Thailand who launched its premium brand Coco Wilson in 2015 to market raw organic coconuts to Europe. Today, Import Coconut is

184 https://fieldstudies.org/2018/04/sustainability-projects-costa-rica/

185 The World Bank. "Employment and Poverty in the Philippines" http://documents1.worldbank.org/curated/en/979071488446669580/pdf/113101-WP-P150535-PUBLIC-ACS.pdf; International Labour Organization (ILO): "Traceability and sustainable coconut: Learning from a recent digital traceability and responsible supply chain initiatives" https://www.ilo.org/manila/projects/WCMS_717793/lang--en/index.htm ; Coconut Industry Development for the Caribbean; Coconut Industry Development for the Caribbean https://sustainabledevelopment.un.org/content/documents/23111Coconut_Industry_Development_for_the_Caribbean.pdf

186 Learn from the quality processes used in Thailand to prepare and export young coconuts. An example of basic process described by the Thai Farm Fresh company. https://www.fairtrade.net/ https://www.thaifarmfresh.com/aromatic-young-coconut-1

187 http://www.zatwa.com/

188 INI Farms has a branch office located in Amsterdam to service customers in Europe: http://www.inifarms.com/fresh-cut-coconut.html

189 INI Farms has a branch office located in Amsterdam to service customers in Europe: http://www.inifarms.com/fresh-cut-coconut.html

present online in order to[190] sell directly to the European consumer. According to their website, 35% of their exports go to Europe and 43% to America. Unfortunately, to develop an online tool like this requires hefty investments, skills and adequate manpower to maintain such voluminous demands. This may be challenging for small size coconut producers.

As an exotic product in Europe, fresh coconut competes with other exotic and tropical fruit, such as mango and papaya. Mango for example, is a fruit more common to European consumers and are consumed in larger volumes in comparison to coconut. Familiarity plays a role in the European consumer's decision to purchase exotic fruit.

Coconut is unique regarding characteristics for its combination of pulp and liquid. Another strength of coconut is the price, lower than most other tropical fruit.[191] In the European market, in addition to fresh coconut, there are many other coconut products available such as canned coconut cream, desiccated grated coconut and bottled coconut water. There is the possibility that one day processed products may come to replace fresh coconuts, but the growing availability of coconut products will have a positive effect on consumer awareness and generate more attention to both fresh and processed coconut in the future.

The prices for fresh coconuts in the European market are relatively stable, although prices fluctuate due to availability. Timing and origin are relevant factors for coconut prices. Prices in the European summer are generally higher, because of increased demand. Importers generally keep a profit margin of 8% over the sales price, excluding handling costs, but Caribbean exporters should be aware that there is not always a direct relation between trade prices and consumer prices.[192]

Coconut 5. Recommendations

Fresh coconuts are marketed through supermarkets and ethnic or specialized wholesalers. Where the coconuts will end up depends on the type of coconut, mature or young, and the volume available to supply.

The market for young and mature coconuts are very distinctive. Mature coconuts are still the dominant segment, but most growth is to be expected in the young drinkable coconut.[193] The young coconut is most perishable and is mainly consumed because of the coconut water. It requires more care, and therefore they can be found in a higher segment. Coconut water is also associated with health properties, which can be strengthened by organic certification. Airfreight can be used to ensure the freshness of organic non-treated coconuts, but the additional costs of certification and logistics put these young coconuts in an exclusive segment. Supermarkets that offer a variety of exotic fruit will likely also offer young, drinkable coconut, especially throughout the summer. Mature coconut is mainly used for its flesh, not its water. For these products, price is the focal point.

Coconuts are sold to consumers through retailers but are also used for culinary purposes in the foodservice segment, especially for exotic or ethnic recipes. Supermarkets are extending their assortment with fresh-cut coconut, adding extra value and processing cost.

It is difficult to evaluate the quality of a coconut. For the end market, appearance and size are the most important features for coconuts. When the product has an inferior appearance, it becomes unsuitable for selling it for fresh consumption and can be best used for processing in the origin country.

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190 http://cocoshop.eu/es/cocosnaturales/coco-wilson-caja-9-unidades-31.html

191 See Fruitrop's comparison of trade volumes and prices between different exotic fruits: https://www.fruitrop.com/en/Produits/Exotics/coconut

192 To have an idea of king prices from wholesalers check coconut wholesale prices on the website of France Agrimer: https://rnm.franceagrimer.fr/prix?NOIX-DE-COCO&12MOIS.
More information to get familiar with consumer prices and presentations in the online assortment of European supermarket chains, including:Tesco (UK) 'coconut' in fresh fruit; Carrefour (France) 'noix de coco'; Albert Heijn (Netherlands) 'kokosnoot'; Rewe (Germany) 'kokosnuss'

193 Allied Market Research: Beverages segment would witness the fastest growth, registering a CAGR of 14.7% during the forecast period 2018-2026". https://www.alliedmarketresearch.com/coconut-products-market

Regarding the channels used to reach the end market, specialized importers play a central role in the distribution of fresh coconuts. These importers are often specialized in exotic or ethnic fruit and vegetables and maintain a wide network of clients in retail and foodservice wholesale because coconuts are a very specific product, importers often have wholesale activities as well.

The introduction of coconut water brought about new businesses that exclusively sell drinkable young coconuts, such as Genuine Coconut[194] in Spain. Other companies, among which the British Coconutty[195] combine the sales of green or young coconuts with other coconut products, such as oil, cream and flour. Some importers, such as Nature's Pride[196] take the role as service providers, developing concepts for supermarkets and organizing the supply chain.

Supermarkets are responsible for a large share of fresh coconuts on the market, although it remains a very specific fruit and a seasonal product for many, mainly during the summer. Processed products such as canned coconut cream, desiccated coconut and bottled coconut water are standard in every main grocery store in Europe. Supermarkets would normally use their preferred service providers to source coconuts or hire a brand with an original concept that adds more value to the product.

Private labels are still growing diversifying the number of products, and supermarkets are increasingly involved with sourcing to ensure reliable and sustainable sources.[197]

On the other hand, traditional fruit wholesalers cover the spot market, moving according to trade fluctuations. They supply to specialised and ethnic shops, street merchants and restaurants. In the case of coconuts, import and wholesale sometimes are performed by the same company.[198]

The most interesting channels for exporters are supermarkets with an exotic fruit assortment, as well as wholesalers that supply the foodservice segment. Most important is finding a buyer or importer that knows the fresh coconut business and these different channels.[199] Direct trade can improve profits, but it is not a guarantee.

For large volumes, being part of the supply chain of large retail chains gives more security of demand and margin. However, the requirements are high and the room for negotiation is minimal with the supermarket chains. The most likely route to becoming part of a retail programme is to cooperate with a service provider that has a local infrastructure and supply contracts with retailers.[200]

4.2 AQUACULTURE

Overfishing is a problem affecting global fisheries (FAO, 2020). The significant overcapitalization of the global fishing fleet has resulted in continuous declines in the sector's productivity, threatening the sustainability of the resource, but also employment opportunities, livelihoods, and food safety (FAO, 2013).

194 Genuine Coconut: https://genuinecoconut.com/es/ in Spain.

195 Coconutty https://coconutty.co.uk/:,

196 Nature's Pride https://www.naturespride.eu/,

197 Private label examples: Tesco's Rainforest Alliance coconut https://www.tesco.com/groceries/en-GB/products/253554452; Asda´s Grower's Selection coconut https://groceries.asda.com/product/mango-kiwi-exotic-fruit/asda-growers-selection-coconut/30694; and Albert Heijn's organic coconut https://www.ah.nl/producten/product/wi193888/ah-biologisch-kokosnoot.

198 Large, non-specialised cash & carry wholesalers, such as Sligro Food Group in the Netherlands and Belgium: https://www.sligrofoodgroup.nl/home-4.htm. It gives service to food professionals and the food service industry. Importing exotic products is not part of their business, so they depend on the expertise of their partner, in this case the fruit and vegetable specialist Smeding: https://www.smeding.nl/

199 Some exotic fruit specialists are Exotimex, Joko Impex, Kinobé Groupe and Special Fruit.

200 Typical importers that deal with exotic fruit and that have the capacity to commit to supermarkets include, for example, Roveg, Nature's Pride and Greenyard France (formerly known as Katopé).

In the last decade, there is a huge reaction from the European Commission, businesses and consumers against the issues of mislabelling, fraud and other bad practices. Now, there is an increasing number of requirements, mandatory, market and niche, to comply to gain market or border entry to Europe.

From the market perspective, there has been an increase in expenditure of the European households for purchasing fish and seafood despite the higher prices. The internal demand was primarily met through imports and the average per capita apparent consumption, was estimated at 24,35kg in 2017[201] mostly of wild-caught products.[202] Simultaneously, there is a growth of European Union aquaculture peaking in the last decade. In addition to the increase in demand, this was due to increased production of high-value species, such as salmon, seabass and bluefin tuna, combined with the strong price increase of some major species, including salmon, seabass, gilthead seabream, oyster and clam.

Aquaculture 1. Market share to European Union / share of standard-compliant

The European Union is a net importer of fish and seafood, and the availability of these products in the domestic market mostly relies on extra-European Union supplies. The value of European Union trade of fisheries and aquaculture products, which comprises both extra-European Union imports and exports, reached EUR32.28 billion in 2018, making it the highest in the world. Of this, imports accounted for EUR26.53 billion, which was 82% of the total (European Commission, 2019).

Fish and seafood are part of the HS Code 03, which includes Fish and crustaceans, molluscs, and other aquatic invertebrates.

- **HS Code 0301** Fish; live
- **HS Code 0302** Fish; fresh or chilled, excluding fish fillets and other fish meat of heading 0304
- **HS Code 0303** Fish; frozen, excluding fish fillets and other fish meat of heading 0304
- **HS Code 0304** Fish fillets and other fish meat (whether or not minced); fresh, chilled or frozen
- **HS Code 0305** Fish, dried, salted or in brine; smoked fish, whether or not cooked before or during the smoking process; flours, meals and pellets of fish, fit for human consumption
- **HS Code 0306** Crustaceans; in a shell or not, live, fresh, chilled, frozen, dried, salted or in brine; smoked, cooked or not before or during smoking; in shell, steamed or boiled, whether or not chilled, frozen, dried, salted or in brine; edible flours, meals, pellets
- **HS Code 0307** Molluscs; whether in a shell or not, live, fresh, chilled, frozen, dried, salted or in brine; smoked molluscs, whether in a shell or not, cooked or not before or during the smoking process; flours, meals and pellets of molluscs, fit for human consumption
- **HS Code 0308** Aquatic invertebrates, other than crustaceans and molluscs; live, fresh, chilled, frozen, dried, salted or in brine, smoked, whether or not cooked before or during the smoking process; flours, meals, and pellets, fit for human consumption

Information about prepared or preserved fish food is included with the following HS Codes:

- **HS Code 1603** Extracts and juices of meat, fish or crustaceans, molluscs or other aquatic invertebrates
- **HS Code 1604** Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs
- **HS Code 1605** Crustaceans, molluscs and other aquatic invertebrates, prepared or preserved

[201] Per capita European Union consume: https://ec.europa.eu/fisheries/press/eu-fish-market-2019-edition-out-everything-you-wanted-know-about-eu-market-fish-and-seafood_en

[202] Wild-caught products predominated in the European Union fish and seafood market, accounting for three-quarters of the total per capita consumption.

China and Norway are the main exporters of HS Code 03 Fish, followed by India, Chile, Viet Nam and Canada. Regarding the HS Code 1605 Crustaceans and molluscs and HS Code 1604 Prepared or preserved fish, China is the most outstanding leader, followed by other Southeast Asian countries.

Both HS Codes 03 and 16 represent a very small part of the European Union imports, just 0,1%. However, for CARICOM it is an important percentage of its exports to the world: 17% in 2019 for code HS03.

Table 20. Exports from Caribbean Community (CARICOM) to European Union (EU 28) for some product with HS Code 03 Fish and crustaceans, molluscs and other aquatic invertebrate and 1603, 1604, 1605

Product code	Product label	CARICOM's exports to European Union 28			% CARICOM's exports to European Union 28			% European Union 28's imports from CARICOM		
		Value in 2017	Value in 2018	Value in 2019	Value in 2017	Value in 2018	Value in 2019	2017	2018	2019
'0306	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine, ...	42 612	51 075	49 347	24.11%	28.62%	32.62%	0.62%	0.74%	0.78%
'0303	Frozen fish (excluding fish fillets and other fish meat of heading 0304)	1 382	3 019	5 478	4.59%	14.93%	10.07%	0.03%	0.07%	0.12%
'0302	Fish, fresh or chilled (excluding fish fillets and other fish meat of heading 0304)	1 804	2 322	3 175	2.65%	3.65%	5.59%	0.01%	0.02%	0.02%
'0304	Fish fillets and other fish meat, whether or not minced, fresh, chilled or frozen	2 989	2 828	1 210	16.39%	19.20%	8.27%	0.03%	0.03%	0.01%
'0307	Molluscs, fit for human consumption, even smoked, whether in shell or not, live, fresh, chilled, ...	4 323	1 843	826	33.37%	13.54%	5.49%	0.08%	0.03%	0.02%
'0305	Fish, fit for human consumption, dried, salted or in brine; smoked fish, fit for human consumption, ...	117	81	196	1.50%	0.70%	2.89%	0.00%	0.00%	0.01%
'0301	Live fish	40	40	15	0%	0%	0%	0%	0%	0%
'0308	Aquatic invertebrates other than crustaceans and molluscs, live, fresh, chilled, frozen, dried, ...	11	9	15	4.72%	0.47%	0.77%	0.03%	0.02%	0.04%
3	**Total Fish**	**53 278**	**61 217**	**60 262**	**17%**	**19%**	**17%**	**0.1%**	**0.1%**	**0.1%**
'1603	Extracts and juices of meat, fish or crustaceans, molluscs and other aquatic invertebrates	0	0	0	-	-	-	0.00%	0.00%	0.00%
'1605	Crustaceans, molluscs and other aquatic invertebrates, prepared or preserved (excluding smoked)	757	344	186	70.35%	33.50%	15.66%	0.03%	0.01%	0.01%
'1604	Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs	2	11	666	0.17%	2.60%	60.88%	0.00%	0.00%	0.01%
16	**Total Fish derivatives**	**759**	**355**	**852**	**34.14%**	**24.48%**	**37.34%**	**0.01%**	**0.00%**	**0.01%**

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

Bahamas, Guyana and Surinam are the main Caribbean exporters to the European Union market.

Table 21. List of supplying markets in CARICOM for product HS Code 03 Fish and crustaceans, molluscs and other aquatic invertebrates imported by EU 28

Exporter countries	*2017*	*2018*	*2019*	*% of total 2019*
Caribbean Community (CARICOM) Aggregation	**53 277**	**61 218**	**60 265**	**100%**
Bahamas	22 039	18 751	27 340	45%
Guyana	5 709	20 708	15 205	25%
Suriname	14 459	15 132	11 807	20%
Jamaica	8 258	4 319	3 717	6%
Belize	2 165	1 319	1 835	3%
Others	647	989	361	1%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

France, the Netherlands and Belgium are currently the main importers from CARICOM.

Table 22. List of importing markets in European Union (EU 28) for product HS Code 03 Fish and crustaceans, molluscs and other aquatic invertebrates exported by Caribbean Community (CARICOM)

Importer countries	*2017*	*2018*	*2019*	*% of total*
European Union (EU 28) Aggregation	**53 277**	**61 218**	**60 265**	**100%**
France	34 266	22 972	31 444	52%
Netherlands	14 143	28 282	15 383	26%
Belgium	6	18	10 490	17%
Germany	593	5 647	1 349	2%
Spain	1 918	1 444	965	2%
Greece	399	569	347	1%
United Kingdom	1 791	2 094	146	0.2%
Others	161	192	141	0.2%

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

42% of the code 03 exports to European Union is subcode 0306, mainly exported by Bahamas, Guyana and Suriname.

Table 23. Existing and potential trade between Caribbean Community (CARICOM) and European Union (EU 28) for product HS Code 0306 Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine

		CARICOM's exports to EU 28		
Product code	*Product label*	*Value in 2017*	*Value in 2018*	*Value in 2019*
'030611	Frozen rock lobster and other sea crawfish "Palinurus spp.", "Panulirus spp." and "Jasus spp.", ...	25 167	20 912	30 602
'030613	Frozen shrimps and prawns, whether in shell or not, incl. shrimps and prawns in shell, cooked ...	14 165	27 884	15 029
'030617	Frozen shrimps and prawns, even smoked, whether in shell or not, incl. shrimps and prawns in ...	1 733	0	2 006
'030612	Frozen lobsters "Homarus spp.", even smoked, whether in shell or not, incl. lobsters in shell, ...	1 273	1 655	1 659
'030633	Crabs, whether in shell or not, live, fresh or chilled	0	3	28

Unit: Thousands of United States dollars. *Sources*: ITC calculations based on UN COMTRADE and ITC statistics.

Aquaculture 2. Concerns in the sector and key sustainability issues

Aquaculture can be part of the solution for the overfishing affecting global fisheries. To help meet the growing global demand for seafood, aquaculture is growing fast. Transition to sustainable and responsible production should be accelerated because the environmental impact of fish farming varies widely, depending on the species being farmed, the methods used and where the farm is located. Good practices can reduce the impact significantly to the environment limiting habitat damage, disease, escapes of farmed fish and the use of wild fish as feed.

Moreover, if aquaculture is done excessively, it can lead to disease outbreaks due to the use of potentially harmful chemicals and the overuse of antibiotics. Unacceptable social trade-offs in aquaculture may include the abuse of workers' and community rights, policies that favour large operators, inequality and discrimination, slavery and child labour. Unacceptable environmental trade-offs in aquaculture may include the degradation and the disruption of an ecosystem, contribution to climate change, and loss of biodiversity.

Concentrated fish can mean concentrated waste. Combined with uneaten food pellets, fish waste can impact the local environment by polluting the water and smothering plants and animals on the seafloor. There are also concerns that diseases and parasites, common occurrences in crowded pens, are spread to wild fish.

If aquaculture is produced in an economically, socially and environmentally responsible manner, it contributes to long-term food security and nutrition, healthy ecosystems and improves the living standards of all, especially the poorest. The VSS should be efficient to manage the problems of this sector including the following principles:

- Legal compliance with international and local regulations
- Preservation of biodiversity, ecosystems and diversity of the wild population
- Preservation of water resources and quality
- Responsible use of feed and other resources
- Fish health and responsible use of antibiotics and chemicals
- Socially responsible farms: workers and local communities

Fisheries are an important source of employment in coastal communities of Bahamas, Guyana, Suriname, and Jamaica. Women make up around 6 per cent of the workforce.[203] Aquaculture is low labour-intensive activity. In coastal areas, fishing-related activities are often the only source of food and employment in times of need, thus the need to support rural development. Increasing climate variability has also compounded local vulnerability of the Caribbean's reefs.

Aquaculture 3. VSS in practice compliant

There are 53 products registered with European Union quality schemes in the seafood sector. They refer to Geographical Indications (GIs), namely Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs), and to traditional aspects, namely the Traditional Specialities Guaranteed (TSG). Two-thirds of the products (36) are PGIs, more than one-quarter (14) are PDOs and 6% (3) are TSGs. The number of GIs and TSGs increased greatly during the last decade, growing from 21 products in 2010 to 53 in 2019.

The main private sustainable standards to certify fisheries are **Aquaculture Stewardship Council (ASC)**[204] in Belize and **Marine Stewardship Council (MSC)**[205] in Suriname and Guyana so that they are officially recognized worldwide as sustainably managed. These matched with the most commonly accepted sustainability

[203] FAO: http://www.fao.org/fishery/facp/JAM/en

[204] ASC: https://www.asc-aqua.org/

[205] MSC https://www.msc.org/uk

certification scheme in Europe for wild-caught seafood Marine Stewardship Council (MSC) and the commonly accepted sustainability scheme for cultivated seafood Aquaculture Stewardship Council (ASC).

Sustainability certification adds to food safety and social compliance certification, the issues of establishment as well as the primary production location of the source of the raw material. Regardless of whether it is fishing boats or aquaculture, increasing numbers of European importers require primary production facilities to be certified. It is no longer a niche requirement. European retailers and the foodservice market use sustainability certification as a mandatory access requirement.

There are also other sustainability standards (**Friends of the Sea, GLOBAL G.A.P, Best Aquaculture Practices**), but they are still considered to be niche market requirements. Additionally, there is the **Global Sustainable Seafood Initiative (GSSI)** whose mission is to ensure confidence in the supply and promotion of certified seafood as well as to promote improvement in the seafood certification schemes. The products should be certified for their production methods and the facilities should be certified by the Chain of Custody certifications by either the ASC or MSC to ensure traceability in the supply chain.

Aquaculture 4. VSS market review in this sector – Regional Importance/ pricing and premiums

In 2017, the apparent consumption[206] of fish and seafood in the European Union amounted to 12.45 million tons in live weight equivalent, 74% of which were imported. Per capita reached 24.35 kg of fish and seafood consumed on average by European Union citizens. Wild-caught products covered three-quarters of total apparent consumption of fish and seafood. The consumption of farmed products in the European Union was at 6.35 kg per capita in 2017, 2% above its decade average.[207] There is a strong difference in profile consumption between countries within the European Union. Portugal (56.8 kg per capita) and Spain (45.6 kg) are very far from eastern European countries with their consumptions not exceeding 10 kg per inhabitant and year (European Commission, 2019).

The European Union can maintain a high level of fish and seafood apparent consumption mainly by sourcing it from other regions of the world. Imports prevail for tuna, cod, salmon, Alaska pollock and shrimps – the top-5 species consumed in the European Union and for which European Union self-sufficiency averaged at only 13% in 2017 (European Commission, 2019).

Consumer prices of fish and seafood grew 12% on the period 2013-2018, clearly over the growth of meat (1.7%) and “food” (4.2%).[208]

Regarding the types of seafood products under European Union quality schemes, 58% of them comes from wild fisheries and 42% from aquaculture.[209]

The self-sufficiency for shrimps averaged 11% from 2008 to 2017, following a downward trend. The most consumed shrimp species, supplied mainly through imports, were warmwater shrimps and Argentine red shrimp, frozen or prepared/preserved.[210]

206 MSC https://www.msc.org/uk

207 European Union SUPPLY BALANCES (2017, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY).
Source: EUMOFA, based on Eurostat (online data codes: fish_aq2a, fish_ca_main and DS-016890) and FAO data.

208 Source: Eurostat - Harmonised Index of Consumer price. (European Market Observatory for Fisheries and Aquaculture products. The European Union Fish Market. 2019 edition).

209 Source: Door DG Agri. (European Market Observatory for Fisheries and Aquaculture products. The European Union Fish Market. 2019 edition).

210 Source: “Self-sufficiency rate for other most consumed products” EUMOFA, based on Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=fish_aq2a&lang=en), FAO, national administrations and FEAP data.

Since 2008, none of the fishery and aquaculture products consumed in the European Union had ever reached a level of annual apparent consumption higher than 3.00 kg per capita until 2017, when tuna achieved the peak of 3.07 kg per capita. It is mostly consumed as canned products of skipjack and yellowfin tuna.[211]

After a decrease recorded from 2008 to 2009, caused by a drop in Spanish catches, European Union consumption of tuna began following an upward trend supported by increased availability from both internal production and imports.[212]

In 2018, European Union imports of crustaceans totalled 645,795 tonnes, worth EUR 4.79 billion. Compared with 2017, the value had decreased by EUR 151.25 million, or 3%, while the volume increased 12,308 tonnes or 2%. In terms of volume, 44% of crustaceans imported in the European Union (286,932 tonnes) are warm water shrimps, more specifically frozen shrimps of the genus Penaeus. In 2018, their import value decreased by 10% compared with 2017, from EUR 2.29 to 2.06 billion, while the import volume remained stable (+0,2%) (European Commission, 2019).

One-third of European Union imports of warm water shrimps originated from Ecuador, which constantly increased its supply to the European Union during the period 2009–2018. In 2018, Ecuador's European Union exports totalled 102,064 tonnes and EUR 609.94 million. Viet Nam and India are also relevant providers of warm water shrimps, with Viet Nam providing farmed species and India providing both wild and farmed species. Spain, France and Italy are the main European Union markets for warm-water shrimps. In 2018, the three countries accounted for 87% of the warm water shrimps volume imported in the European Union. The consumption of imported shrimps and prawns is increasing in Europe. The potential market can be exploited by CARICOM countries to further increase their exports to the European Union (European Commission, 2019).

Aquaculture 5. Recommendations

To reach the European market for CARICOM producers passes through the obligatory fulfilment of some requirements. We have already mentioned those VSS that buyers and the market require.

Looking at other areas like the mandatory requirements and Non-Tariff Measures (NTM)[213] set by European countries, and the requirements for specific niche markets:

Mandatory requirements:

Country[214] and processing facilities[215] need to be accredited. The European Union's hygiene rules include the following:

- Primary responsibility for food safety resting with the food business operator
- Food safety ensured throughout the food chain, starting with primary production
- General implementation of procedures based on the HACCP principles
- Application of basic hygiene requirements possibly further specified for certain categories of food

[211] Source: "Apparent consumption of most consumed products, three-year trend Source". EUMOFA, based on Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=fish_aq2a&lang=en) and FAO data.

[212] Source: "Apparent consumption of tuna" EUMOFA, based on Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=fish_aq2a&lang=en) and FAO data.

[213] Refer to UNCTAD´s Non-Tariff Measures (NTM) at https://unctad.org/topic/trade-analysis/non-tariff-measures and its database at https://trains.unctad.org/ that has those requirements easily accessible by product.

[214] European Union Traces portal, to check countries approval listed by the European Union, and which companies in your country can export fish and seafood to Europe: https://webgate.ec.europa.eu/sanco/traces/output/non_eu_listsPerActivity_en.htm#. Guyana: https://webgate.ec.europa.eu/sanco/traces/output/GY/FFP_GY_en.pdf

[215] Trade Gate Sweden for specific questions about rules and requirements in Sweden and the European Union: https://www.kommerskollegium.se/en/open-trade-gate/export-to-sweden-and-the-eu/essential-export-requirements/

Maximum residue levels must not be exceeded, depending on the species and the source, fisheries or aquaculture. Required a health certificate produced by an accredited laboratory per shipment.[216]

Chlorate levels in imported fish and seafood are one of the residues that came into focus in 2019, and a tighter MRL is expected soon. Processing establishments that do not have access to clean water use chlorate to treat the water before it is used in the processing facilities. At the end of 2019, German authorities found levels of chlorate in imported fish and seafood products which raised concerns about the safety for human consumption of these products. Eventually, this debate may result in a change to the acceptable levels of chlorates in food exported to Europe. Chlorate-based pesticides have already been banned. The exporter has to be prepared when changes to regulations are made. Chlorate[217] is only one example; another example is the use of antibiotics in cultivated seafood. The fish and seafood trade is expected to be fully regulated and controlled by 2030.

Labelling regulations[218] must be strictly followed: unprocessed/processed fish and seafood, wild/cultivated fish and seafood, pre-packed having some additional information needs that products which have not been pre-packed do not need to include. The name of the product, commercial and scientific names; list of ingredients, production method, origin, net weight, date of minimum durability, European Union seller, European Union approval number, lot number, nutrition facts, date of first freezing. Added water needs to be included as an ingredient. This has been a recent point for discussion among importers and European authorities because of how water content should be measured and how it should be labelled. For instance, in Germany, authorities take it a step further, if more than 12% water is added, the seller is no longer allowed to name the product as shrimp. Instead, a product with more than this amount of added water should be labelled a "preparation from" shrimp.

The consequences of the interpretation of the regulation[219] are far-reaching, affecting not only consumer perception but also the customs code under which the shrimp product has to be imported. As "preparations from" fish or seafood fall under HS16 instead of HS03, they are subject to higher import duties that increase the price of the product. The debate about how to deal with added water in seafood labelling is still ongoing.

- **Prove that your fish and seafood come from legal sources**

  The European Union Regulation,[220] to prevent, deter and eliminate illegal, unreported and unregulated (IUU)[221] fishing came into effect on 1 January 2010. According to the European Union, IUU fishing is any fishing that is in forbidden areas, uses illegal methods or goes unreported. IUU fishing harms the

[216] Regulations European Union: Regulation (EC) No 470/2009 procedure for setting MRLs for residues of pharmacologically active substances in food of animal origin, such as antibiotics https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-5/reg_2009-470/reg_470_2009_en.pdf; Regulation (EU) No 37/2010 Annex: complete list of substances and their MRLs https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-5/reg_2010_37/reg_2010_37_en.pdf; Regulation (EC) No 396/2005 establishes European Union MRLs for pesticides https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32005R0396; Publicly available database maintained by the European Union https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN; Regulation (EC) No 1881/2006 MRLs for environmental contaminants such as heavy metals, including mercury https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:364:0005:0024:EN:PDF; European Union Register of Feed Additives (coccidiostats and histomonostats residues in food derived from animals reared on feed containing them https://ec.europa.eu/food/sites/food/files/safety/docs/animal-feed-eu-reg-comm_register_feed_additives_1831-03.pdf

[217] CBI news items on chlorate: https://www.cbi.eu/news/european-union-findings-chlorate-residues-create-challenges-food-industry

[218] Labeling regulations guide for a detailed understanding of the European Union's requirements for fish and seafood labelling:https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/eu-new-fish-and-aquaculture-consumer-labels-pocket-guide_en.pdf

[219] Visit the European Union Trade Helpdesk for more information on import rules and taxes in the European Union https://trade.ec.europa.eu/tradehelp/

[220] Summary of Europe's IUU regulations https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:pe0005

[221] The European Union Regulation to prevent, deter and eliminate illegal, unreported and unregulated (IUU) http://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en/

sustainable management of global (and local) fish stocks and creates unfair competition against those that fish legally and responsibly.

The catch certificate shall contain all the information specified in the specimen shown in Annex II of the European IUU legislation.[222]

• Consider a new system for the country of origin certificates

Exporting fish and seafood products from a country that is listed as "Standard GSP", "GSP+" or "Everything But Arms" (EBA) from the European Generalised Scheme of Preferences (GSP), benefits from reduced or even removed import tariffs. However, the exporter should prove that the product origin is the country from which it is exported.

This is called the REX system[223] and was introduced by amending Regulation (European Union) No 1063/2010 in the context of improving the GSP Rules of Origin (RoO)[224] in 2010.

• Understand the requirements for niche markets

New technology, and the ability to use it for increased levels of monitoring and control, is one of the driving forces behind the niche market demands. Consumers are more interested in the source of their seafood, which encourages traceability in retail and also stimulates the increase in organically certified seafood, which is still niche but stable.

• Ensure traceability in wild and farmed fish and seafood supply chains

To supply fish or seafood to European retailers, the exporter will sooner or later be confronted with requirements to avoid fraud, mislabelling and the risks of Illegal, Unreported and Unregulated (IUU) products entering the supply chain. Traceability, related to rule out the risks of IUU practices and fraud, is becoming more important in the European retail market.

Many European retailers are beginning to look beyond the traceability of the consumer products themselves and also consider the ingredients needed to produce those consumer products. For farmed fish, reputational risks perceived by retail chains often relate to the use of fishmeal and oil from unsustainable or irresponsible sources which target overfished stocks or which use methods that damage ecosystems. Retailers themselves, but also suppliers, are working hard to take traceability to the next level. Several retailers in Europe are involved in the Seafood Taskforce.[225] Another initiative is FishCoin,[226] more focused on improving the livelihoods of small-scale fishermen and fish farmers than in transparency as others.

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222 Annex II of the European IUU Legislation: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02008R1005-20110309&from=EN

223 Practical aspects of REX and what it means for you as an exporter on the European Union website. https://ec.europa.eu/taxation_customs/business/calculation-customs-duties/rules-origin/general-aspects-preferential-origin/arrangements-list/generalised-system-preferences/the_register_exporter_system_en

224 GSP, GSP+ or EBA status. Select your country name in the tool on this European Union webpage. https://ec.europa.eu/trade/policy/countries-and-regions/development/generalised-scheme-of-preferences/

225 The Seafood Taskforce is a non-profit organisation. Its members are made up of businesses, governmental organisations and non-governmental organisations. The taskforce aims to tackle IUU fishing, and the social and environmental damage that it causes.The Seafood Taskforce is piloting a new tool, which enables them to track the origins of the different inputs to the farm; for example, tracing the fishmeal and oil which is used on the farm back to the boats and fisheries that supply them. These retailers will require that their suppliers make an attempt to map the whole supply chain and all of its inputs, including the indirect ones. https://www.seafoodtaskforce.global/

226 Seafood Traceability Powered by Blockchain: https://fishcoin.co/

- **The organic seafood market requires a certification for proof**

The organic market for seafood is relatively stable. The European largest markets are found in the United Kingdom and Germany, followed at a distance by France, Italy and Spain. Keeping health and sustainability trends in mind, we may expect the growth of the organic market in the long term.

Organic seafood can only be sourced from aquaculture because European Union organic regulations, with which all imported organic seafood must comply, do not allow wild-caught seafood to be certified as Organic seafood. The most common items to be found in the organic segment are species such as shrimp (black tiger shrimp and Pacific white shrimp), salmon and trout.

Important to realize is that organic seafood always needs to be a native species to the place where it is produced. This means that organic Pacific white shrimp can only be sourced from the Americas, while organic black tiger shrimp can only be sourced from Africa or Asia.

Organic fish and shrimp often sell at a 15% to 40% premium.[227] To sell organic seafood on the European market, the minimal requirement that you need to meet is the European Union Organic Seafood Regulation. This compliance will allow you to put the European Union green leaf on the package.

5. ROLE OF ACCREDITATION AND CERTIFICATION BODIES

To meet the increasing demand for sustainable and safe products, countries need to set up a reliable Quality infrastructure system (QIS). QIS relies on metrology, standardisation, accreditation, and conformity assessment to help national industries in meeting the requirements of markets, especially export markets, which enhances countries' industrial efficiency and effectiveness.

Standards and accreditation are referenced in the WTO Technical Barriers to Trade (TBT) Agreement and play an essential role in trade facilitation. Good standardisation practices from a free-trade perspective have been codified in WTO TBT Agreement and the decisions of its Committee. The WTO TBT Agreement considers accreditation as an indication of adequate technical competence that builds confidence in the continued reliability of the Conformity Assessment Bodies (CABs).[228] WTO encourages its members to provide technical cooperation in the areas of metrology, testing, certification and accreditation to improve technical infrastructure. The government needs to make sure that the implementation of standards and regulations is consistent with world trade rule established within the World Trade Organization (WTO).

QIS also play a vital role in the transformation of economic activities, social practices and human behaviour needed to achieve sustainable development.

5.1 QIS AND SUSTAINABLE DEVELOPMENT

VSS can actively support the circular economy; that is through unifying terminologies, communication and exchange of information become more efficient. VSS also promote the acceptance of circular products, which is essential for ensuring circular solutions would successfully take place. Thus, QIS can assist in the creation of a circular economy and also in underpinning the implementation of the Sustainable Development

[227] CBI Ministry of Foreign Affairs, The Netherlands. 2020. "The organic seafood market requires certification for proof". https://www.cbi.eu/market-information/fish-seafood/what-requirements-should-your-product-comply; "Exporting frozen organic seafood to Europe".

[228] Article 6.1.1, TBT Agreement.

Goals (SDGs) by contributing to the three sustainable development themes: Prosperity, People and Planet,[229] as follows:

Prosperity: In today's global world, national and international QIS continue to play a vital role in international trade and Global Value Chains (GVCs). The prompt growth in international trade and the greater concerns regarding the products' safety and quality, along with environmental protection make their role even more evident.

QI institutions and services contribute to SDG 8 (Decent Work and Economic Development), and SDG 9 (Industry, Innovation, and Infrastructure), through

- Contributing to the economy by expanding and opening new markets, and increasing innovation, efficiency and productivity gains.
- Enhancing product quality and compatibility, and therefore competitiveness.
- Reducing costs of trade by avoiding duplication in testing and inspection and creating standardised working methods along the GVCs.
- Supporting the development of industry and infrastructure and contributing to innovation through fostering the development of new technologies or products in line with established best practices. This also contributes to generating greater employment and fostering socio-economic development.

People:[230] QI institutions and the services they provide have a fundamental and demonstrable role in the support of trade in food and agricultural products. Thus, they contribute to SDG 2 (End Hunger) by ensuring that food is fit and safe for consumption and is grown in a sustainable way, which in turn allows people to live healthy lives and improve their social and economic well-being.

A QI also plays a pivotal role throughout the health sector and SDG 3 (Good Health and Well Being). Guidelines and regulations that cover medical equipment and methods can only be relied on if the measurements and processes used to verify their compliance are accurate, traceable to internationally agreed on reference standards and performed using competently calibrated instruments.

Also, in the case of SDG 6 (Clean Water and Sanitation), QI institutions provide technical means so that water can reach more people and is safe for consumption. It also ensures that pollution is being controlled and that water efficiency is promoted.

QIS also contribute to SDG 7 (Affordable and Clean Energy); accredited conformity assessment services provide invaluable and critical support for governments and organizations as they seek to enhance the energy efficiency, economic performance and the transition to clean energy. They also prevent unsafe, unhealthy or environmentally harmful products from entering the marketplace.

Planet: QI institutions and services also contribute to SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Change), SDG 14 (Life below Water), as well as SDG 15 (Life on Land). They help in protecting and nurturing the environment is indispensable for people's well-being and human survival. They also support the transition towards sustainable consumption and production patterns. Also, compliance with technical regulations, mandatory requirements and appropriate voluntary standards, as demonstrated through accredited testing, inspection and certification, can provide the information required to assess and improve the ecological performance of materials and products.

Moreover, QIS favourably impact all the stakeholders in the supply chain, including regulators, governments, producers and customers. Figure 3 provides a summary of the role and benefits of QIS that are formulated around the triple bottom line of sustainability; plant, people, and prosperity.

[229] United Nations Industrial Development Organization (UNIDO) (2019) Sustainable development and the future of quality infrastructure.

[230] United Nations Industrial Development Organization (UNIDO) (2019). *Sustainable development and the future of quality infrastructure.*

5.2 ACCREDITATION AND CERTIFICATION BODIES: FEATURES AND MECHANISM

Accreditation bodies need to show that they are independent and unbiased, and for this reason, are either government-owned or under agreement with the government. Accreditation bodies are often established as national or regional entities that in practice need to demonstrate the existence of mutual recognition arrangements through membership of relevant international organisations that engage in peer reviews of each other.[231]

The National Accreditation Bodies (NABs) may seek recognition of its accreditations within the frameworks of the International Accreditation Forum (IAF) and International Laboratory Accreditation Forum (ILAC). The IAF is the world association of Conformity Assessment Accreditation Bodies and other bodies interested in conformity assessment in the fields of management systems, products, services, personnel and another similar program of conformity assessment.[232] ILAC is the international organisation for accreditation bodies operating per ISO/IEC 17011. It is involved in the accreditation of conformity assessment bodies, including calibration laboratories, testing laboratories, medical testing laboratories, inspection bodies, and proficiency testing providers. These bodies have been working towards harmonisation of international practices for accreditation of conformity assessment bodies.[233] The World Trade Organization TBT agreement states that this harmonisation resulted in the development of global networks to facilitate recognition and acceptance of results of conformity assessment.

Developing countries often do not have the resources or the expertise to establish NABs, and frequently are operating at a low economic level that makes it unprofitable for third party conformity assessment providers to operate exclusively in their territory. One of the major decisions for a developing country therefore involves how its conformity assessment and accreditation requirements are to be carried out. Using a combination of national and foreign conformity assessment providers, backed up by regional accreditation structures, maybe the best way for developing countries. However, countries might also need to tailor their solutions that fit their circumstances in the best possible way.[234]

5.3 VSS AND LEGAL STANDARDS FROM A REGULATORY PERSPECTIVE

The relationship between VSS and legal standards although seems easy to describe yet is not that simple in reality. On one side there is a tendency to privatize regulations and to shift it from state or authority-based institutions to private bodies. On the other hand, the procedures for the creations of voluntary standards are increasingly institutionalised and are sometimes more formalized than legislative processes (Albrecht, E., 2014). VSS now have a considerable degree of credibility as a governance instrument as they gain legitimacy by relying on a set of international standards and international rules. Therefore, a distinction between public standards and VSS, from a regulatory or policy perspective, is not very relevant if one does not solely focus on the legal status of an organization involved in standard-setting and enforcement. Public and private standards, therefore, increasingly 'co-regulate', complement, and supplement each other (Marx A, 2015).

5.4 VSS AND INTERNATIONAL QI INSTITUTIONS

As mentioned, national and regional QIS bodies may seek the recognition of their international counterparts. The link between the national/regional quality infrastructure system and the international quality infrastructure systems has numerous advantages to the national and regional QIS institutions that are not limited to:

231 United Nations Industrial Development Organization (UNIDO) and International Organization for Standardization (ISO) (2020). *Building Trust: The Conformity Assessment Toolbox* / ISO, ONUDI; pref. de R. Stelle, K. Yumkella.

232 Retrieved from https://www.iaf.nu/articles/Role/7.

233 Retrieved from https://ilac.org/about-ilac/role/.

234 United Nations Industrial Development Organization (UNIDO) and International Organization for Standardization (ISO) (2020). *Building Trust: The Conformity Assessment Toolbox* / ISO, ONUDI; pref. de R. Stelle, K. Yumkella.

- Providing a globally recognised system with harmonised processes and procedures that result in higher transparency.
- Ensuring quality service is maintained while being cost-effective and globally accepted.
- Creating a robust and credible representative network that genuinely represents the standards, certification, accreditation, and metrology industry.
- Obtaining international acceptance that results in achieving a higher level of competitiveness for the QI institutions and all other stakeholders including manufacturers, businesses and producers.

The table presents the link to International QIS in the light of CARICOM regional QIS. CROSQ, the regional standards organisation of CARICOM, is in the process of establishing a regional accreditation mechanism amongst its Member State. The CARICOM already has an established regional metrology institute, CARIMET, which is the regional arm of the Sistema Interamericana de Metrología (SIM), that is made up of representatives of the National Metrology Institutions (NMIs) of all the States of the Caribbean area except for Cuba and Puerto Rico. Also, a committee of regional conformity assessment bodies was formed under CROSQ to plan and apply internationally recognised and harmonised quality assurance systems in CARICOM. This work will involve collaboration and harmonisation among the CARICOM Member State's laboratories, certification bodies and inspection bodies.

Table 24. National, regional and international QIS links in the light of CARICOM

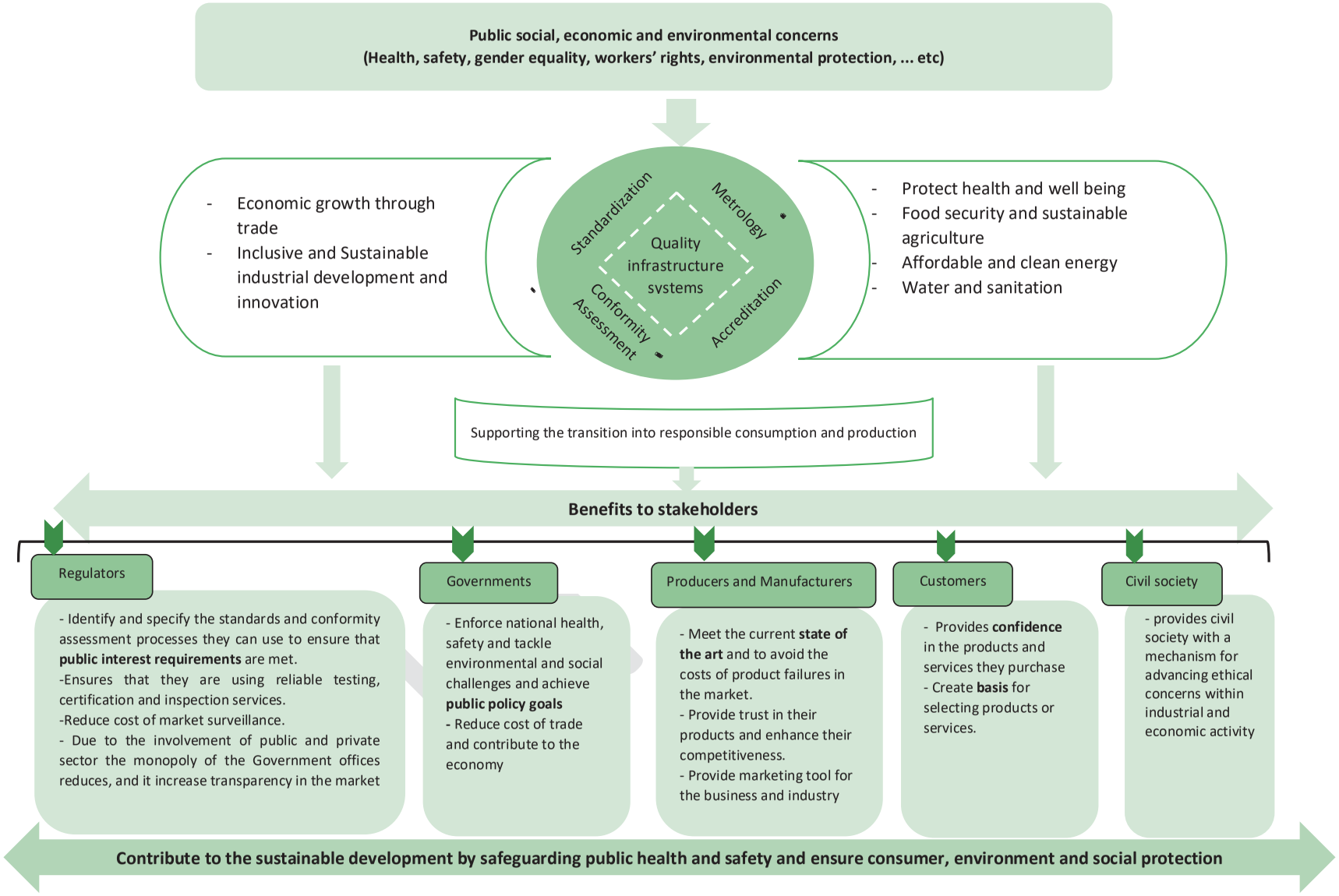
International	ILAC and IAF	BIPM and OIML[235]	ISO and ISEAL	
Regional	- CROSQ is in the process of establishing a **regional accreditation mechanism** amongst its Member State. - **Caribbean Cooperation for Accreditation** (CCA) Scheme is envisaged as a regional approach in which the CCA will operate as a unit within CROSQ	**CARIMET** is the regional arm of the Sistema Interamericana de Metrología (SIM), which is made up of representatives of the National Metrology Institutions (NMIs) of all the States of the Caribbean area except for Cuba and Puerto Rico	CROSQ	A **committee** of regional conformity assessment bodies was formed under CROSQ to plan and apply internationally recognised and harmonised quality assurance systems in CARICOM; this work will involve collaboration and harmonisation among the CARICOM Member State's laboratories, certification bodies and inspection bodies
National	National Accreditation Body	National Metrology institute	National Standards Organisation	National Conformity Assessment Body

The International Organization for Standardization (ISO) Committee on Conformity Assessment (ISO/CASCO), is responsible for developing and maintaining a coherent and mutually supportive framework of guides and standards related to conformity assessment, promoting their global acceptance and use, and fostering global recognition of conformity assessment results based thereon. While it does not perform conformity assessment activities, it has issued guidance and reference material covering virtually every aspect of conformity assessment (e.g. testing and calibration, inspection and certification) (UNIDO, 2020). International organizations in cooperation with ISO for accreditation includes IAF and ILAC.

Sustainability standards that are International Social and Environmental Accreditation and Labelling Alliance (ISEAL) Members are required to conduct regular consultation and revision of their standards as part of complying with ISEAL's Standard-Setting Code. Standards system owners shall use the provisions for accreditation to ensure that assurance providers certification bodies conform to the Assurance Code. Also, they shall ensure that the scheme requirements for the assurance (certification) process conform or are equivalent to ISO standards 17065 or 17021.

[235] BIPM: International Bureau of Weights and Measures, OIML: International Organization of Legal Metrology.

Figure 3. QIS roles and benefits to all stakeholders



ISEAL also sees that, in contrast to national accreditation, international accreditation is a better model for international social and environmental standards systems. international accreditation bodies accredit certifiers worldwide, thus establishing a basis for equivalence and recognition of statements of conformity issued by different assurance providers around the world.[236] ISEAL requires its members when incorporating accreditation as an oversight mechanism, to ensure that accreditation bodies comply with ISO 17011 in addition to the relevant Assurance Code requirements.

5.5 NATIONAL INTERPRETATION OF VSS

Since VSS are usually set in a country/s different than where it will be used, there might be a situation where some of the standards' clauses and requirements are irrelevant or not suitable due to for example the cultural differences between countries. Lately, some standards have started to include a "national interpretation" option; where standards can be nationally benchmarked to gain higher acceptability in different locations and countries. However, the standard owner has the right to reject or accept this national interpretation of their standards (Pande M, 2017).

In conclusion, QI institutions and services can play a fundamental role in supporting the transformation into sustainable development. In many countries, QI institutions now need to be strengthened and expanded to meet the SDG-related challenges and opportunities ahead. Strategic partnerships and international industrial cooperation have proven to be innovative and impact-maximizing approaches to address the multidimensional context of economic deprivation, social inequality, and environmental degradation. Many good practices – including VSS- have evolved related to QI systems that support the SDGs whilst simultaneously underpinning trade and protecting the safety and health of people, fauna and flora and the environment (UNIDO, 2019).

6. ROLE OF CROSQ

Voluntary Sustainability Standards (VSS) were initially rejected by developing countries as they were conceived in the industrialized world as protectionist tools designed to serve the interest of foreign corporations by erecting new barriers to trade. Some standard requirements and indicators may not be suitable to all producers, especially those who are outside the area where the standard was originally developed. Complying with some VSS and demonstrating compliance requires substantial capital, time and skills. Developing countries have particularly complained about the discriminatory effects of VSS, especially on small and medium-sized enterprises (SMEs), which play an even more crucial role in less industrialized economies. Due to the lack of public infrastructure and financial stimulus to help domestic producers implement these standards, VSS have been perceived as trade barriers.

Moreover, VSS (typically referred to as private standards in this context) have been a growing concern among developing countries in the World Trade Organization (WTO). Although these standards are often seen as a means to fill the gaps by regulations and other standards, and as a way of raising the bar to achieve higher levels of economic, social and environmental sustainability, by the very fact that these standards do not necessarily develop standards with adequate developing-country representation, consideration of the special development, financial and trade needs of developing countries in the preparation and application of these standards and the related certification schemes explains certain discriminatory effects recognized by the WTO.

However, this reluctance has come to a turning point when the first National Private Sustainability Standards (PSS) multi-stakeholder platform was launched by the Quality Council of India, under the auspices of the Ministry of Commerce and Industry in 2016. For India's National PSS platform, their interest to participate in

[236] International Social and Environmental Accreditation and Labelling Alliance (2018). Assuring Compliance with Social and Environmental Standards ISEAL Code of Good Practice.

shaping the evolution of VSS was largely motivated by their domestic priorities towards sustainable value chains and export opportunities to higher quality markets.

Between 2016 and 2018, after India launched its platform, Brazil, China and Mexico followed suit with similar interests built on multi-stakeholder principles, mandated to serve as clearinghouses for international knowledge exchanges and collaborative action plans. The initial idea that was meant to only benefit the industrialized world soon turned into development opportunities for developing countries to foster economic transformations towards achieving the Sustainable Development Goals (SDGs).

These platforms then sparked interests for other national initiatives such as Indonesia, Malaysia, Viet Nam, South Africa as well as the Andean Community comprising of the Plurinational State of Bolivia, Ecuador, Colombia and Peru. Although they have not reached the ministerial mandate to mainstream and facilitate the implementation of VSS at the national level, the focal points typically led by standards bodies and export promotion boards have initiated themselves to join the global forum of VSS.

In a nutshell, National (and Regional) VSS platforms play a crucial role in addressing several challenges that MSMEs and SMEs face concerning VSS. Thus, it is in the interest of these platforms, maintained through multi-stakeholder principles to raise awareness about VSS and provide adequate support for these marginalized sectors, especially if it contributes positively to the economic, environmental and social fronts.

6.1 ROLE OF THE CARICOM REGIONAL ORGANISATION FOR STANDARDS AND QUALITY (CROSQ)

Even though VSS were created outside of public policy processes, the established VSS platforms have identified VSS as an important tool that can help the public sector entities promote their green growth policies. For governments, using VSS will allow them to be aligned to the international norms or multi-stakeholder decision-making precursors, and also include internationally recognized best operation practices.[237] This essentially allows the public entities to outsource some of the more burdensome aspects of policy implementation. By adopting VSS, the CARICOM markets are being transformed to utilise sustainability systems that are already adhering to the best practices to date and provide the major products for exports greater credibility and international recognition.

Against this background, the CARICOM states need a coherent strategy to deal with VSS. As a starting point, CROSQ has made the right step as the central standards organization to initiate collaborative work programme among the 15 participating countries. However, even if CROSQ is the established regional enquiry point within CARICOM, each country would still need to establish its national focal points that are supported by their public and private bodies in their respective countries to represent the interests of commerce, quality, agriculture, agribusiness, industry, certification, and standardisation entities. Enquiries resulting from these national level multi-stakeholder dialogues are then reported back to CROSQ to deal with international issues such as the different trade barriers caused by the proliferation of VSS globally.

Rather than perceiving VSS as de facto trade barriers, CROSQ can establish a mandate that recognizes that VSS are a response to increasing consumer awareness of sustainability issues and markets that demand sustainability produced goods. Therefore, even with the recognized challenges that VSS have been perceived CROSQ can motivate the 15 CARICOM states to play certain roles to help increase the positive aspects of VSS in line with their policy objectives that meet the broader SDG targets. Between CROSQ and the national focal points, these roles include (UNFSS, 2016):

[237] The UNFSS 3rd Flagship Report maps the criteria found in some of the widely used VSS to have direct links to the indicators of the SDGs.

1. Setting underlying conditions for effective VSS implementation

Adequate national policy and regulatory frameworks are important factors for the implementation of VSS to achieve the intended benefits to the local communities. Issues related to local regulations may increase the overall compliance costs and limit the benefits of VSS certifications. Issues such as corruption may exacerbate the livelihoods of vulnerable communities and environmental degradation. Although VSS may be complied to for export purposes, without proper policy frameworks, it is extremely difficult for certification schemes to be implemented credibly.

Furthermore, the effectiveness of VSS schemes relies upon government functions, such as statistical and data collection services. The absence of reliable data will not help the market properly assess the impacts VSS schemes are generating.

For this, the Food and Agriculture Organisation of the United Nations (FAO) highlighted three main government actions that can enhance the effectiveness of VSS. They include:

- Supporting the development of measurement and monitoring systems that can provide evidence that the VSS is having a positive impact
- Raising awareness about small producers' needs and providing information and insights about the local context
- Strengthening the scientific verification of standards and advising on the content of VSS

2. Tailoring VSS for local applicability

One of the concerns raised about VSS is if the intended scheme objective is also contributing positively to the vulnerable communities, and if developing countries can reap the benefits these schemes promise.

In the cocoa sector, for example, the inability of VSS to lift smallholder farmers out of the abject poverty has led national governments to step in to create locally relevant standards geared towards supporting the needs of that constituency. The cost of certification for multiple international cocoa-related VSS has been problematic for farmers. This obliged producers to sell to only those buyers who paid for their certification program, which also weakened their bargaining position.

The Indonesian government then decided to establish the Indonesian Cocoa Board, housed within the Ministry of Agriculture. They created the Indonesian Standard for Cocoa (ISCocoa) in response to the perceived need to harmonize and streamline the number of standards related to cocoa. By creating a unique Indonesian brand for cocoa, the benefits for domestic cocoa farmers in line with meeting the Indonesian government´s sustainable development policies have been realized. Furthermore, ISCocoa harmonizes international and national industry standards, localizes implementation methods and creates stronger economic pillar to increase local benefits by drawing upon international standards such as the Rainforest Alliance and UTZ, and incorporated elements of local practices. They managed to integrate local realities into the standard while retaining key elements of best practice captured in international standards.

3. Aligning public policy goals with VSS

Some governments have recognized the potential of VSS to further their policy objectives and have established broad national or regional regulations that relied on VSS in their implementation. For example, the Organic Regulation and the Timber Regulation of the European Union are built on VSS in line with their public policy priorities.

The European Union Organic Regulation came into force in the 1990s in response to the growing organic movement. The regulation created a framework with which VSS performs the essential function of providing a baseline that guarantees the quality and integrity of all organic production and processing, which is vital

for ensuring trust in systems that serve the public interest. The European Union Timber Regulation, on the other hand, moved some VSS through public procurement criteria.

For developing countries, increased participation in localization efforts can help dispel concerns that VSS are cause undue pressures and acting as barriers to trade for their local producers. China and Kenya for example, created ChinaGAP and KenyaGAP which benchmarked their local standards to the GlobalGAP standards. These standards look to bring about local ownership and ensure local relevance, while also enabling increased export market access for certified products.

4. Facilitating Multi-Stakeholder Partnerships for VSS

Rather than taking individual action, governments can join forces with the private sector and civil society to amplify the sustainability benefits of VSS. Public-private partnerships have the potential to serve many functions:

- Increasing government financial support for VSS systems to help extend the reach of schemes and provide necessary training and incentives for local smallholder farmers,
- Launching new joint initiatives that tailor VSS in ways that address localization concerns,
- Providing a non-biased platform that brings together a range of stakeholders, and
- Adding domestic legitimacy for VSS systems and their aims.

A major advantage of increased government interaction in VSS schemes is the legitimacy that public sector engagement confers. For example, the development of the European Union Organic Regulation directly involved the International Federation of Organic Agriculture Movement (IFOAM), a leading VSS on the topic with deep expertise on organic issues. IFOAM`s involvement at the very beginning of the regulation development not only points to how VSS can gain increased legitimacy by playing a role in regulation development but also legitimizes the role of VSS more broadly. The European Union Organic Regulation`s reliance on, and explicit support for, VSS further ensures this outcome. Government`s active involvement in improving key governance features lends in increased legitimacy to the schemes that benefit the public. In that respect, CROSQ and its 15 bureaux of standards should conduct a stakeholder analysis (see sample below) to identify capacity assets and motivations of the respective stakeholder´s engagement:

Table 25. Stakeholder Identification

Stakeholder	*Capacity assets / gaps*	*Motivations*
National government – policymakers, including relevant ministries	Power to reform sectoral policy and regulations. Require knowledge of and input from private sector and civil society to inform policymaking.	Improved policies and regulations to support sustainable exports, sustainable resource management, and rural development.
National Standards Bodies of the 15 CARICOM member states.	Extensive knowledge in the implementation of standards at national level. Requires the buy-in from the national governments in order to pass a regional reformation towards the use of VSS.	Implementing bodies to ensure policies are of the best interest of the national agenda, economic strategy and the community at large.
CROSQ – CARICOM Regional Organisation for Standards and Quality	The regional umbrella organization for the 15 National Bureaux of standards of the member states. Requires the buy-in of the 15 NSBs.	Harmonizing of regional standards can promote economies of scale and regional competitiveness of export products, while be the central focal point of all international participation and frameworks.

Stakeholder	*Capacity assets / gaps*	*Motivations*
CARICOM – Caribbean Community Secretariat	Ability to mobilize member states and coordinate on needed policy to enable economic diversification and job creation, while at the same time supporting sustainable development.	Following its mission to contribute, in support of Member States, to the improvement of the quality of life to the People of the Community and the development of an innovative and productive society in partnership with institutions and groups working towards attaining a people-centred, sustainable and internationally competitive Community.
MSMEs/ Producers/ Associations	Power to identify sustainable business opportunities and support them. Also requires information on foreign markets, product requirements, institutional support, investments.	Improved business environment, access to foreign markets and access to information and other perceived gaps.
VSS systems present in the region/ and international standard-setter representatives	Ability to participate and understand the challenges posed in the implementation stage and provide suggestions to facilitate compliance for vulnerable societal groups.	Participate in a public-private partnership to identify economic resolutions.
Foreign buyers/retailers	Ability to link MSMEs to foreign markets. Require information on productive capacity and business environment.	Identification of new sourcing and supply opportunities.
Civil Society – Community groups, NGOs, labour unions	Ability to support policy reform, support new and expanded business activity, and acquire skills to meet labour requirements. Require participation in strategy development with the possibility to voice concerns/requirements to government and private sector.	New skill-building and decent work opportunities, improved environment and infrastructure, better access to basic services.
Academia	Ability to provide evidence-based approaches to scientifically support policy recommendations. Requires the demand from national stakeholders to conduct national studies.	Specialization in the particular topic area concerning VSS, sustainable development and trade promotion.
International Organizations	Provide technical assistance with cleaner production, market requirements and standards and certification. Require demonstrations of sustainable export metrics, interest and request from the government.	A better understanding of national potential needs and objectives in the selected sectors of national interest.

6.2 LEARNING FROM OTHER ESTABLISHED NATIONAL VSS PLATFORMS

This section has greatly benefitted from the UNFSS 3rd Flagship Report (UNFSS, 2018) where these case studies are contributions from the respective National Platforms.

1. India

The India Private Sustainability Standards (PSS)[238] platform can be traced back to the Standards Conclave 2014 of the Department of Industry Policy and Promotion, Ministry of Commerce & Industry (MoCI). Upon receiving further support from UNCTAD, UNFSS and MoCI, the Platform was launched in March 2016 with the Quality Council of India (QCI).

[238] VSS are mostly understood as standards created by private entities, and therefore for the India National Platform have referred to them as Private Sustainability Standards or PSS. Standards created by entities which are statutorily established or are public-private bodies are not treated as PSS. While all the private standards are voluntary, not all the voluntary standards are private standards.

The core focuses of the platform includes institution-building, knowledge creation and sharing, capacity development, promotion of sustainability standards and criteria for public procurement, and harmonizing the ecosystem. The Platform aims to usher in a systematic model of meta-governance of standards with the values of transparency, confidence, accountability, and participation among all its stakeholders. In collaboration with national and international stakeholders, the platform serves to provide knowledge, promote research, and cooperate on findings in the area.

The platform offers membership to all organizations, firms, and individuals working in sectors impacted by VSS such as agriculture, food processing, fisheries, forestry, manufacturing, textiles, mining and jewellery, electronics & IT, etc. Such an approach is in line with the multi-stakeholder process.

The fundamentals of the Platform include:

- Building resilience for transformative change – Enabling farmers, smallholders, their communities, and MSMEs to access, connect, and compete in the Global Value Chains.
- Consultations and international dialogue – An initiation of stakeholder engagement through Multi-stakeholder Assembly.
- Leveraging on data-driven studies – The platform engages in data-driven quantitative and qualitative studies to understand the ecosystem and advocate the impact of PSS that may have on India´s trade success and sustainable development.
- International cooperation in the VSS space – serve to share its knowledge and experiences in international forums.
- Harnessing governments for action – Establishing the Government of India´s paramount role in extending support to the work of the Platform.
- Strengthening the Secretariat – Through encouraging its members to undergo extensive capacity development training in areas of global governance, multi-stakeholder processes, and international cooperation.

The India PSS Platform is currently in the process of identifying and undertaking harmonization, benchmarking, and national interpretation activities for standards to execute its objectives of service to producers and firms alike. The platform also organizes capacity building workshops for smallholders and producers to be informed about the global VSS outlook and how they too can leverage this tool.

Concerning the European Union, India established its VSS for Timber Legality Assessment and Verification Scheme (VRIKSH) to reflect the European Union´s Timber Regulation on Forest Law Enforcement Governance and Trade (FLEGT). When this regulation came to existence, there was no foolproof mechanism to validate the legality of Indian wood. Thus, VRIKSH aims to ensure that all aspects of the verification of the legal origin of the wood are covered by checking critical points such as supplier verification, inward entry of the raw material, material balance and records, segregation procedures, production procedures, conversion factors etc.

Significant changes have been observed through the establishment of VRIKSH certification. The internal procedures adopted by the companies were able to demonstrate compliance against the requirements of their overseas buyers which made VRIKSH today, a trusted brand for the acceptance of Indian Handicraft items worldwide. This was done by institutionalizing verification check related to the legality of the wood. With strict compliance to the standard and robust procedures for the verification of the origin of the wood, VRIKSH has helped a lot in curbing the flow of illegal wood into the handicraft industry. This scheme ensures that wood used in the handicraft is legally sourced and eliminates any chances of illegal logging and extracting, thus, promoting sustainable forest management.

2. Brazil

VSS is increasingly affecting Brazilian exports. Today, Brazil has been ranked number one for the highest adoption rate of VSS. The Brazilian National VSS Platform was established by the Brazilian National Institute of Metrology, Quality and Technology (INMETRO) to first analyze sectors which could potentially be affected by VSS, while also taking into account the export levels. Although the government has not yet conducted any cost assessment, INMETRO estimates that the amount of Brazilian exports to countries where VSS is in demand is around US$100 billion. Thus, even if 0.1% to 1% of this amount is associated with VSS-related costs, it is reasonable to consider that VSS plays a significant role in reducing the competitiveness of the products Brazil exports.

Key Brazilian economic sectors engaged with VSS are notably agri-food (soy, coffee, sugar, juices, cocoa, corn etc.), forestry, farming, tobacco, fish, essential oils and textiles. While the big producers comprise the majority of the exports in Brazil, many SMEs have access to international value chains through cooperatives. These small-producer cooperatives exported US$5.3 billion in 2014 and are increasingly investing in sustainable practices to be competitive in the international market.

Just like many countries, Brazilian producers and exports do face challenges such as high implementation costs to obtain VSS certification, which leads to diminishing competitive advantage, a proliferation of VSS in Brazil which contributed to many confusions across the production and consumption channels and stringent requirements of the standards. Despite these challenges, Brazil still saw huge benefits with compliance to VSS. These benefits have been realized through their products as being more appealing in the international market. Not only are they able to put actual tools into place for the Sustainable Development Goals (SDGs), it has also given the public policymakers enough evidence to establish Brazil VSS coordinates to conduct controlled studies to determine the actual effects of VSS. Conducting these studies may be labour intensive but it will provide a clearer understanding of VSS and its direct and indirect correlation with the SDGs.

Thus, the role of the Brazilian National Platform includes:

- Being the national focal point in the country to discuss VSS domestically and internationally,
- Mapping how VSS affects the Brazilian economy, domestic market and access to foreign markets,
- Promote discussion and events surrounding VSS,
- Collect, discuss and prepare studies regarding the impact of VSS on the Brazilian economy and on Brazilian exports,
- Compiling proposals for pro-active national policies on maximizing the positive economic, social and environmental effects and limit the costs and problems of VSS,
- Raising awareness to the public and private stakeholders affected by VSS,
- Mobilizing stakeholders and working together on initiatives developed through the Platform process,
- Analyzing and comparing experiences on best practices and suitable pro-active policies developed by other National Platforms.

Specifically, these are done through 3 main activities:

1. Policy Dialogue – The Brazilian National Platform organizes regular stakeholder meetings nationally and internationally. This allows the stakeholders to collect relevant and reliable data and information about the benefits of VSS. The National Platform is also the clearinghouse to inform any misuses of VSS that may lead to unnecessary trade barriers.
2. Training activities and Workshops – The platform also provides regular training sessions and workshops that address the needs and goals of each stakeholder.

3. Research and Analysis – The continuous efforts in providing research and analysis will ensure the credibility of VSS pertinent to all stakeholders. The National Platform aims to have a systematic way to collect and provide reliable data on VSS, its impacts on the SDGs and the best way possible to access their information with all stakeholders in Brazil.

Most of these activities have been achieved through partnerships with Brazilian research institutions, other national platforms, where UNFSS stands in as the producer of materials for these studies.

3. China

As one of the largest exporters in the global market, China is particularly competitive in the textile, furniture, mechanical and electronic sectors. The importance of standards in international trade inevitably requires producers, farmers and all exporters from China to ensure that their products meet the requirements of the international standard. In some occasions, these exporters are required to meet more than one specific standard required by their importers and more often than not, they also have to meet the higher criteria required by VSS at their own cost. However, they are also aware than that with stringent standards, their products will get picked out by supermarkets and even get displayed in prominent areas and shopfronts.

Moreover, the implementation of the Belt and Road initiative accelerates the communication between China and its trading partners along the route. While China is under rapid development to expand its global investments, especially at this current juncture, they are also placing sustainability standards as the key element of international trade.

Albeit the potential boost VSS can contribute to China´s export market and its realization of the SDGs, its contradiction points to where VSS unveil new barriers to trade. VSS schemes are often non-governmental systems and do not necessarily comply with principles such as transparency, openness, consensus, equivalence, and scientific-based analyses. Small-scale enterprises in developing countries may not have the means and adequate information to implement such schemes without the involvement of public actors. More often than not, exporters tend to get confused in the spiderweb of standards and schemes where more costs are incurred to comply with more than one VSS and more operational costs to consider as these factories have to go through an excessive number of inspections. Furthermore, the cost of standard adoption and certification is already a financial burden, resulting in some companies especially SMEs and MSMEs to exit the value chain.

The establishment of the Chinese National VSS Platform was launched in 2017 and aims to provide professional information services, industry research and standard comparative analysis, and actively facilitate enterprises to participate in international trade. With the guidance of the General Administration of Quality Supervision, Inspection and Quarantine of China (AQSIQ) and the Ministry of Commerce of China (MOFCOM), these departments are responsible for the Platform, whereas the Standardization Administration of China (SAC) leads the overall work of the platform, and China Association for Standardization (CAS) takes the Secretariat responsibility of the daily operations such as:

- International communication with UNFSS and its 5 composed agencies, as well as the cooperation with other national and regional platforms, other Standards Developing Organizations (SDOs) and agencies.
- Information service in collaboration with the ITC and other SDOs to establish a national VSS information platform, catered to the Chinese market.
- Policy advise which is focused on WTO/SPS and TBT and United Nations´ pertinent topics, for related government departments and other agencies.
- Experience exchange, with other national and regional platforms on operating models and other interesting areas that will benefit the Chinese platform.
- Capacity building through workshops and training programmes designed for the local market.

7. RECOMMENDATIONS

The growing pro-active commitment of developing countries to VSS is a welcoming trend. Their efforts in aligning VSS to national priorities and in articulating developing countries´ perspectives at the international level will enhance the contribution of such market-based instruments to the SDGs.

While the establishment of UNFSS was a strategic step to facilitate a multi-stakeholder process for sharing experiences, joint knowledge creation and policy dialogue on VSS, there is also the need for the international community to establish a global framework for VSS meta-governance which should overcome the present state of fragmentation and promote a more sustainable trade.

Through these country learnings, CROSQ would first need to identify its stakeholders and a governmental body, as an approach to develop an ecosystem and a more institutionalized structure around VSS. With more solid support from its stakeholders, types of policy instruments that can influence VSS trade effects should then be discussed in the subsequent dialogue. These instruments can include contributions to the information and awareness building on VSS, economic incentives, legal and potential partnerships.

It is worth noting that the contribution of VSS towards the efforts for achieving the SDGs will depend largely on their effectiveness. Their effectiveness can be defined based on multiple dimensions of which at least two are necessary for assessing their potential to contribute to the SDGs. The first dimension focuses on the impact of VSS on a range of social, economic and environmental indicators, such as poverty reduction and improvements in biodiversity and the wages and safety of workers. The second dimension analyses the degree to which VSS are adopted by economic operators. These two dimensions of effectiveness are equally important- a VSS that generates significant impacts on the ground and transforms the way producers work, but if it is not widely adopted, the result of the market transformation to achieve the SDGs are considered ineffective.

Thus, for CROSQ and its constituencies to address the effectiveness of VSS and its potentiality as a tool for better market access to the European Union, this section suggests recommendations[239] for the region to consider.

7.1 DEVELOP A SUSTAINABLE EXPORT MARKET IN CARICOM

For CARICOM to promote exports of its sustainably produced products to the European Union, its export market should demonstrate competencies in sustainability production along the supply chain. Some key areas have been identified to add value to the indicated product sectors:

7.1.1 Creating an online presence for CARICOM to provide information about VSS, regular updates, regional mandates, case studies etc.

For this, CROSQ can feature itself on the United Nations Forum on Sustainability Standards (UNFSS) platform[240] to create a dedicated page for its VSS projects, establishments, and programme implementations to tap on the National Platform and Initiative Cooperative (NPIC) Network.[241] The objective of this network is to allow National and Regional Platforms to collaborate and/or gather inputs on areas of work that are mutually beneficial for the participating parties and to foster a South-South coalition to approach global issues around VSS. CROSQ should also create a page in its website to promote this collaboration and be able to push feeds to the 15 National Bureaux of Standards so that they are also on top of all updates.

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239 Note: These recommendations were presented and discussed at the virtual Validation Workshop on 21st October 2020. This session was co-organized by CROSQ and attended by several Bureaux of Standards in the CARICOM region. The recommendations were converted into a survey questionnaire where participants had to rate the degree of relevance and feasibility, to which those recommendations with lower scores were discussed further during the workshop.

240 https://unfss.org/home/national-multi-stakeholder-platform/

241 https://unfss.org/npic-network/

7.1.2 Establishing a producers' network/connect platform, nationally or regionally, to share regular updates, events e.g. trade fairs, capacity workshops, technical training, facilitate buyers and producers match etc.

7.1.3 Promoting and facilitating transparency of the producers´ operations – complying to at least the minimum sustainability requirements mandated by the European Union import regulations. Buyers from the European Union expects access to updated and reliable data on the farm and the producers.

There were however some reservations for recommendation 7.1.3 in terms of feasibility expressed by the CARICOM participants during the validation workshop, even if the degree of relevance scored 100%. The main concern for this is the uncertain skillset and tools acquired by the producers and farmers to produce or track data for online transparency purposes, and also have no access to put in this information online.

Therefore, the recommendation 7.1.2 can be facilitated by assisting these producers to gain visibility online through the ITC Sustainability Map Virtual Network.[242] As of today, there are over 55,000 profiles created in this network where producers were able to identify buyers featured in the network, interested in sourcing sustainable products and promoting transparency of their supply chain. Through this platform, producers are also able to learn market trends and other VSS e-learning courses.

However, producers in the CARICOM may not automatically come to know about this platform and how to use. Thus, we suggest the Regional VSS Platform (i.e. CROSQ) facilitate technical training workshops (with UNFSS), success stories and awareness communications on how to leverage this platform.

7.1.4 Promoting the Caribbean´s sustainable produces through international conventions/ trade fairs to get the international traction for the Caribbean sustainable products.

7.1.5 Realizing CARICOM´s unique story behind its sustainable production and impact on the ground that distinguishes it´s produces from competitors elsewhere.

7.1.6 Invest in personal partnerships: inviting potential buyers for a personal visit to the Caribbean producing region. Offering samples of micro-lots they can test themselves, demonstrate on the field knowledge and control of the value chain as traceability is a key point in the European cocoa market.

This recommendation option, however, is more challenging today due to the outbreak of COVID-19, which affected all economies across the globe with confinements, lockdowns and social distancing measures. Thus, this recommendation scored only a mere 60 per cent for its degree of feasibility, compared to 100 per cent for its degree of relevance voted by the CARICOM participants.

7.1.7 Implement "out of the box" promotion strategies, for example promoting CARICOM spices through leveraging ethnic cuisines to potential European Union customers.

7.1.8 Facilitate and promote widespread uptake of Fairtrade certifications and build the right infrastructure accessible for the producers to learn and implement the standards.

7.1.9 Upgrade and/or implement national/regional Quality Infrastructure, aligned to the food safety and security measures.

The Quality Infrastructure and the services they provide must ensure that food is fit and safe consumption which urgently need to evolve to support sustainable agriculture and food production, which in turn allows people to live healthy lives and improve their social and economic well-being. Quality Infrastructure is also indispensable in supporting trade in food and agricultural products, which is an important component of export for many developing countries.

242 https://www.sustainabilitymap.org/network

These Quality infrastructures should support policy objectives in areas including industrial development, trade competitiveness in global markets, efficient use of natural and human resources, as well as mitigation of and adaptation to climate change.

All parts of the Quality Infrastructure act synergistically with each other and provide valuable tools for defining, developing and verifying requirements for products and services, helping to ensure and demonstrate that products and services meet specified requirements.

The Quality Infrastructure institutions and their services can provide policymakers, businesses and other stakeholders with technical knowledge and capacity to strengthen the implementation, measurement and monitoring of many of the objectives and targets contained in the SDGs, and support actions to achieve them.

7.2 ENHANCE KNOWLEDGE OF SUSTAINABILITY PRACTICES AND STANDARDS UPTAKE THROUGH CAPACITY BUILDING PROGRAMMES

7.2.1 Facilitate quality assurance training workshops, for example, some products like cocoa requires a special continuous quality check/assurance in all the production stages as well as during storage and transportation.

European Union exporters might be willing to involve the producer in the product development process. Thus, technical workshops carried out by the European Union side to train CARICOM producers might be a good start for collaboration between the two parties.

7.2.2 Establishing a platform to educate the exporters in search of European Union buyers in terms of defining the product in measurable terms – product description, exact quality, quantity, relevant technology, certificates, process and delivery terms, and to create a unique selling proposition.

7.2.3 Organize capacity building seminars to address issues like transparency and traceability, which is paramount for European Union buyers.

Knowledge can empower farmers and producers of sustainably produced products in the value chain. They need to be informed about the value of VSS certification for them, their communities and the environment. Farmers and other producers can receive seminars from the standards-setters through the support of processors applying for certification. But if the farmers – or even other actors in the value chain- are not convinced of the economic benefits of certification for themselves, they will not be motivated to participate in these seminars. Thus, building knowledge of sustainable practices do not have to be a requirement for certification but be part of a more general initiative to inform farming communities of their roles in certified value chains. Training will then target each community or group of farmers regardless of their interest or participation in sustainability certification.

These capacity-building programmes can be conducted in partnership with academics, NGOs, United Nations entities like the UNFSS and associations to stress that concerns about sustainability practices cut across different parts of the society.

7.2.4 Organize regular knowledge exchange seminars among the CARICOM NSBs to share concerns and best practices and take part in the UNFSS National Platform and Initiative Cooperation (NPIC) Network.

7.2.5 Setting tighter collaboration with certification systems in the ground to leverage group certification/ cooperatives etc. that reduces the burden on producers.

This action was already attempted in Saint Lucia but the result did not turn out well due to the imbalance conditions, circumstances and competencies among the 15 CARICOM states thus, this requires a wide level of tolerance to come to a single agreement. Even if the idea of cooperatives was to ensure that no one is left behind, according to the CROSQ, this is very challenging in a practical context.

For this reason, considering recommendation 7.2.3 would include studying producers and farmers capacities from a more micro level. This also includes the assessment of impact perceived by these farmers and producers and a deeper dive to understand where thy lack and provide the needed support required.

7.2.6 Provide a space for dialogue among the VSS standards-setters, public authorities, policymakers, producers, associations, implementers, academia etc.

This recommendation boils back down to the rationale for a multi-stakeholder platform. VSS is an innovative mechanism to promote green growth policy, but its broad and effective implementation requires concerted action among stakeholders including value chain actors, related government institutions, and the civil society. Challenges need to be addressed and overcome to realize its benefits, particularly with the SDGs.

7.3 PRODUCT AND PACKAGING CONSIDERATIONS

7.3.1 Increase food safety and anti-modification requirements.

7.3.2 Implementing systematic traceability measures – source, safety and labelling.

7.3.3 Raising awareness and promoting health benefits/ ecological and/or social benefits to consumers through product labelling practices.

7.3.4 Promoting Organic labels – This is especially the case for seafood markets as the European Union is increasingly concerned about suppliers and working conditions at farms and factories.

7.3.5 Switch to sustainable packaging – materials, right portions in consumer packaging etc.

This recommendation, even with a high degree of relevance, scored only 58% for its degree of feasibility according to the poll result during the validation workshop. The concerns that were discussed for this issue is the need for better clarification on what is sustainable packaging. For many suppliers, they do not understand if sustainable packaging means the obligation of the material to be biodegradable for example. This is particularly important for CARICOM who has claimed that the region is challenged with the availability of such materials. Furthermore, it also requires the understanding of the shelf life of the products when using sustainable packaging, for example, costs incurred, the awareness of sustainable packaging, all of which will affect the selling price of the product itself.

For this, UNCTAD advises a circular economy initiative that should go in parallel with its sustainable development initiative. This programme can be in part of CARICOM´s International Convention on Sustainable Trade and Standards (ICSTS),[243] co-organized with UNFSS.

7.3.6 Use sustainable packaging for each product based on the potential customer. For instance, although the consumer market for sugar cane requires retail-packed raw cane in granules or cubes of high quality, however, it is generally packed for retail in Europe by importers.

7.4 ESTABLISHMENT OF CARICOM´S REGIONAL VSS MULTI-STAKEHOLDER PLATFORM

It is widely recognized that multi-stakeholder partnerships (MSPs) are effective means for scaling up innovation, resources, and action to deliver the Sustainable Development Goals (SDGs). The UNFSS is a prime intergovernmental forum formed at the joint initiative of five United Nations Agencies – FAO, UNIDO, ITC, UNCTAD and UN Environment, which is aimed to support the advancement of VSS, applies the concept of multi-stakeholder platforms to engage various stakeholders to participate in improving the standards and

[243] Learn more about the International Convention on Sustainable Trade and Standards here: https://unfss.org/icsts/

implementation for VSS in developing countries. The UNFSS identified national platforms as one policy intervention to encourage the implementation of VSS through informed policy dialogues. The main objectives of MSPs based on their objectives include:

- Knowledge-sharing – sharing information is critical to development because, while the solutions to problems already exist, information about solutions is not shared and the ability to replicate them at scale is lost.
- Standard-setting – aim to design, strengthen and enforce norms and standards because of the difference in terms of strengthening of stakeholders´ obligations, internal verification and compliance procedures, and formality.
- Service providing – seek to address market failures by providing goods and services, mobilising resources or enabling innovation and the development of products and markets.

With the CARICOM Regional VSS Platform, UNCTAD recommends the following activities, aligned to the main objectives of MSPs mentioned above.

7.4.1 Development of measuring and monitoring systems to provide evidence if VSS is contributing to a positive impact.

7.4.2 Strengthening scientific verification of standards and advising on the content of VSS for local applicability.

7.4.3 Suggesting and/or recommending public policy goals aligned with the VSS criteria- eg. Organic Regulation

7.4.4 Facilitating MSPs for VSS to:

7.4.4.1 Increase governmental financial support for VSS systems to help extend the reach of schemes and provide necessary training and incentives for smallholder farmers to be certified

7.4.4.2 Establish joint initiatives that tailor VSS in ways to address localization concerns

7.4.4.3 Providing a non-biased platform that brings together a range of stakeholder

7.4.4.4 Adding domestic legitimacy for VSS systems eg. Leveraging on the International Federation of Organic Agriculture Movement (IFOAM) for organic certifications

CONCLUSIONS

The current report represents a feasibility study that assesses CARICOM export potential to the European Union through the utilization of VSS. It focuses on five products that are herbs and spices, cocoa, sugarcane, coconut, and aquaculture. While the report assesses the export potential of these products in the light of all CARICOM countries, it also considers the individual circumstances of each country.

Chapter 1 provides an introductory framework to the study; it presents the sectors under investigation briefly, and it highlights the market opportunities in the European Union for "sustainable" products from CARICOM.

Chapter 2 and 3 present an analytical framework of the supply and demand of the five products in the two trading partners as well to the world. The methodology included an analytical approach based on secondary data on trade and VSS. The two chapters examine methodically and in detail, the constitution of the supply and demand level of the products under investigation. This includes a comprehensive analysis of the market trends and regulations.

Chapter 4 analyses the current and potential trends of VSS adoption and demand in the selected sectors within the European Union countries. It assesses VSS as a trade instrument for CARICOM Exports to the European Union. The chapter presents a detailed evaluation of each product separately. Also, it addresses the possible concerns in each sector/product and key sustainability issues. And finally, it presents a set of recommendations for each product individually.

Chapter 5 presents the role of certification and accreditation bodies in contributing to sustainable development through the safeguarding of the triple bottom line of sustainability environmental, social and economic.

Chapter 6 illustrates the role of CROSQ in setting a coherent strategy to deal with VSS and the necessity of such a system. Also, this chapter emphasizes the potential role of National VSS platforms and presents the lessons learned for established platforms.

Chapter 7 proposed recommendations that are aimed mainly to promote a sustainable export market in CARICOM, enhance the capacity and knowledge of the value chain actors in CARICOM, foster the differentiability of CARICOM products and boost their ability to participate in European Union markets, promote the triple bottom lines of sustainability in the production as well as the post-production processes within the region, and specify the role of CROSQ in potentially moving CARICOM exports towards more sustainable ones.

This report shows great potential for CARICOM to enhance their exports to the European Union through VSS adoption. As VSS offer considerable synergies with the SDGs, this also assists in moving these sectors towards sustainability. More issues remain to be discussed and determined by CARICOM; this includes creating a more enabling environment for producers to adopt VSS, among others.

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