10th EDF SPS Project

STUDY ON THE IMPACT OF PRIVATE STANDARDS ON CARIFORUM COUNTRIES

FINAL REPORT

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10th EDF SPS Project:
Support to the Caribbean Forum of ACP States in the Implementation of Commitments Undertaken Under the Economic Partnership Agreement (EPA): Sanitary and Phytosanitary Measures (SPS)

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ABBREVIATIONS

ACP	Africa, Caribbean and Pacific
ADEXVO	Asociación Dominicana de Exportadores de Vegetales Orientales
CAHFSA	Caribbean Agricultural Health and Food Safety Agency
CARIFORUM	Forum of the Caribbean Group of African, Caribbean and Pacific (ACP) States
BAHA	Belize Agricultural Health Authority
BRC	British Retail Consortium
CARDI	Caribbean Agricultural Research and Development Institute
CNMSF	Comité Nacional para la Aplicación de Medidas Sanitarias y Fitosanitarias
CROSQ	CARICOM Regional Organisation for Standards and Quality
EPA	Economic Partnership Agreement
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FSMA	Food Safety Modernization Act of the Food and Drug Administration of the United States of America
FSSC	Food Safety System Certification
GAA	Global Aquaculture Alliance
GAP	Good Agricultural Practices
GDP	Gross domestic product
GFSI	Global Food Safety Initiative
GRMS	Global Red Meat Standard
HACCP	Hazard Analysis and Critical Control Points
INDOCAL	Dominican Republic Quality Institute
ISO	International Organization for Standardization
IFAD	International Fund for Agricultural Development
IICA	Inter-American Institute for Cooperation on Agriculture
IPPC	International Plant Protection Convention
ITC	International Trade Centre
OECS	Organization of Eastern Caribbean States
OIE	Organisation for Animal Health
Primus GFS	Primus Global Food Safety
SMEs	Small and Medium Enterprises
SPS	Sanitary and Phytosanitary
SQFI	Safe Quality Food Institute
UK	United Kingdom
USA	United States of America
WTO	World Trade Organization

EXECUTIVE SUMMARY

The objectives of this study were "*to determine the impact of private industry standards on CARIFORUM countries, specifically with regard to market access (international and regional), cost of compliance and poverty (alleviation/ creation).*"

Particular emphasis was to be placed on the impact on smallholders.

Market access

This study differentiates between public and private standards and summarises their importance in national, regional and international trade. While public standards (government to government) have existed for many years, the private standards are a relatively new phenomena and focus on food safety and quality, environmental, ethical and social issues.

Private standards (or company food safety requirements) are often owned and implemented by large retailers (mainly supermarkets) and restaurant chains. They contain very detailed criteria in the form of certification schemes and require significant financial and human resource investments by small and medium enterprises (SMEs) in order to become certified and comply with annual audits. For the most part, there is no price premium received by the SMEs for those who obtain and maintain certification. The main benefit of certification to SMEs is the security of being in the export market.

Cost of Compliance

Processing facilities often require the largest financial and human resource investment in order to comply with private standards. Expenditures of greater than one million US dollars is not uncommon and the hiring of quality management and food safety staff is typical.

At the SME level, there are numerous barriers to compliance with private standards but the major one concerns the transition from traditional farming methods to modern practices, especially regarding documentation and record keeping. With private certification schemes, the process is as important as the product.

One particularly costly irritant to processors is the need for multiple certifications which involves separate audits by each company/certification scheme for initial certification and annual compliance audits. The Global Food Safety Initiative has the slogan, '*Once certified, accepted everywhere*' but this is not working in practice; at least not in CARIFORUM countries.

Recommendations are made in this report to encourage SMEs to operate in a collective fashion and reduce their compliance costs by seeking public-private partnerships.

Poverty (alleviation/creation)

Not all agricultural and fisheries production can be absorbed in domestic markets. Exports are therefore essential for foreign exchange, job creation and income to SMEs and their community.

All SMEs are not equal when it comes to the ability to meet public and private standards and many will be satisfied selling to local formal and informal markets. SMEs will not be able to achieve the modern production methods required to comply with private certification schemes without additional assistance. Working in clusters and establishing relationships with exporters and processors is a model that seems to work best.

Conclusions

While the focus of the study was private standards and their certification schemes, serious value chain deficiencies were found to exist in different combinations, in different CARIFORUM countries.

Other factors—such as the loss of European Union (EU) preferential treatment, climate change, hurricanes and drought, sanitary and phytosanitary requirements, transportation, water shortages, financing issues and the global economy—are some of the major elements affecting agricultural production and export.

Similar problems exist in fisheries and aquaculture. There are infrastructure problems, controversy over water rights, lack of trained staff, few research facilities, and most feed and specialised hatchery equipment has to be imported. Aquaculture legislation is in its developmental phase and so the rules are not clear.

When these problems are overcome, and in many cases SMEs have done so, then private standards do become a barrier. However, while private standards may negatively impact SMEs, it is difficult to attribute a major impact on exports due to the emergence of private certification schemes. Many farmers and processors have successfully transitioned to private certification standards, but not without substantial financial assistance and technical guidance from government.

The farmers and processors in the CARIFORUM region who comply with private standards indicated that they were much better off as a result of certification in a private scheme. There is light at the end of the tunnel, but once again it should be emphasised that SMEs cannot do it on their own. They need a great deal of support.

Private Certification Standards are here to stay. CARIFORUM countries need to work together to develop measures that will allow SMEs to adapt.

1 BACKGROUND

1.1 The CARIFORUM

The purpose of the Forum of the Caribbean Group of African, Caribbean and Pacific (ACP) States (CARIFORUM) is to promote the coordination of policy dialogue, cooperation and regional integration, mainly within the framework of the Cotonou Agreement between the ACP and the European Union (EU) and also the CARIFORUM-European Community Economic Partnership Agreement (EPA). The EPA Implementation Unit is subsumed under the CARIFORUM Directorate at the Headquarters of the CARICOM Secretariat. (CARIFORUM website).

There are fifteen (15) participating states:

- Antigua and Barbuda
- The Bahamas
- Barbados
- Belize
- Dominica
- Dominican Republic
- Grenada
- Guyana
- Haiti
- Jamaica
- Saint Lucia
- Saint Kitts and Nevis
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago

1.2 The Lomé Convention and the Cotonou Agreement

The Lomé Convention sets out the principles and objectives for cooperation between what is now known as the EU and the ACP countries. The Convention provided non-reciprocal trading preferences with the European market mainly for former British, Dutch, Belgian and French colonies.

The benefits to the agriculture sector in the CARIFORUM countries were 1) a large export market where products could enter duty free; and 2) a fixed quantity of purchases by the EU for certain products, allowing CARIFORUM products to compete with that of EU countries. These advantages allowed farmers in CARIFORUM countries to sustain operations even through difficult economic times. (For the purpose of this report, the term farmer will include agricultural producers and fisherfolk—including those involved in aquaculture).

However, with increasing global trade liberalisation under the World Trade Organization (WTO), the WTO Dispute Settlement Body concluded that EU and ACP agreements were incompatible with WTO rules. The impact on CARIFORUM countries of losing these preferential trade conditions will be discussed later in this report.

When the Lomé Convention expired in February 2000 it was replaced by the Cotonou Agreement, which is in force until 2020. An important feature of the Cotonou Agreement is the provision for Economic Partnership Agreements. This study is being conducted with funding from the 10th Economic Development Fund (EDF) programme titled: *Support to the forum of Caribbean states in the implementation of the commitments undertaken under the EPA: Sanitary and Phytosanitary (SPS) Measures*.

The overall objective of the 10th EDF Programme is to support the beneficial integration of the CARIFORUM States into the economy, to support regional cooperation and the development efforts of the Caribbean, in an effort to meet the requirements under the current EPA between the EU and CARIFORUM.

2 STUDY OBJECTIVES

The objective of this study is to determine the impact of private industry standards on CARIFORUM countries, specifically with regard to:

- Market access (international and regional);
- Cost of compliance; and
- Poverty (alleviation/creation).

The standards under consideration for the purpose of this study are private standards, required by large food wholesalers, retailers and restaurant chains. These private standards affect the livelihood of farmers, processors, packing houses, exporters and other stakeholders in the food and fisheries sectors.

The implementation of private standards is undertaken using what are referred to as private certification schemes, often used interchangeably with the terms private standards and private industry standards.

The Terms of Reference for this study state: *There is anecdotal evidence that many small producers and small scale processors and exporters in developing countries have been forced out of production or otherwise negatively impacted*. This theory will be tested in some detail in this report.

3 METHODOLOGY

The Inter-American Institute for Cooperation on Agriculture (IICA) identified five countries for face-to-face interviews that would provide a cross-section of agriculture, fisheries and aquaculture and include various levels of economic development in the CARIFORUM region. The interviews were conducted by the consultant in Belize, the Dominican Republic, Jamaica, Saint Lucia and Saint Vincent and the Grenadines over a four-week period in December of 2015 and January of 2016.

The interview process was complemented by written questionnaires (see Appendix 1) sent to all CARIFORUM countries by IICA in consultation with their government and industry contacts. IICA country representatives assisted with the organisation of the interviews and managed the process to distribute and collect completed questionnaires within their country. There was a low return rate of written questionnaires (see Appendix 2) but the information gathered through this process was consistent with messages/themes identified in the face-to-face interviews. The interviews involved numerous private and public sector stakeholders that impact the food value chain.

Consultations took place with the following organisations:

Public sector organisations

- Agriculture (Animal Health, Plant Health and Food Safety)
- Fisheries
- Environment
- Human Health
- Foreign Affairs
- Trade and Promotion
- National Standards and Quality
- Rural Agricultural Development
- National Accreditation/Certification

Private sector organisations

- Farmers and farmer organisations
- Exporters and exporter associations
- Processors and processor associations
- Technology companies
- Trade promotion
- Manufacturing
- Packing houses
- Higglers, hucksters and Traffickers

Appendix 3 contains the list of the organisations that contributed to this study, either through interviews or by written questionnaire.

4 SNAPSHOT OF THE AGRICULTURE SECTOR IN CARIFORUM COUNTRIES

4.1 Economic Impact

The following analysis is taken from an IICA-IFAD (International Fund for Agricultural Development) report on smallholders in agriculture.

The importance of the agricultural and rural sectors to the Caribbean region cannot be overstated. Across the region, the sector continues to be a major source of employment and generation of revenue, food and nutrition security, and sustainable livelihoods for thousands of rural dwellers. A sampling of the current data bears this out. In Dominica, agriculture is the single most important private sector activity, both in terms of number of persons employed and contribution to gross domestic product (GDP). The sector continues to be a major employer of the labour force (25%), generating on average 12.6% to 15% of GDP.

In Guyana, the agricultural sector is central to the survival strategy of many rural and hinterland households. The sector contributes almost 20% to the economy, employs more than 30% of the population and almost 40% of exports earnings is contributed by agriculture. In Jamaica, over 85% of the rural population depends either directly or indirectly on agriculture (FAO 2014b). Belize is no exception, with agriculture accounting for 12% of GDP and employing over 31%, or one-third of the country's workforce.

In the case of Grenada, the sector is a significant contributor to national development, accounting for 4.5-8.5% of GDP, and employing about 24% of the labour force. It is significant to note that in Grenada, there is an alarming increase of the acreage of land being abandoned—from 356 acres in the year 2000 compared to 6,122.5 acres in 2009.

Trinidad and Tobago has the highest percentage of rural people at 86 percent (FAO 2014b).

Table 1 shows a downward trend in the contribution of value added by agriculture to the GDP in some CARIFORUM countries since the year 2000. The most significant reduction has been in Guyana, while some others such as Belize, Dominica, Saint Vincent and the Grenadines and Jamaica have remained fairly steady. Loss of preferential access to the EU market, agricultural pests and diseases, climatic conditions and the global economy are the main contributors to this decline. At the same time, the tourism sector has been growing and increasing its contribution to GDP.

Table 1: Agriculture, value added (% of GDP)

Country Name	2000	2002	2004	2006	2008	2010	2012	2014
Antigua and Barbuda	1.9	2	1.9	2	1.8	1.9	2.2	2.4
Bahamas, The	2.9	3.1	2.3	2.5	2.3	2.3	2.3	1.8
Barbados	..	..	..	..	..	..	..	..
Belize	17.4	15.3	16.6	14.7	12.7	13.2	15	..
Dominica	13.3	12.1	12.8	12.5	14.1	13.9	14.4	15.9
Dominican Republic	7.2	7.2	7	7.1	6.8	6.5	6.3	6.2
Grenada	6	7.2	5.8	4.5	4.3	5.2	5.6	7.1
Guyana	31.1	30.8	31.3	23.9	22.4	18.3	18.7	18.3
Haiti	..	..	..	..	..	..	..	..
Jamaica	7	6.3	5.7	5.9	5.6	6.1	6.8	7
St. Lucia	5.9	5.5	4.5	3.6	4.3	2.9	2.8	2.8
St. Kitts and Nevis	1.7	2	2.1	1.4	1.5	1.6	1.6	1.5
St. Vincent and the Grenadines	8.6	7.4	6	6.2	6.7	7.2	7.2	7.8
Suriname	11.2	7.4	5.8	11	7.3	8	7.1	..
Trinidad and Tobago	1.4	1.5	1	0.6	0.4	0.7	0.6	..

Source: Worldbank

4.2 Profile of Agricultural Smallholders

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. 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 acres (approximately 2 hectares) in size, and utilizing traditional farming methods—typically labour intensive and rain-fed systems.

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.

Barbados has 4,600 registered farmers (CARDI/FAO 2012), some of whom occupy relatively large holdings (2–8 hectares) and with the majority on smaller holdings: 0.2–1.6 hectares). The Dominica Agriculture Census 1995 reports a total of 9,026 farms with 44.9% between 1–4.9 acres, and 21% between 0.1–0.99 acres. Since 1995, there has been a reduction in the total number of farmers in Dominica as a result of the significant decline of

the banana industry and migration, abandonment of farm lands, and a low level of entry of new farmers into the industry.

Indigenous peoples constitute an important aspect of smallholder production, particularly in Dominica, Belize and Suriname. In the case of Dominica, there are approximately 800 households in the Kalinago territory, with some 93.8% being small farmers. Typically, holdings are small, fragmented, and communally owned. Farm systems are diversified and are dominated by root crops, coconut, tree crops, and banana. Farming is not the main source of livelihood, as households are also involved in alternative activities (e.g., construction, craft production, tourism). Approximately 5–6% of farmers are totally dependent on agriculture.

In Suriname, the total number of farms recorded in the 2008 Census was 10,234. Of these, 10,188 were small farms run by single families and of these small farms, 40% were subsistence farms. Smallholder production is concentrated primarily in the rural areas, in the coastal regions and in the savanna region, as well as in the interior with the indigenous peoples, namely the Amerindians and Maroons.

With the exception of rice, crops in Suriname are mainly rain fed. About 25% of all farms (mainly rice producers) in Suriname irrigate their crops. Most farmers use herbicides to suppress weeds but some small farmers prefer to use brush cutters. Chemical fertilisers are more frequently used than organic fertilisers, and on the majority of the farms (both small and large farms) pesticides are used. Only a few farmers prefer to use environmentally-friendly pesticides.

In Guyana, there are small farmers producing rice, sugarcane and non-traditional crops. Smallholder rice farmers occupy plots of 15 acres or less, while the 2,041 small sugarcane farmers (of which 500 are Fairtrade and 16% are women) tend to occupy plots up to 25 acres. There are approximately 15,000 non-traditional farmers on holdings of five acres or less, producing fruits and vegetables. Smallholder livestock producers in Guyana are more accurately defined by annual gross income and categories of livestock reared. Rearing of larger animals is predominant among smallholder farmers. In most cases, farming occurs on land that is unable to sustain the number of animals. A significant percentage of livestock farmers are landless, and farm on communal or State lands. In the fisheries sub-sector, there is a high prevalence of women.

Data from the Belize Farm Registry (2007) show that 24% of farms have less than 2 hectares (4.9 acres), 33% have between 2 and 8 hectares (19.8 acres), and 74% of farms in the country are below 20 hectares (49.4 acres). Small farmers produce primarily for the domestic food and livestock markets using traditional technology such as Milpa (slash and burn), particularly for the production of corn, rice, and beans. In addition, a few are involved in vegetable production (tomato, onion, sweet pepper) while others are focused on livestock production, such as backyard poultry, tilapia, small ruminants, cattle, and apiculture for honey production. A few smallholders are also involved in hunting and gathering cohune nuts.

Despite the growing tourism industry in Belize, agriculture continues to provide over 70 percent of the country's total foreign exchange earnings, and employs almost a third of the total labour force. About half of the land used for agriculture is under pasture, with the remainder planted to a variety of permanent and annual crops.

5 SNAPSHOT OF THE FISHERIES

5.1 Economic Impact

The following analysis is taken from the Caribbean Regional Fisheries Mechanism (CRFM) Report for 2012.

The fishing industries in most Caribbean countries share the following characteristics: a large artisanal fishing sector; an industrial fleet sector; a processing, distribution and marketing sector; and an unquantified, recreational fishing sub-sector (CRFM 2008). Inland waters (lakes, ponds and rivers), aquaculture systems and marine waters are all part of the sector.

The fishing industry makes an important contribution to the social and economic wellbeing of Caribbean countries. It generates employment and income (particularly for coastal communities and rural communities along inland waters) and enhances food security and local nutrition. Fish and fish products are a major protein source for many Caribbean people. However, the sector's contribution to GDP varies across the region, from less than 1% of GDP for some countries to as high as 6% of GDP in Guyana (CRFM 2008).

In 2012, the fisheries sector contributed to the GDP of Member States from a low of 0.1% (Barbados) to a high of between 2.1% and 2.3% in Guyana, Suriname, Belize and Anguilla. It should be noted, however, that the GDP value is based on the ex-vessel value of fish landed, and perhaps is not the best indicator of the economic value of fisheries in the CRFM region.

Mahon et al (2007), showed that as the fish moves through the various market pathways to the consumer, it increases in value and contributes to livelihoods, and that the overall additional value was 2.6 times the landed value of the fishery. During the period 2011–2012, at ex-vessel prices (the point of first sale) the value of the marine capture fishery production for the region was estimated at approximately US$392.9 million annually and the value of the aquaculture fishery was US$28.9 million annually, giving a total value of approximately US$421.8 million annually over the period.

Information gathered from interviews for this study indicates that the aquaculture sector is still in its infancy in the CARICOM region. Significant development has been limited to countries like Jamaica and Belize, but other countries like Guyana, Haiti, Suriname and Trinidad and Tobago have begun to put more emphasis on aquaculture as an area for development.

Fish farms face many of the same problems as agricultural farmers. CARIFORUIM countries generally lack infrastructure and have a limited, if any legal framework for aquaculture. There is controversy over water rights, lack of trained staff, few research facilities, and most feed and specialised hatchery equipment has to be imported.

5.2 Profile of Fishers

The number of persons employed in direct production in the commercial marine capture fisheries and aquaculture sub-sectors (including full-time and part-time fishers, harvesters and farmers engaged in artisanal/subsistence and commercial activities) in the CRFM region in 2011, was approximately 113,412 persons (110,818 persons employed in direct production in the marine capture fisheries and about 2,594 persons employed in direct production in aquaculture).

The fisheries sector also provides employment for many persons who supply services and goods to the primary producers. This includes persons engaged in processing, preserving, storing, transporting, marketing and distribution or selling fish or fish products, as well as other ancillary activities, such as net and gear making, ice production and supply, vessel construction and maintenance, and also persons involved in research, development and administration linked with the fisheries sector. The total number of persons employed in the fisheries sector of the CRFM region was estimated at approximately 338,835 in 2011, which was approximately 5% of the workforce of the region.

6 STANDARDS

Prior to initiating the discussion of public and private standards, it is useful to review the following definition of a 'standard' from the International Organization for Standardization (ISO):

A standard is a *"document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context"* (ISO/IEC Guide 2:2004, definition 3.2).

Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits.

There are numerous definitions/distinctions between private and public standards in the existing literature. For the purpose of this study, national, regional and international sanitary and phytosanitary standards will be considered to be in the public domain as they are developed, implemented and enforced by, or under the authority of public agencies. These public standards are science-based, usually centred on risk analysis processes and subject to review and debate by contracting parties, and sometimes private sector stakeholders, prior to adoption.

It is important to define the scope of requirements contained in private standards and the requirements contained in public standards in order to differentiate between the two types of standards. This will help to place this study in its proper context and allow the reader to focus on the impact of private standards on developing countries and small and medium enterprises (SMEs).

Private standards usually contain more stringent requirements than public standards. It is also significant that some measures will satisfy specific public and private standard requirements. However, certain requirements are common across public and private standards; hence there is some level of concurrence between the standards.

6.1 Public Standards

There are several levels of public standards that may impact the agriculture and fisheries sectors. International and regional standards that deal with sanitary and phytosanitary measures all have an impact on trade and food safety and are usually integrated into national standards in the form of legislation, regulations and policies of contracting parties to the relevant international conventions.

6.1.1 International Standards

The three international bodies which develop sanitary and phytosanitary (SPS) standards that impact the agriculture and fisheries sectors globally are:

1. the Organisation for Animal Health (OIE) for animal health and animal safety standards;
2. the Codex Alimentarius for human health and food safety standards; and

3. the International Plant Protection Convention (IPPC) for plant health standards.

These international bodies have a long history. In 1924, twenty-eight States obtained an international agreement to create the Office International des Epizooties (OIE), now known as the Organisation for Animal Health. In the food safety realm, regional efforts to harmonise national food standards began after the Second War, leading to the establishment of the Codex Alimentarius Commission. In plant health, a multilateral treaty, the IPPC was signed in 1951.

The WTO replaced the General Agreement on Tariffs and Trade (whose history dates back to 1947). The function of the WTO is to "*ensure that trade flows as smoothly, predictably and freely as possible*" in a multilateral trading system. The WTO-SPS agreement sets out the basic rules on how governments can apply food safety, animal and plant health measures, referred to as sanitary and phytosanitary or SPS measures:

Relevant excerpts from the WTO SPS Agreement and the Technical Barriers to Trade Agreement follow:
"Sanitary or phytosanitary measures include all relevant laws, decrees, regulations, requirements and procedures including, inter alia, end product criteria; processes and production methods; testing, inspection, certification and approval procedures; quarantine treatments including relevant requirements associated with the transport of animals or plants, or with the materials necessary for their survival during transport; provisions on relevant statistical methods, sampling procedures and methods of risk assessment; and packaging and labelling requirements directly related to food safety."

The Technical Barriers to Trade Agreement distinguishes mandatory standards (or technical regulations) from voluntary standards.

Voluntary standards: "*a document approved by a recognized organization or entity, that provides for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory under international trade rules. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.*"

In contrast, a technical regulation is defined as: "*a document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.*" [emphasis added]

6.1.2 Regional Standards

In some cases, there are regional SPS standards developed by countries in the same geographic area and in accordance with regional agreements, such as the North American Free Trade Agreement and the MERCOSUR agreement in South America. These standards apply to contracting parties to these regional agreements and usually contain requirements specific to conditions in that region. Despite the fact that these requirements are limited to a specific region, these regional standards must still be consistent with the provisions of the WTO-SPS Agreement and the international standards of the OIE, Codex and the IPPC.

The Caribbean Agricultural Health and Food Safety Agency (CAHFSA) is a newly formed regional body whose mandate is focused on organizing and coordinating the SPS regime in the region. It does not anticipate developing regional SPS standards in the near future.

The CARICOM Regional Organization for Standards and Quality (CROSQ) is the regional centre for promoting efficiency and competitive production in goods and services, through the process of standardisation and the verification of quality. Under the 10th European Development Fund through the Technical Barriers to Trade (TBT) component, CROSQ has a project to strengthen the capabilities of testing laboratories in CARIFORUM Member countries so they can provide reliable, competent, internationally recognised, and affordable testing services to exporters. A newly-formed committee under the CROSQ will develop a regional conformity assessment infrastructure as it relates to testing, inspection, certification, testing and accreditation.

The OECS does not set standards but one of its objectives is: *"To promote co-operation among the Member States at the regional and international level."*

The reason for including the reference to the OECS, the CARIFORUM, the CARICOM, CAHFSA, CROSQ and others is to emphasise the number of organisations which have a potential role to play in the standards space and the need for coordination among them at the regional and national levels.

6.1.3 National Standards

To implement international and regional standards, contracting parties to international agreements and conventions (for the most part national governments) integrate the international and regional standards into their national legislation, regulations and policies. Contracting parties have the sovereign right to adopt measures, which may not be in accordance with international or regional standards, "*if there is a scientific justification, or as a consequence of the level of sanitary or phytosanitary protection a Member determines to be appropriate*." (WTO-SPS Agreement)

The Food Safety Modernization Act (FSMA) plays a major role in exports to the USA. Validation that FSMA requirements have been met is often the basis for food safety certification with no additional demands for private standard certification. The verification is performed by third party certification.

6.2 Private Standards

6.2.1 The Global Food Safety Initiative (GFSI)

During the 1990s, there were a series of high-profile international food safety crises including bovine spongiform encephalopathy (BSE), commonly known as mad cow disease, dioxin and listeria. Within the food industry, there was growing audit fatigue as retailers and brand manufacturers audited facilities against their countless in-house standards, each developed in isolation and with no consideration of convergence. There was inconsistency and consumer and food industry confidence was low.

At the same time, demands for sustainable agriculture and fisheries, social and ethical issues (such as worker's health and rights) and environmental protection came to the forefront and have been incorporated into private standards since.

The Chief Executive Officers of the world's food retailers agreed to take collaborative action. In May 2000, the Global Food Safety Initiative, a non-profit foundation, was founded (GFSI website: http://www.mygfsi.com). The GFSI is an industry-driven initiative providing guidance on food safety management systems necessary for safety along the value chain. This work is accomplished through a collaboration between the world's leading food safety experts from retail, manufacturing and food service companies, as well as international organisations, governments, academia and service providers to the global food industry.

The GFSI approach is to evaluate and endorse standards against a benchmark model. With the vision, '*Once certified, accepted everywhere*', the idea was to determine and recognise equivalency between food safety schemes, while leaving flexibility and choice in the marketplace. Realisation of this vision has not been so successful and will be dealt with further in section 6.2.4.

6.2.2 World Trade Organization (WTO) involvement with Private Standards

In 2005, at a meeting of the WTO SPS Committee, Saint Vincent and the Grenadines raised a specific trade concern regarding the impact of private standards on bananas destined for sale in the United Kingdom; that is, they (private standards) are often more rigid than international standards, causing small farmers to suffer. In October 2008, an ad hoc Working Group was established, and in March 2011 the SPS Committee endorsed a five-point action plan. The first action was to "*develop a working definition of SPS-related private standards and limit any discussions to these*."

The following summary of concerns and benefits of private standards is taken from the same March 2011 SPS Committee meeting report.

Among the concerns that some members have raised about private standards in food safety and animal and plant health are:

- Private standards are not always based on science.
- They deviate from international standards or from official governmental requirements (for example, for maximum residue limits).
- There are a large number of them, and they are not harmonised.
- They are costly for suppliers complying with them and seeking certification for their products, particularly with the large number of standards.
- They are set up without transparency, consultation or systems for appealing.
- They prescribe how measures should be applied rather than what the outcome should be, ignoring the principle that equivalent outcomes achieved by different means should be recognised.
- They pose disproportionate burdens on small and medium-sized producers and exporters in developing countries.

But some members have also seen benefits in private standards:

- They help suppliers comply with national and international standards when they prescribe how those standards should be met.
- They promote best practices and improved productivity.
- They give brands a better reputation and help suppliers have access to markets and credit.
- They address emerging risks in a rapid manner, filling gaps, and making it easier for international standards to eventually be adopted.

Several meetings of the ad hoc Working Group have been held since 2011 but participants were unable to reach agreement on a definition of private standards.

As a result, the March 2015 SPS Committee meeting report states that: "m*embers agreed to a 'cooling off' period to reflect on how to overcome the impasse*."

At that same meeting in March 2015, it was reported that, *"Private standards are a growing concern among developing countries, many of whom took the floor at the committee meeting to urge continued efforts to find a compromise."*

For the purpose of this study, the latest draft definition from the WTO-SPS ad hoc Working Group follows:
"An SPS-related private standard is a written requirement or condition, or a set of written requirements or conditions, related to food safety, or animal or plant life or health that may be used in commercial transactions and that is applied by a non-governmental entity that is not exercising governmental authority."

The proposed definition also included a statement or footnote stating that the working definition did not prejudice the rights and obligations of members under the SPS Agreement or the views of members on the scope of this agreement.

In the section on public standards, the scientific and participative process for development of international standards was noted. There was some criticism by respondents in this study that private certification schemes are developed using neither a transparent process nor scientific justification. Most scheme owners claim they encourage participation through a public consultation process, but many participants in these schemes were either unaware of this possibility or sceptical that their concerns were being heard. A criticism was also heard that private certification schemes do not have an effective appeal mechanism to challenge requirements that are not appropriate for local conditions.

One example was encountered where a farmer organisation had actively participated in the development of private standards: The Belize Shrimp Farmers Association participated in the development of the Aquaculture Stewardship Council Shrimp Standard.

6.2.3 Types of Private Standards

The buyer determines the type of private standard that it deems appropriate for its use.

Most fast food chains and large retail chains/supermarkets such as Costco, Tesco, and Walmart require that specific food safety standards be followed. These companies have either developed their own standards or rely on a standard developed and owned by independent food safety standard organisations such as GLOBALG.A.P., Primus GFS (Primus Global Food Safety), FSSC22000 (a food safety management scheme), Global Red Meat Standard (GRMS), the British Retail Consortium (BRC), the Global Aquaculture Alliance (GAA) and the Safe Quality Food Institute (SQFI). These independent organisations have no vested interest, financial or otherwise, in the companies (retailers, restaurants, hotels, etc.) that apply their standards.

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. Certification that a participant has met the requirements of the standard is done by company auditors or by an accredited, independent third party known as a certification body, or in some sectors referred to as a conformity assessment body.

As mentioned previously, companies may decide, in some cases, to use private standards other than their own. In January of 2016, for example, Walmart Brazil announced that it would be using GLOBALG.A.P. certification for fresh fruits and vegetables. Other combinations are also possible, for instance, a company may use an independent standard with its own specific company 'add-ons', usually with new or stricter requirements.

Private standards cover the entire food value chain 'from farm to fork'. Certification schemes identify control points and the criteria necessary to satisfy those control points. Certification schemes and Good Agricultural Practices (GAP) programmes are usually based on a Hazard Analysis and Critical Control Point (HACCP) scheme, a well known and internationally-recognised food safety management system.

At the farm level, the whole production process is assessed, usually starting with the site history and including issues such as health and safety, hygiene, signage, water and land use, pesticide use, storage and disposal, harvesting techniques, post-harvest handling. One private standard reviewed contained a checklist with 258 control points at the farm level alone.

Farmer comment:

The fruit and vegetable GAP checklist is 'frightening' for small farmers.

The use of HACCP is not always mandatory at the farm level. In some cases, the responsibility for food safety lies with the processor or the packing house. In this study, most farmers supplying products to processors were unaware of any specific requirements they had to meet, other than to provide visually acceptable product. Some farmers were aware that processors conducted pesticide residue testing. Banana farmers were the exception. The banana industry is well versed in GAP through its adherence to Fair Trade certification requirements.

Storages and processing facilities have their own set of certification requirements to meet. Processing companies, in some cases, could not pinpoint exact investments related to the onset of private standards, because they had been improving their food safety measures for more than a decade. At least two of the processors interviewed also saw the opportunity to expand the scale of operations or the number of product lines at the same time, in order to capitalise on their certified status. Several processors involved in this study reported an investment of more than one million USA dollars.

Some private standards include worker's rights and environmental safeguards, while there are also other independent standards which deal exclusively with these elements. There are also specific independent standards on issues such as the chain of custody for traceability purposes. Private standards now number in the hundreds. Appendix 4 is a Generic Checklist of control points taken from several of the most applied private standards.

A buyer may require a farmer/processor to follow the buyer's own certification standard, or it may use of one of the independent standards, sometimes with what are referred to as 'add-ons', to meet its specific criteria.

The starting point for an audit of compliance with private standards is the level of compliance with the national laws and regulations of the territory in which they are being applied.

6.2.4 Equivalence (Benchmarking) of Private Certification Schemes

The WTO study on the *Effects of SPS-related Private Standards* in 2009 reported that, "the major retailers are using the benchmarking process of the Global Food Safety Initiative."

While these retailers may have accepted the concept in principle, the results of the current study on the impact of private standards tell a somewhat different story. In the CARIFORUM countries there were numerous examples found, primarily in the processing sector where certification for multiple schemes is required. One shrimp farming (aquaculture) operation required certification to nine different schemes. A citrus processing plant was burdened with up to a dozen different audits annually.

'Once certified, accepted everywhere', the vision of the GFSI, does not appear to be working in practice. There is much work to be done to realise this objective and eliminate the major resource burden (financial and human) placed on suppliers.

7 FOOD VALUE CHAIN IN CARIFORUM COUNTRIES

Farmers plant seed or plantlets and use inputs such as chemicals (fertilizers and pesticides) and equipment to grow a final product. Figure 1 represents the numerous possibilities for movement of that product along the food value chain from farmer to consumer, as observed in the CARIFORUM region including:

- A large farmer may sell directly to a buyer, if the farmer can produce a reliable source of quality product.
- Small farmers may sell to local hucksters, higglers and traffickers who mainly operate in informal markets.
- Farmers may sell directly to local formal and informal markets.
- Farmers may sell to processors for transformation into sauces, beverages, juices, mash, etc.
- Processors may sell to further processors, exporters or buyers.
- Farmers may sell to exporters or middlemen who have established market contacts and buyers.
- Farmers may sell to a larger farmer who aggregates product for sale.
- Farmers may join with other small farmers to sell through a shared operation/small business directly to a buyer.

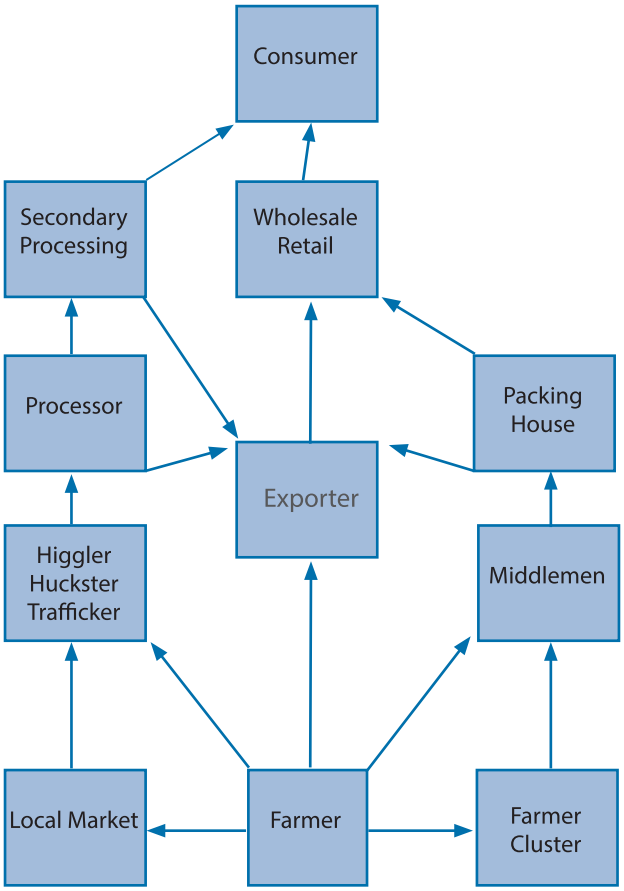

Figure 1: Food Value Chain – Farm to Fork

8 COUNTRY PROFILES

Most agricultural and fisheries products in CARIFORUM countries are sold on both the domestic and the export markets, either as primary or processed products. The following country profiles were compiled using information obtained from the interviews conducted as well as from responses to the written questionnaires.

8.1 BELIZE

Agricultural and Fisheries Products

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.

Markets

The main export markets are the USA; Canada; Japan; the EU, mainly the UK; Mexico; Jamaica and other CARIFORUM countries. The most important and traditional trade ties for Belize are outside the CARIFORUM.

Private Standards Readiness

There is a good overall awareness of private certification schemes within the government, and among citrus, banana, sugarcane and shrimp farmers and processors in Belize. Shrimp farming is one of the most successful sectors where, with Compete Caribbean funding and using a cluster approach, most of the industry has become certified to the Aquaculture Stewardship Council standards.

The banana industry had adapted reasonably well to private standards (most farmers are certified under Fair Trade standards) but it has been hit hard in recent years by hurricanes, drought, low prices and the introduction of black sigatoka—a leaf spot disease that results in prohibitions of banana exports to some major markets because of the phytosanitary risk.

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 to the general economy of Belize.

The Belize Agricultural Health Authority (BAHA) has initiated voluntary training programmes in GAP and farmers receive acknowledgement, 'BAHA approved' stickers. This generic GAP training helps farmers and processors to modernise their production practices and is a stepping stone towards certification under a private standard. However, as in most other CARIFORUM countries, the legislation and ongoing enforcement is limited for domestic production in Belize. Quality control programmes are focused, for the most part, on exports and the larger processing facilities and national quality requirements are not enforced for some products.

Not all exports are subject to private certification schemes. Some markets accept evidence that a HACCP system is in place. Exporting to the USA for many products from Belize is usually based on meeting the FSMA requirements. Of course, independent retailers/wholesalers and restaurant chains may still demand certification to a private standard. These private requirements are in addition to government requirements and are usually more stringent than official sanitary and phytosanitary standards.

Small and medium size farmers find the private certification requirements for export to be very high and there is no direct offsetting benefit—there is no price premium received. At least one produce company has closed as a result of the required investment to meet private standards. The best opportunity for a small farmer to stay in, or enter the export market is to become aligned with a farmer group, buyer, exporter or company that will sponsor the necessary certification and compliance audits. These expenses are then reimbursed through a collective fund or check-off arrangement taken from sales revenue. In some cases, processing companies have spent more than a decade making infrastructure improvements leading to private certification while incurring costs ranging from US$1–10 million.

Because of its extensive list of international markets, the major shrimp production facility is frustrated by the need to comply with nine different private certification schemes. This is very costly in terms of financial and human resources and is one of the most extreme cases observed in this study. Another extreme example was a citrus company in Belize, which undergoes at least 12 audit visits a year. These two operations were sufficient evidence that the benchmarking system of the GFSI is not working. In addition to the frustration caused by multiple audit visits, aquaculture experts reported that their challenges to technical requirements were not successful and there was no independent forum to mediate.

Some processors in Belize have their own laboratories, such as those conducting internal monitoring for compliance, and have the capacity to do assessments such as conducting microbiological tests for dairy products. While independent laboratories can conduct some testing (such as water quality), more complex diagnosis and analysis that requires specialised equipment and expertise, such as heavy metal testing, is often done by accredited labs in the USA or Canada.

On a positive note, some improvements are on the way. Belize has benefited from funding made available through a UK trust fund that is administered by the Caribbean Development Bank. This funding has provided support for improvements and training, leading towards obtaining laboratory accreditation and purchasing of equipment. BAHA is expecting to soon have ISO 17025 accreditation for its laboratory and the next step is to seek accreditation for the Metrology Laboratory under the Belize Bureau of Standards. Funding was also made available for ISO 9001:2008 training for private companies, some of which had no quality management plans. It should be noted that under this same project, the Belize Bureau of Standards staff was trained in ISO 9001:2008 Quality Management Systems and since then, the Unit has received accreditation to that ISO standard.

A significant weakness is the lack of expertise in Belize, either public or private, to assist farmers or processors to integrate private certification requirements into their operations. There is also an absence of certification or verification bodies in Belize and, as a result, travel expenses for a consultant from North America or Europe

can be high. Some companies use referred consultants from Europe or the USA, while others find experts from Central America on the internet.

The Ministry of Trade has held workshops to support small/micro enterprises and encouraged the formation of 'clusters' for resource efficiencies. However, there is still much work to be done to develop the necessary 'quality management culture' that was identified as a necessity by some interviewees.

General Observations

As mentioned in the previous section on '*Private Standards Readiness*', Belize has taken some positive steps towards adapting to private standards. The BAHA has shown leadership, which is recognised by other government organisations and farmer organisations alike. However, BAHA as an agricultural health authority, does not have the mandate to cover all aspects of private certification. Coordination among other government and private sector organisations is critical, if Belizean farmers wish to comply with both public and private standards in order to continue competing in export markets.

Belize is one of the countries of the CARIFORUM, along with some countries outside the region, that is taking an active role at the World Trade Organization in determining the place for private standards in international trade. However, there is resistance from developed countries and since its first mention in 2005, little has been accomplished. Currently, there is much debate and controversy at the very starting point—a definition for private standards.

Belize should not take its eye off the ball. Should it decide to aggressively pursue the subject at the WTO, it should not ignore the importance of private standards to agricultural and fisheries exports. Belize needs to continue its efforts to comply with private standards as it appears that these are increasingly becoming more significant than regulatory requirements in international trade.

8.2 DOMINICAN REPUBLIC

Agricultural and Fisheries Products

Commodities for local consumption and export include: poultry, sugarcane, bananas, rice, tomatoes, yucca, onions, beef, eggs, cacao, mango, bell peppers, avocadoes, citrus, oriental vegetables and dairy products.

Markets

The EU, the USA, Canada and CARICOM countries.

Private Standards Readiness

In the Dominican Republic, a Food Safety Department was established in 2005. The President of the country has identified the need to diversify exports and, in Decree 52-08, established the basic requirements for agricultural production, packing and transport (GAP).

Despite these legal instruments, farmers and farmer associations indicate that there are insufficient resources to enforce the application of GAP. As a result, many producers in the Dominican Republic have not yet developed a full understanding and appreciation of the impact of private standards.

The National Competitiveness Council (CNC) is a public/private entity that encourages farmers to work in clusters for reasons of financial and human resource efficiencies, information exchange, shared learning experiences, and so forth. One of the Council's objectives is to strengthen national production systems to allow entry into export markets.

The Agribusiness Committee (Junta Agroempresarial Dominicana—JAD) is a private sector organisation whose goal is to improve productivity, increase the number of products, and strengthen the ability of farmers to compete in national and international markets. Members interviewed possessed a very good understanding of private standard certification requirements.

There are many companies and several grower consortiums/clusters that do successfully export fresh fruits and vegetables, juices and concentrates; therefore, demonstrating the ability to meet the private standard certification requirements.

There is a positive outcome to mentoring the small farmers in clusters and to help them comply with private certification. Although the small farmers may be able to comply, they may not necessarily see the relationship to private certification. However, they understand there are new requirements to meet, which are necessary for sale of their products. There is no clear differentiation in their minds between public sanitary and phytosanitary standards and private standards.

Training in GAP is offered by several entities, and there has been EU support for development of GAP manuals and infrastructure improvements, such as pasteurisation equipment in the dairy sector.

Small farmers account for about 50% of dairy production. The quality of dairy products for sale domestically is not monitored with the same rigour as for export, where private standards are enforced. Although there may be some interest in export among small farmers, they prefer to sell in the local market, because quality and health standards are not being enforced domestically, and they know that private certification will be a difficult task in the near term. Those who do export belong to organised clusters and take advantage of training and guidance in GAP from CONALECHE, a legal entity chaired by the Minister of Agriculture, which is a public/private enterprise for dairy products.

The Dominican Exporters Association (ADEXVO, by its Spanish Acronym) provides leadership in expanding export markets and provides training on requirements for specific markets. The Dominican Republic also has a Quality Institute (INDOCAL) that produces national voluntary standards and has the power to certify products according to those standards. The organisation for oriental vegetables, fresh fruit and associated products for export has been elevated to a national organisation (DINVOFEX), which will implement GAP and oversee production, harvest, post-harvest, treatment and packing.

General Observations

There are several other government agencies not mentioned in the previous section, but which also play a role in the production and export of agricultural and fisheries products in the Dominican Republic. Although there is a National Committee on Sanitary and Phytosanitary Measures, with so many organisations involved in the food value chain there is a high potential for confusion, overlap, and loss of focus.

Overall, there is a need for a clear leader in food safety and, more specifically, for a focal point for private certification knowledge. Closer coordination is critical among government departments with a stake in food safety, domestic production, trade and exports, as well as with farmers and their associations. Otherwise, a piecemeal approach will slow the acceptance of GAP on a national basis, and put the health of its own citizens and those in other countries, at risk.

Several respondents in the Dominican Republic, and indeed in other CARIFORUM countries commented on the need for commitment and coordination at all levels if a country is to succeed in export markets, now and in the future.

ADEXVO and INDOCAL have recently signed an agreement to collaborate on capacity building, which is a very positive sign for the future. Hopefully, GAP and private certification standards will be integral components of this training.

8.3 GRENADA

Agricultural and Fisheries Products

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

Markets

The USA, Germany, Switzerland, France, Australia, Caribbean, Japan, Holland, Canada and the Caribbean region (Trinidad, US Virgin Islands).

Private Standards Readiness

Grenada was surveyed by electronic questionnaire and, due to the fact that only four questionnaires were returned, it is impossible to make assumptions about the national situation based on the limited data gathered.

Of the four responses, three were from medium sized processor/exporters and one from the Marketing and National Importing Board. As a result, this section of the report relates mainly to the processor/exporter phase of the food value chain. The responses in the completed questionnaires by these four organisations were very detailed and informative and are summarised here.

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 taking place, such as HACCP certification to meet the demands of the FSMA. Technical guidance and access to third party auditors is necessary for these advances to occur.

Additional internal controls by processors have been implemented, at significant cost, to meet new food safety requirements but expenditures have been offset somewhat by expanded and more secure markets with better prices.

For most other commodities produced in Grenada, buyers have not yet imposed private certification schemes. This is changing though with the introduction of the FSMA.

8.4 JAMAICA

Agricultural and Fisheries Products

Commodities for local consumption and export include: ackee, bananas, beef patties, breadfruit, callalo, chicken, cocoa, coffee, conch, dasheen, ginger, June plum, lobsters, papaya, peppers, pimento, pumpkin, mango, okra, spices, sugar, sweet potatoes and yams.

Markets

Most farmers sell product for both the domestic and the export market in some manner, either directly or through cluster arrangements or food processors. The main export markets are the EU, mainly the UK; the USA; Canada; and other CARICOM countries.

Private Standards Readiness

Some larger companies in Jamaica started seeking HACCP certification in the 1990's and have worked their way through various iterations of GAP since. In 2007, a grant from the EU was provided for small and medium enterprises to meet various certification measures of the ISO. According to industry reports, there were few companies that took advantage of that programme. Although the initial investment was beneficial, there was a weakness that is characteristic of many programmes of this type, and that is the lack of financial support to conduct ongoing capacity building.

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 has provided funding for a Jamaica 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 EU. The government has assisted with infrastructure improvements to meet private certification requirements and the processing plants are responsible for activities such as ensuring

potable water, laboratory testing, documentation. This funding has extended a lifeline to SMEs which could not otherwise provide the infrastructure required to meet private standards.

In 2013, the Jamaican government supported improvements that included infrastructure, storages and the use of pesticides to assist with compliance with the FSMA.

Agro parks have been created to form groupings, or 'clusters' of farmers to generate efficiencies by using shared post-harvest and packaging facilities. In August of 2015, a mission and information exchange took place with USA buyers/importers and Jamaican exporters and Agro park farmers to improve buyer-seller relationships, demonstrate the quality control in production and clarify USA requirements.

There is still work to be done to improve knowledge, understanding and capacity to implement GAP at the farmer level in Jamaica. However, government efforts are being made to fill those gaps. Government funding has supported the development of a GAP manual, and training is available to write a Food Safety Plan. However, the programme is voluntary and uptake by farmers has been slow, in addition, some sectors are better organised than others to react to private standards.

Some of the larger companies in both animal and plant (fruit and vegetable) production are in control of the full value chain, from planting material to feed mills, pesticide application, record keeping, health and safety, all the way to export. These companies only purchase product from their own approved growers; the risk of losing a customer due to nonconformity is too high to accept product from non-approved growers. This tight control has not only allowed them to meet private standard certification requirements, but it has also resulted in better quality product and reduced rejections at the destination.

One private sector interviewee answered with the following, when asked about Jamaica's state of readiness to meet private certification requirements, *"Jamaica agriculture needs a change of culture—it's not just 'the same old, same old'. Farming is a business, not just left to those who can't do anything else".*

Similar comments were made in several other CARIFORUM countries: that farming needs to be seen as a profession; treated as an agribusiness. Farmers have moved from trying to sell what they produce, to producing what they know they can sell.

Well-structured and financially viable companies can, and have adapted to private standards but smaller farmers have difficulty doing so. Small farmers are more vulnerable to the impacts of certification costs due to their small volume of production.

The term 'domestic exports' has been used to describe in-country sales to companies that apply certification requirements. In Jamaica, several hotels have formed a company to purchase from contracted farmers, indicating a growing trend for more stringent food safety requirements and certification schemes at the national level.

As with most CARIFORUM countries, in Jamaica there is insufficient laboratory support for food safety programmes, thus complicating the compliance with private standards. There are few accredited labs in Jamaica and some can only analyse for presence/absence whereas identifying parts per million for contaminants is necessary for certification.

General Observations

Jamaica has taken some positive steps towards adapting to private standards. The National Food Safety Policy and the inter-agency committee both confirm their recognition of the importance of food safety and a greater level of coordination than in most other CARIFORUM countries. These efforts need to be continued.

The major companies have adapted well to private certification standards, notwithstanding the large financial investments in infrastructure and human resource costs for HACCP coordinators or Quality Managers, and food safety training for staff. Some have developed cost-sharing mechanisms to create efficiencies, such as cooperating on the timing of verification audits to reduce travel costs and professional fees associated with auditor visits.

8.5 SAINT LUCIA

Agricultural and Fisheries Products

Commodities for local consumption and export include: avocado, bananas, beans, breadfruit, cocoa, coconut, coconut oil, dasheen, fish, golden apple, guava, herbs, honey, okra, tubers, fruit, mango, papaya, plantain, root crops, vegetables, spices and yams.

Markets

The EU, the USA and other CARIFORUM countries.

Private Standards Readiness

Saint Lucia has embarked on an ambitious programme that will require farmers to register and become certified by the Bureau of Standards for GAP, with support and training from the Ministry of Agriculture. The Trade and Export Promotion Agency is working with the Bureau of Standards to support HACCP training. These initiatives should provide a basic level of GAP training that could be an important stepping stone to certification for farmers who are not already participating. Nevertheless, some small farmers have become marginalised due to their inability to adapt to private standards and have already dropped out of the export market.

As is the case in other CARIFORUM countries, farmers and government officials alike said that there are insufficient resources to enforce the maintenance of HACCP plans and compliance with GAP. It is a challenge to meet domestic standards, let alone strict requirements of private certification schemes for exports.

There is a history of working in cooperatives in Saint Lucia, and a recognition that small and medium size farmers can prosper when working together. To that effect, an umbrella organisation for agricultural producers was recently registered under the Department of Cooperatives.

Costs to producers for GAP certification have been offset, in many cases, by the Banana Emergency Recovery Unit (BERU) and local Fair Trade Associations.

General Observations

Farmers generally accept that they need to comply with private certification schemes if they want to keep their export markets open and are committed to producing safe, quality food. In order to be able to dedicate their efforts to production, they strongly express the need for assistance with marketing, storage and transportation systems, and other value chain requirements, to get their products to the consumer.

Farmers sometimes feel frustrated with slow government reaction and, at times, the lack of follow-through on initiatives. However, it is also apparent that farmers are still dependent on government support and expectations are high for extension services.

All export problems are not related to private standards. Other factors affecting the ability to produce and export from Saint Lucia are lack of storage space, long delays in payment to farmers and a shortage of water in the dry season.

8.6 ST. VINCENT AND THE GRENADINES

Agricultural and Fisheries Products

Commodities for local consumption and export include: bananas, dasheen, eddoes, fish, ginger, plantain, pumpkin, sweet potato and vegetables.

Markets

The USA, Canada, the EU, and other CARIFORUM countries.

Private Standards Readiness

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 trade was required to comply with private certification long before demands for certification of other crops came into play.

The Banana Accompanying Measures (BAM), a five-year European Union fund which began in 2013, is focused *"mainly on increasing banana, livestock, fruit and vegetable production. The implementation of the BAM is expected to result in improved agricultural infrastructure; improved access to credit facilities; good environmental management systems and land use practices; development of agribusinesses; improved institutional capacity; and the strengthening of public/private partnership in the value chain."* (https://ec.europa.eu/europeaid/sectors/food-and-agriculture/sustainable-agriculture-and-rural-development/bam_en)

In Saint Vincent and the Grenadines, a national food safety policy and an export strategy would provide much needed direction and coordination mechanisms for the agricultural and fisheries sectors. These actions would help satisfy the socio-economic framework referred to later in this report under 'General Observations', and help to generate public and private interest in meeting the GAP challenges.

The combination of foreign government sanitary and phytosanitary demands together with those of private certification required by buyers, has created a tangled web of requirements that are daunting to most growers, large and small. It is challenging for farmers to make planting decisions on things like crops and varieties without knowing potential markets and certification demands. As in most other CARIFORUM countries, even the larger growers do not have the time nor the expertise for market development.

General Observations

In his 2015 budget speech, the Prime Minister of Saint Vincent and the Grenadines stated: "*In agriculture, it is the business of government to provide or facilitate the access to a range of services and to engender the development of a socio-economic framework to assist the farmer in the production and marketing of his or her agricultural products. It is, at the end of the day, the farmer, and his/her workers, who produce and market the crops and animals*."

This statement clearly identifies the need for active public and private collaboration in the agriculture sector. The potential for public-private partnerships in the agriculture (including fisheries/aquaculture) sector will be covered under the '*Recommendations*' section of this report.

Similar to other CARIFORUM countries, over the past five years, natural disasters and plant diseases have taken their toll on agricultural production in Saint Vincent and the Grenadines.

Despite the reduced contribution to the national economy in the recent 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 way of life remains important both culturally and politically.

If small and medium size farmers are to survive, fully embracing private certification schemes will be necessary—even if viewed by farmers as a 'necessary evil'. Farmers generally understand, even if they don't fully accept, the need to comply with private certification schemes if they want to keep their export markets open. A coordinated approach of government and all food value chain participants is necessary to make this work.

8.7 TRINIDAD AND TOBAGO

Agricultural and Fisheries Products

Commodities for local consumption and export include: cassava, cocoa, citrus, corn, dairy, dasheen, fruit juice, poultry, pigeon peas, rice, yams, sweet potatoes and eddoes.

Markets

The USA, Canada and CARICOM countries.

Private Standards Readiness

All three respondents were involved in processing and distribution. Two of these were certified under a private standard. Significant financial and human resource investment was required.

General observations

There is a clear recognition among the few responses to the questionnaire, of the need for food safety and an interest in pursuing opportunities in new and emerging markets for exotic and organic produce.

The agricultural export challenges facing Trinidad and Tobago at the moment relate to phytosanitary regulations of importing countries; shipping cargo space; timely delivery to destinations; distribution networks; and difficulties providing reliable, consistent quality to buyers.

9 EFFECT OF PRIVATE STANDARDS ON MARKET ACCESS

Farmers in the agriculture and fishery sectors in CARIFORUM countries are mainly small and micro enterprises (SMEs). This term can mean small in number, usually a single owner who may be the sole employee, or engage less than ten employees, which often include only family members. It can also mean 'small' in terms of land owned/farmed or volume of production and is frequently limited to a single product. In the fishery sector, it could relate to other measurements, such as volume of catch and number of fishing vessels and in aquaculture it could also refer to the amount of production.

Although an SME production may be small, individual farmers when collaborating in clusters, can still have access to global markets for their products. In the report, *Agro-based Clusters in Developing Economies* (FAO 2010), a number of different commodity clusters are described (e.g., wine, fruit, cut flowers, coffee, salmon, root crops and grapes). It outlines the advantages and the challenges faced by small farmers in developing countries and lessons to be learned in the establishment and operation of clusters. Of particular importance is that 'a one-size-fits-all approach should be avoided'.

Governments can improve the effectiveness of their support for the establishment and improvement of agricultural value chains *"by promoting the development of and organizing their assistance around clusters"* (ITC 2005).

Many clusters include governmental and other institutions, such as universities, standard-setting agencies, think tanks, vocational training providers, and trade associations that provide specialised training, education, information, research and technical support (Porter 1998).

A collection or cluster of independent farms in aquaculture operations can also be considered collectively as a single operation for certification purposes. Nevertheless, there will always be a percentage of SMEs that will not be able to compete beyond the local market.

According to the Food and Agriculture Organization of the United Nations (FAO), the demand for agricultural products will increase by 50 percent between now and 2030 and by 70 percent by 2050.

There are increasing demands for food production globally, and the supply of agriculture and fishery products produced in CARIFORUM countries represents a vital opportunity to sell product that cannot be absorbed by domestic markets. Economic, social and political factors come into play, because taking advantage of export markets allows farmers of the region not only to stay in business but also to create jobs, support their families and maintain a rural lifestyle.

In most CARIFORUM countries the use of GAP is either not required or, if required, not enforced. As a result, the transition from traditional to modern production methods has been delayed.

The majority of products intended for export, however, are being produced using GAP, either informally or formally. Some buyers do not currently require formal certification processes, but this is changing rapidly and will not persist much longer. The emphasis on food safety is growing, and the internet and news media reports enable immediate notification of food recalls, deaths and illnesses caused by food-borne diseases and pathogens.

A few respondents were of the opinion that private certification standards were essentially marketing tools of large international corporations. However, consumers around the are becoming more concerned about food safety and are more selective in their food choices. Retailers, restaurants and other buyers believe that private standards provide a level of security beyond government requirements.

Foodborne diseases receive enormous attention in the media and their occurrence is reported globally within hours. The Centre for Disease Control based in Atlanta, Georgia, USA "*estimates that each year roughly 1 in 6 Americans (or 48 million people) get sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases*" (CDC website).

At this time, awareness and concern over food safety by consumers in developed countries is still much higher than that shown by some producers and consumers in developing countries. This situation may continue for some time at the local market level. In comparison, restaurant chains and supermarkets within CARIFORUM countries are now also beginning to demand GAP and HACCP certification for food safety and marketing reasons.

It is no longer a situation of 'buyer beware'. Although food safety is a shared responsibility, the consumer expectation is that the food they consume is safe, and societal values have shifted towards 'seller beware'. Food safety is a growing concern and retailers—the last point of consumer contact in the food value chain—have to be confident in the safety of the product they put on the shelves.

The financial impact on affected companies can also be considerable. In late 2015, a fast food company in the USA experienced two separate outbreaks of E. coli resulting in illness to more than fifty people in 14 states. As a result, company shares dropped by 36%. Although the source of contamination could not be identified, this case underlines the importance of food safety for consumers and business.

Although voluntary in theory, if private standards are not complied with, market access will be denied. Private standards do not have legislative enforcement but their strength lies in the obligation of sellers to meet the demands of buyers. If buyer demands are not met, they will find other suppliers that are willing to meet their demands.

> "*Suppliers were given until the end of 2009 to adhere to the Global Food Safety Initiative framework - or stop doing business with Walmart*"
> (http://www.qualityassurancemag.com/article/qa0613-walmart-food-safety-standards/)

In addition to food safety and quality, consumers are increasingly aware of social and ethical production practices. As reported in *Private Standards and Certification in Fisheries and Aquaculture* (Washington and Ababouch 2011): *"Attachment to an environmental standard or ecolabel provides insurance against boycotts and 'bad press' from environmental groups and in the media, but it also helps retailers and brand owners tap into and grow consumer demand for ethical products."*

Regarding equivalence of private certification standards, the examples from the Belize country profile should be highlighted. *"Because of its extensive list of international markets, the major shrimp production facility does find it a challenge to comply with nine different private certification schemes. This is very costly in terms of financial and human resources and is one of the most extreme cases observed in this study. Another extreme example was a citrus company in Belize that undergoes at least twelve audit visits a year."* (Washington and Ababouch 2011)

These examples offer a serious challenge to the vision of the Global Food Safety Initiative of, *'Once certified, recognised everywhere'.* This weakness in the international acceptance of private certification standards needs an urgent remedy. It places a great financial and human resource burden on producers and processors and is considered by some to be a barrier to trade.

Additional Findings

- Major markets are the USA, the EU (in particular the UK) and Canada, followed by other CARIFORUM countries. To produce a reliable supply of quality product for export requires a level of sophistication and business acumen that not all SMEs possess.
- There is significant anecdotal evidence that small producers may not have the interest in exporting if additional costs are incurred, nor do they have the capacity to meet private standards on their own.
- Good Agricultural Practices certification checklists were described as 'frightening' for small producers, although perception is not always reality—correct interpretation of requirements often conflicts with preconceived notions.
- International market access is reduced at this time if private certification requirements are not met. More and more buyers are moving towards private certification, which will mean further decreases in international and domestic market access in the future if private standards are not met.
- Domestic markets have not yet seen a major impact by private standards. However, fast food chains and some hotel chains now require private certification, even for domestic food consumption. If this trend continues, it may ultimately lead to the establishment of private certification requirements by domestic food suppliers (restaurants, hotels, etc.).
- Governments have taken initiatives to educate small producers on the Certification of Agricultural Produce and Good Agricultural Practices but participation is voluntary and the uptake by producers has been slow. Neither is there enforcement of the application of these Good Agricultural Practices.
- National Food Safety Committees have been formed to bring together the major stakeholders and are seen as positive efforts to build capacity, especially among small producers.
- 'Clusters', or consortia of producers have been formed to create efficiencies, to the point of forming companies that control all phases from production to export.
- 'Agro Parks' have been created in one country with government support as an example of this clustering mechanism. It is a model that brings together specific commodity producers to share post-harvest and packaging facilities.

- Compliance with private standards provides opportunities to expand existing markets and develop new markets.
- Exporters/processors will not take product from producers outside of their established supply group, because the application of food safety standards is not assured and the risk of spoiling the market because of non-compliance is unacceptable.
- There is a problem of access to accredited laboratories for specific testing on a timely basis for export.
- There will always be a small percentage of producers who are content to produce for informal local markets and who may never have the capacity to move beyond the local market.

Lessons Learned

- To produce a reliable supply of quality product for export requires a level of sophistication and business acumen that not all SMEs possess.
- SMEs need financial and technical assistance in order to make the improvements necessary and acquire the knowledge to become certified.
- SMEs operating in clusters create operational efficiencies and increase the negotiating power with buyers.
- Not all improvements need be costly. Innovation and creativity have already produced effective solutions to some certification barriers.
- SMEs are hesitant to change without incentives from government, or facing loss of market access.
- Domestic markets are beginning to demand *private certification schemes*; SMEs need to be prepared.
- National legislation, national Food Safety Policies, and effective coordination among stakeholders, especially among government agencies, are essential to drive change.
- Rapid and reliable laboratory testing is necessary to respond to export market demands.

> "Farming is not just 'the same old, same old'. It is a business, not just left to those who can't do anything else."
>
> *Jamaica, Private Sector Interviewee*

9.1 Market Access - Recommendations

Some CARIFORUM countries have raised the issue of private standards at the WTO-SPS Committee as potential barriers to trade. The issue was initially raised in 2005 but not much action took place until the last couple of years. A Working Group was struck to seek consensus on a definition of private standards, but to date no consensus has been reached despite numerous attempts. Without getting into the details of objections here, developed countries generally are not convinced that private standards fall within the scope of the SPS Agreement. This study does not take any position on that question. However, it is unlikely to be resolved soon and trade will continue. The recommendations that follow are independent of the WTO-SPS discussions.

The recommendations that follow will address some of the specific difficulties caused by private certification standards in CARIFORUM countries.

Governments, for the most part, do not have any product to sell, but they can create an environment that allows the private sector to flourish. Although de-regulation is becoming more and more popular in some countries, national GAP legislation and food safety policies would be a great asset to CARIFORUM countries. Protection of one's own citizens should be as important as protecting those in foreign countries from food borne illnesses.

Numerous survey respondents pointed to the need for commitment to food safety at the highest levels of government, and for government support for small and medium enterprises to transition from traditional farming practices to the more stringent and sophisticated GAP requirements.

Recommendation #1

Develop and nurture a food safety culture at the regional and national levels and promote awareness at all stages of the food value chain through the adoption, implementation and promotion of legislation, regulations, policies and capacity building that support the use of Good Agricultural Practices.

Recommendation #2

Clearly identify a 'champion' or leader of the food safety initiative at the regional and national levels.

Recommendation #3

Encourage all CARIFORUM countries to establish a National Food Safety Policy composed of key government departments and private sector organisations. (Government of Jamaica 2013)

Numerous cases were identified related to individual or groups of farmers who were required to comply with multiple private certification schemes. This 'nightmare' scenario, as it was described, has been resolved in some countries outside the CARIFORUM region through the development of national certification programmes, which then are presented for benchmark recognition under the Global Food Safety Initiative. Canada, Japan, Chile, China, Kenya, Mexico and Malaysia amongst others, have all developed national GAP programmes. China sought the assistance of a major food supplier to develop its programme.

This should be the long-term objective of the CARIFORUM countries, because acting as a coordinated group will carry more clout with buyers than acting individually. There is an abundance of publicly available material in the form of existing GAP standards in the countries mentioned above.

A CARIFORUM GAP would help to develop local expertise and encourage the establishment of certification bodies, auditors and laboratory capacity within the region. Establishing a focal point for investment and donor funding and the pursuit of public-private partnerships will facilitate the achievement of this goal. One national GAP coordinator strongly emphasised the importance of working with all stakeholders, especially buyers, in the development of a national or regional GAP.

Closer coordination is critical among government departments with a stake in food safety, agriculture and fish production, trade and exports, as well as with farmers and their associations, processors, exporters and buyers. Otherwise, a piecemeal approach will slow the acceptance of GAP on a national basis and jeopardise the health of citizens within and outside the CARIFORUM. At the present time, countries are developing resources such as GAP training programmes and manuals of procedure, in isolation. Much can be gained from sharing expertise and information obtained from national, regional and international sources.

Recommendation #4

Develop an independent CARIFORUM Good Agricultural Practices standard, with participation of governments and major stakeholder groups (especially buyers), with the goal of recognition under the Global Food Safety Initiative.

As the food safety culture develops some farmers will be more interested in GAP than others. It will be important to focus resources on assisting committed farmers. It is not uncommon for farmers who have participated in GAP in the past to drop out because of the certification demands. Small farmers will have the best chance of survival if they work in clusters and create economies of scale.

"Spatial proximity and shared strategic interests allow enterprises and their support institutions to realize shared gains through the organization of joint actions between cluster enterprises (e.g., joint bulk inputs purchase or joint advertising, or shared use of equipment) and between enterprises and their support institutions (e.g., provision of technical assistance by business associations or investments in infrastructure by the public sector).

Measures to help cluster stakeholders reduce barriers to cooperation and help them overcome their isolation include:

- *Foster linkages between cluster stakeholders*
- *Facilitate consensus building*
- *Build relationships*
- *Encourage trust building*
- *Strengthen governance mechanism*
- *Support the cluster's institutional network "*

(UNIDO 2013)

Recommendation #5

Encourage the formation of clusters, especially for those producing the same outputs, to increase efficiencies, share expenses and to ensure a reliable supply of product to penetrate/maintain markets.

Section 10 on the '*Cost of Compliance*' will further address the benefits of clusters or cooperative arrangements. Private certification programmes rely on laboratory testing as a risk management tool but there is insufficient and inadequate laboratory testing capacity in the CARIFORUM. Many comments were received during interviews about the need to send samples outside the region for laboratory testing, which can add significant costs, delays and sometimes lost opportunities to export. There are significant gaps in the availability of testing for both public and private SPS requirements.

Previous studies by Beverly Wood (2006) and by CIRAD, a French research agency (2009), have detailed the weaknesses of current laboratory capacity in the region. Both reports identify similar deficiencies, most importantly the lack of recognised quality assurance programmes and accreditation (resulting in no international acceptance of test results). Other weaknesses include the lack of equipment, trained staff, storage space, disposal procedures and standardised testing procedures.

Recommendation #6

Develop a regional strategy for a network of laboratories to provide analytical and diagnostic testing services in the CARIFORUM region to meet the needs of public and private sanitary and phytosanitary requirements.

Most study participants agreed that it is not economically feasible to have numerous laboratories in the region attempting to provide testing for all commodities and possible contaminants. Diagnostic equipment is very expensive and technical expertise and training to operate it cannot be duplicated in numerous locations. In addition, there needs to be sufficient demand for a test in order to make it economically feasible to offer that test.

Recommendation #7

The laboratory network should include Centres of Expertise for different products and contaminants based on public and private SPS needs.

There are private laboratories, such as the Caribbean Industrial Research Institute in Trinidad and the Technological Solutions Limited in Jamaica that perform a range of analytical services. Private sector options should be identified across the region and taken into consideration in the development of a CARIFORUM laboratory network. Government laboratory services will not necessarily be less expensive or timely than existing private services.

Recommendation #8

The laboratory network should consider including private laboratory testing services available in the region in the development of an integrated laboratory system for the CARIFORUM.

Many CARIFORUM countries do not have national export strategies and it is not clear how priorities are set for funding allocation to specific sectors, farmers, and the like, nor for capacity building efforts. The CARICOM Regional Organization for Standards and Quality provides training on a demand basis and seeks to line up requestors with donor funding. A good example is the CROSQ workshop on jams and jellies held in Antigua and Barbuda in December of 2014 to upgrade the quality infrastructure for the jams and jellies value chain. In order to develop private standard certification schemes at a regional basis, it is important to know the markets and what is being produced for those markets.

Recommendation #9

CARIFORUM countries should develop their own export strategies, so that GAP standards are developed in a manner that take into account local conditions, specific products and buyer demands.

Social and environmental issues are becoming more important every day to consumers in developed countries. Organic and Fair Trade products no longer belong in minor niche markets. CARIFORUM farmers should continue their efforts to become compliant with these private standards, because in the organic market there is a direct financial benefit to farmers through higher prices. Although Fair Trade does not bring direct benefits to farmers, there are community benefits, such as funding of hospitals and schools.

Recommendation #10

CARIFORUM at the regional level and countries at the national level should re-double their efforts to further penetrate markets that value organic and fair trade products, for the benefit of individual farmers and the community as a whole.

An immediate milestone is facing banana producers with regard to the UK export market. Shipments from some CARIFORUM countries to the UK have been suspended due to the presence of crown rot, a phytosanitary problem. A trial shipment was attempted in late 2015 but crown rot was detected at the destination and the shipment was rejected. The feeling among farmers and industry groups was that farmers were not ready, the trial shipment arrangements were hurried and there was fear that the phytosanitary risk had not been mitigated. In hindsight, the farmers realised that a more cautious approach should have been taken and the trial shipment should have been delayed.

This situation demonstrates the need to comply with both public and private standards, if market access is to be achieved and maintained.

Recommendation #11

Farmers and SPS authorities need to collaborate and communicate with each other to ensure that public and private requirements are satisfied prior to export.

10 COST OF COMPLIANCE

Initial Certification

Many farmers in the CARIFORUM have received government assistance to put in place on-farm GAP programmes in order to qualify for HACCP certification, as a precursor to meeting the requirements of a more specific private certification schemes down the road. This assistance has come in the form of basic infrastructure, such as simple concrete block packing and storage sheds, pesticide mixing pads and signage. In most cases, governments have also assisted with capacity building with an emphasis on documentation and record-keeping; strong components of any private certification scheme. In one case, foreign development funds have been used to install an irrigation system to the benefit of hundreds of small farmers. Unfortunately, the system was damaged by hurricanes in the past few years and has not been repaired, to the detriment of those producers.

Some farmers/processors have followed a step-wise process leading to full certification. This path involves what is sometimes referred to as 'local certification' or 'partial certification', starting out with the implementation of basic GAP, allowing participants and their workforce time to build up knowledge, experience and expertise.

This level of certification does not necessarily mean acceptance of products by buyers, nor the ability to export. The next logical step, usually after a year or two of experience and successful implementation of GAP, is to seek full certification, following the implementation of additional required safeguarding measures. The most common method of preparation for an initial certification audit would be to hire a private consultant to advise the farmer/processor on necessary improvements and the conduct of a self-assessment.

Some medium to large enterprises (mostly processors) have hired Quality Managers or HACCP officers who are responsible for their food safety programme and management of the certification, inspection, testing and audit processes. These enterprises have worked on improving their food safety systems over time, some for as long as ten years, and as a result have a difficult time estimating the exact costs of compliance with private standards. They started with HACCP training, then ISO and GAP training, leading to obtaining certification for private standards.

The last step before seeking full certification is usually a self-assessment using the buyer's checklist in order for business owners to satisfy themselves that their operation is ready; to identify any potential weaknesses that might lead to failure of the initial certification; and to have them corrected.

This usually improves the chance of succeeding at the first full certification attempt, however there are no guarantees. There are examples of failure to achieve certification on the first attempt linked to inexperience and lack of knowledge on the part of companies or their private consultants. If the first attempt is unsuccessful, additional fees are applied for subsequent certification inspections.

Evidence obtained from certification companies also indicates that producers and consultants do not always understand the requirements and clients spend large amounts of money on solutions that are much more sophisticated than required.

Certification costs for farmers can also vary widely, depending on their level of sophistication, such as prior application of food safety measures, the specific crops they produce and the amount of land under production. In some cases, in the CARIFORUM countries, the investment required for certification is paid by exporters or processors who then recoup their investment over time as a percentage of sales. In some countries, there are still farmers who expect that governments should help pay for certification. This has resulted in some 'push back' from those producers who have managed to adapt to private certification schemes on their own.

Certification to a GFSI-recognised scheme is achieved through a successful third party audit against any one of the schemes that have been recognised by the GFSI.

Following are two case studies to examine the expenses related to initial certification and annual re-certification with GLOBALG.A.P. This analysis does not include any of the major investments that are required to get a farm prepared for certification. Case Study 1 describes the costs associated with one individual farm and only two crops. Case Study 2 describes the costs associated with a cluster of seventeen farms with multiple crops.

CASE STUDY 1

Option 1 - One Individual Farm

SCOPE OF CERTIFICATION: Integrated Farm Assurance (IFA)
Option 1. Fruit and Vegetable: (Orange and Papaya). Produce Handling Included.

Produce	Acres	
Citrus	5 acres	
Papaya	5 acres	
Acres in Production	10 acres	# of Employees: 5

FEES (US$)		
GLOBALG.A.P. IFA Audit	$2,025.00	1.0 day(s) on-site / 0.5 day off-site
File Maintenance Fee	$297.00	Paid annually
Certification/Recertification Fee	$280.00	Paid annually
GLOBALG.A.P. Fee	$45.00	Paid annually
Total	$2,322.00	

Client responsible for travel expenses, billed at actual cost, which include, as applicable: travel time, airline travel, hotel, car rental, meals and auditor transportation.

CASE STUDY 2

Option 2 - Multiple farms – one certificate

SCOPE OF CERTIFICATION*: Integrated Farm Assurance (IFA) Option 2. Fruit and Vegetable (Orange, Papaya, Banana, Sugarcane, and Guava). Produce Handling Included.

Produce	Acres	
Orange	10	
Papaya	40	
Banana	30	
Sugarcane	40	
Guava	30	
Total Acres in Production	150	# of Employees: 50
FEES (US$)		
GLOBALG.A.P. IFA Audit	$4,050.00	2.0 days on-site / 1.0 day off-site
17 farms = 5 farm inspections per year (0.05 day each)		
File Maintenance Fee	$297.00	Paid annually
Certification/Recertification Fee	$280.00	Paid annually
GLOBALG.A.P. Fee	$225.00	Paid annually
Total	$8,902.00	

Client responsible for travel expenses, billed at actual cost, which include, as applicable: travel time, airline travel, hotel, car rental, meals, and auditor transportation.

These two case studies illustrate the efficiencies that can be gained by farmers operating in a formal cluster. In Case Study 1, the individual farmer would be responsible for paying US$2,322 for the initial certification and the same amount annually for re-certification audits.

In Case Study 2, it is shown that only a sample of 5 farms in a cluster (determined using a square root formula) are inspected each year, and that the cluster of 17 farmers is responsible for the total amount of US$8,902.00. Each of the 17 farmers in the cluster would share the cost of initial certification and annual re-certification, which amounts to US$523/ farmer/year.

This is a very strong argument for farmer clusters.

Maintaining Certification

In order to maintain certification, areas such as the farm, processing facility and packing house will normally be subject to annual audits by a representative of the buyer. The auditor could be a company employee or a contracted third party selected by that company, depending on the particular certification scheme in place. Owners/operators will generally conduct a self-assessment audit prior to any scheduled audits to reduce the risk of losing their certification. Audit visits are usually annual and depending on the certification scheme may be announced or unannounced on-site visits, or a combination of both.

Additional Findings

- Independent consultants are often hired to assist the farmer/processor to bring their operations into a state of readiness for the initial certification visit.
- Farmers and processing companies lack precise cost estimates for initial certification to private standards, because they had been gradually improving their food safety system over the past 10-20 years through the application of HACCP and International Standard Organization procedures.
- It is difficult to quantify costs for farmers and processors to comply with private certification schemes, if they have been partially subsidised by governments.
- Farmer estimates range anywhere from US$1,000 to US$10,000 for initial certification.
- Processor costs for initial certification range anywhere from US$250,000 to more than US$ one million.
- Ongoing costs for private certification range from US$500 to US$15,000 per farm.
- Ongoing processor costs for private certification range from US$10,000 to US$50,000.
- Other costs to processing operations involve hiring additional staff in HACCP/Quality Control positions to ensure that private certification requirements are met.

Lessons Learned

- Audit costs for both farmers and processors can be reduced, if the respective groups collaborate within their group (i.e., clusters) to schedule audits in order to share the travel and accommodation costs for auditors.
- Not all consultants are created equal. A lack of knowledge and experience can result in costly, unnecessary investments by farmers or processors.

10.1 Cost of compliance - Recommendations

As we have already seen, private certification schemes place the burden of added costs onto the farmer who rarely shares in any financial reward, other than staying in the market. Long term support from the public and private sector is required if SMEs are to survive in export markets. Buyers should be pressured, from a regional level, to take on some of these costs. American, European Union and Canadian buyers should be helping small farmers in implementing GAP, as they are benefitting directly from sales of their products.

> **Recommendation #12**
> Public-private partnerships should be sought with international buyers, local agricultural input providers and governments to support SMEs and processors to obtain and maintain certification.

Many of the recommendations in the section on '*Market Access*' have implications for reducing costs and increasing efficiencies for farmers as they move towards or continue in private certification schemes. By working in clusters, many of the farmer costs can be shared, for example, bulk purchasing of agricultural inputs, such as fertilisers and pesticides, product storage and transportation, post-harvest treatments, and the costs of scheduled audits. Clusters of farmers may also have a higher potential to negotiate better prices at the farm gate and reduce their risk of being marginalised in the food value chain.

Another successful model observed in some CARIFORUM countries is farmer association with an exporter, processor or packing house. These larger organisations have the capacity to cover the up-front costs of certification for the farmer with repayment by the farmer from sales revenue.

Recommendation #5 under the '*Market Access*' section applies here also.

Developing regional expertise will help to avoid costly and unnecessary investments in infrastructure by sharing good and cost-effective ideas. For example, a chemical storage facility need not be a sophisticated structure. A used refrigerator with a lock added may be sufficient to meet the requirements for secure storage of chemicals.

A CARIFORUM approach will help to focus donor funding. Numerous projects and donors are carried out at the regional and national levels and there does not appear to be any clear picture of their linkages.

11 POVERTY (ALLEVIATION/CREATION)

The Lomé Convention and the Cotonou Agreement were aimed at the reduction and eventual eradication of poverty and the gradual integration of ACP countries into the economy. These efforts have been partially stymied due to the loss of preferential treatment for CARIFORUM countries to the European market. This was the result of a decision of the World Trade Organization that this preferential treatment was an unfair trading practice.

This has affected the export of many agricultural and fishery products, mostly fruits and vegetables and it has hit banana exports especially hard. *"As a result, Oxfam is concerned that a squeeze on the share of the European banana market will unnecessarily condemn thousands of people to poverty and hardship."* (Godfrey 1998) This could potentially threaten the future political and economic stability of the islands.

The loss of preferential treatment clearly has nothing to do with private certification schemes. Private certification schemes may inhibit or restrict some SMEs but there are many other factors that cause difficulties to reach export markets, as depicted in Figure 2.

Poverty issues, as they relate to private certification schemes, are closely linked to market access issues. If private certification schemes cannot be complied with, the loss of market access directly affects the income of farmers. This, in turn, affects the level of production and revenue generated, the number of direct jobs created in production and those generated by sale of agricultural inputs and other goods and services. The general socio-economic health of rural and small community life is negatively impacted when exports are reduced, and the country as a whole loses the foreign exchange benefits. As stated previously, the domestic market cannot absorb local production and so many farmers are reliant on export market income for their survival.

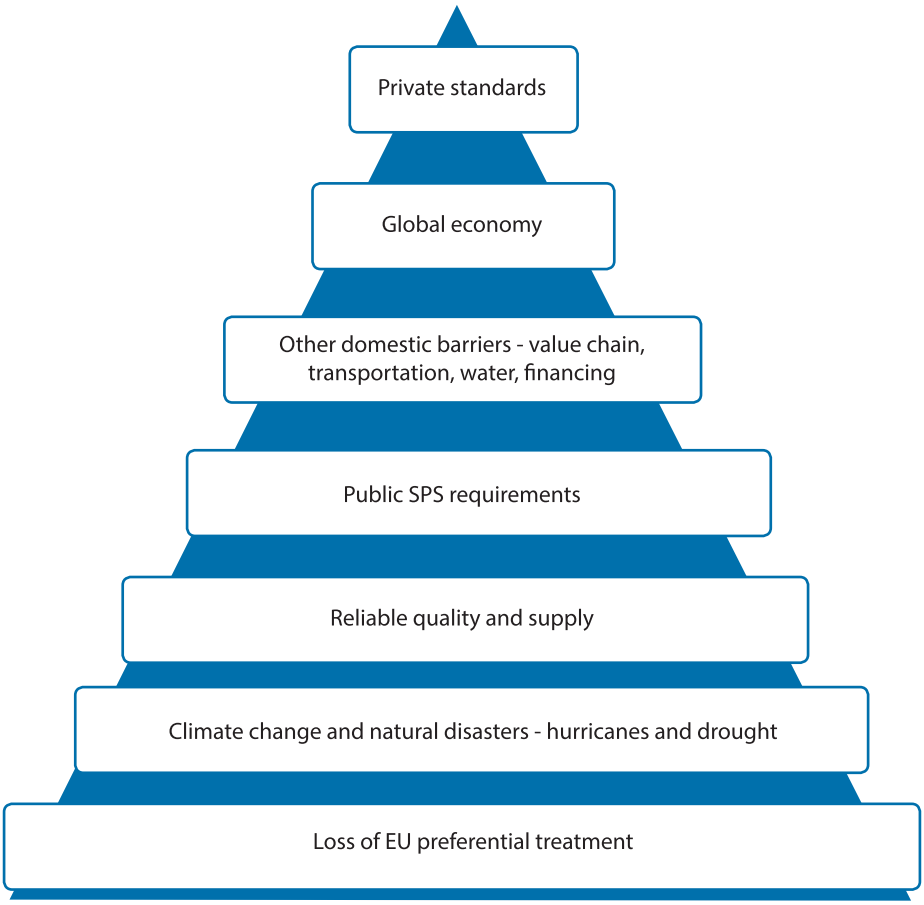

Figure 2: Barriers impeding production and export of agricultural and fishery products from CARIFORUM countries

As the title says, Figure 2 puts into context the various barriers or factors impacting the production and export of agricultural and fishery products in CARIFORUM countries. It is not meant to downplay the impact of private standards. For example, if public SPS requirements cannot be met, that is the end of the process; private standards do not even come into play.

Farmers need product to export. In 1992, there were 7,855 banana farmers in Saint Vincent and the Grenadines who produced almost EC$100 million. In 2015, there were only 441 banana farmers who produced EC$3 million. This huge decline was the result of a combination of several of the factors above, mainly the loss of EU preferential treatment, hurricanes and the Black Sigatoka disease.

A detailed economic study would be necessary to quantify the relative importance of each of the factors shown. However, the requirement for private standard certification would likely pale in comparison to the impact of these other factors. If all of the other barriers can be overcome or eliminated, then the requirement to meet private standards does become a concern for farmers.

Additional findings

- There is insignificant, if any, price premium for products that meet private certification standards, so there is no direct benefit to small or medium-size farmers to offset the additional investment required to meet private standards.
- At the small farmer level, costs for implementation and ongoing compliance with private certification standards are seen as exorbitant and so certification is beyond reach.
- Even if there is a small price premium for production where private standards are applied, the benefits do not come back to the farmer. There is little incentive therefore to incurring the additional investment to become certified.
- There is anecdotal evidence that some small farmers have lost access to export markets because of non-compliance with private certification schemes and are, in fact, worse off financially as a result.
- On large farm operations or in 'clusters' of farms and processing facilities, the reaction to private standards is very positive. Benefits include improved processes, general operational efficiencies and heightened staff awareness of the importance of food safety procedures.
- In some instances, new market opportunities have evolved due to increased product quality as a result of private certification schemes, and production has increased.
- Overall quality improvements have resulted in a reduction of product rejections at any point in the food value chain.
- Exporters, processors and packers most often assume the costs of certification of farms in their group thus reducing the impact on the individual farmer. In cases of illiterate producers, field managers have sometimes taken on responsibility for record keeping thus allowing these farmers the opportunity to produce for export and at least maintain their economic situation.
- On a macro level, continued market access for those who comply with private standards generates foreign exchange for the country, while also creating well paid local jobs.
- On a micro level, should the demand for private certification requirements continue to grow, many more small farmers will be forced to comply, or go out of business and lose their sole source of income.

Lessons Learned

- In some cases, those farmers who have accepted the need for private certification have benefitted from new and expanded markets and the opportunity to increase production and profits
- SMEs that do not currently comply with *private certification schemes* will need to adapt for exports, and possibly for domestic sales in the future. Otherwise they will lose their livelihood.
- Fair Trade benefits the community in terms of financial support for hospitals and schools but there is no direct financial benefit to SMEs.

11.1 Poverty (alleviation/creation) – Recommendations

*"Only a fraction of smallholder farmers (perhaps 10–30 percent) can be expected to succeed as entrepreneurs in competitive food chains. While small-farm disadvantages can be partly overcome through collective action, there is a minimum scale of operations, which varies by commodity, below which commercial viability is unrealistic. Many smallholder farmers in developing countries today fall below this threshold size." (*FAO 2014a*)*.

Exclusion from the export market presents financial hardship for SMEs with a multiplier effect on their community. Much has been written about the needs of SMEs and the importance they play in national economies. In addition to problems providing a reliable quality supply of product, SMEs are generally weak in the business side of their enterprise.

The Caribbean Information and Credit Rating Services Limited suggests that, *"SMEs inability to communicate business models and plans to bankers as well as the inability of commercial banks to evaluate and price credit risk are among the primary mitigating factors for poor borrowing and high riskiness."*

SMEs suffer significant financing constraints. The University of the West Indies reports that in Trinidad and Tobago, only 11% of SME start-up funding comes from the banking sector while 70% comes from personal savings.

If we compare the public/private division of funding across sectors, geographies, age and size of cluster organizations, there seem to be a 'hard rule' of 60/40, with 60% public funding (The Cluster Initiative Greenbook).

Recommendation: #13

In addition to capacity building on GAP, those SMEs with the most likelihood of success (usually operating in clusters) require training on how to prepare a business plan and operate a small business in general, in order to get loan approval for farm and production improvements.

Land rights were raised as an issue in at least one country surveyed. The lack of stability caused by concerns over land ownership has a detrimental impact on the operation of the farm and farm families. A Deloitte/ Ireland study, *The Food Value Chain: A Challenge for the Next Century* stated the following, *"Farmers will need to have proper access to credit to fund new capital investments. They will also need to be assured of property rights as an incentive to increasing productivity—and value—of the land for future sale"*.

Recommendation: #14

National governments are encouraged to resolve land rights issues for the benefit of individual farmers and rural communities.

Private certification standards are now sufficiently entrenched in the fabric of the food value chain that their removal seems highly unlikely. Despite the more stringent requirements of public standards, food borne illnesses continue to be a serious public health issue. Unexpected events can jeopardise consumer confidence to the point of threatening the financial viability of a retailer/restaurant chain.

Recommendation: #15

The CARIFORUM, its member countries and private sector players need to work collectively to make the food value chain work.

Recommendation: #16

SMEs require easier access to investment funds and market development assistance in order to penetrate and maintain markets for agricultural and fisheries products.

Recommendation: #17

Farmers need to produce a reliable and safe supply of products that meet all SPS requirements, public and private, to create a good image for marketing.

The banana industry has adapted well to Fair Trade standards, despite the external forces that have brought the industry almost to its knees in most CARIFORUM countries. Other commodity groups should look at these 'premium' type standards for their survival.

Recommendation #18

The CARIFORUM and its member countries should pursue Fair Trade and Organic certification wherever feasible, in order to develop a quality image and brand for Caribbean food products.

Using the banana production collapse over the past two decades as a recent example and sugarcane decline before that, farmers need to avoid placing all of their eggs in one basket so to speak. With climate change bringing about more severe weather events, the risks associated with the international spread of pests and diseases with more frequent travel and trade from new origins, today's farmers need to manage the risk of total crop loss. Crop diversification is one way of doing this.

Recommendation #19

The CARIFORUM and its member countries should encourage growers to diversify their production to avoid severe crop losses due to pests and diseases or catastrophic events, and/or loss of export market access.

12 CONCLUSIONS

Recalling that the objectives of the study were to determine the impact of private industry standards on CARIFORUM countries, specifically with respect to,

- Market access (international and regional);
- Cost of compliance; and
- Poverty (alleviation/creation);

and that particular emphasis was to be placed on the impact on smallholders, the following conclusions are drawn:

Market Access

- There has been little, if any, loss of market access attributed to private standards for trade of food products among CARIFORUM countries. However, some large supermarkets, international hotel chains and cruise lines are beginning to demand GAP and HACCP certification.
- Following this trend of increased buyer demand for the application of these risk management tools and consumer demands for safe food, more international companies in the food value chain with operations in the CARIFORUM may well move towards private certification schemes.
- For exports to major markets, such as the EU, the USA and Canada, private certification schemes are here to stay. Food borne illnesses receive international media attention and outbreaks which can lead to death or illness of consumers are highly publicised.
- Many SMEs in CARIFORUM countries have made the transition from traditional to modern production methods using Good Agricultural Practices. These SMEs have been able to maintain market access.
- Farmers who produce a very low volume of product may not have the interest or wherewithal to transition to GAP and private standards, will not be able to export and are therefore limited to local informal or formal markets.
- While private standards may negatively impact on SMEs, it is difficult to attribute a major impact on exports solely due to the entry on the scene of private certification schemes.
- Many farmers and processors are transitioning to private certification standards, but not without the financial assistance and technical guidance from government, usually supported by international donors such as the EU.
- The loss of EU preferential treatment, climate change, hurricanes and drought, sanitary and phytosanitary requirements, transportation, water shortages, financing issues and the global economy are some of the major factors affecting agriculture and fisheries exports in general.

Cost of compliance

- SMEs cannot transition from traditional to modern farming methods without assistance. Governments need to create an environment that facilitates this transition. Financing, education, market identification, crop diversification, infrastructure and a coordinated food value chain are some of the major items that need to be addressed for farmers to move towards private certification.
- Public-private partnerships should be sought with multinational companies in the food value chain.

Poverty

- When loss of export markets results in surpluses of agricultural or fishery products on the domestic market, some products may be difficult to sell, leading to a loss of income. This results in detrimental effects not only on the SME standard of living, but also on the communities in which they live.
- Reduced spending power of SMEs means less money injected into the local economy and less demand for other goods and services within and outside the agriculture and fisheries sector.
- For SMEs that mange to adjust to the requirements of private standards, their poverty level will essentially remain the same. There are negligible financial benefits from meeting private standards, other than the continuing possibility to sell on the export market. There are few price premiums for meeting private standards and, if they do exist, they rarely make it back to the SME.
- The vast majority of certified farmers and processors interviewed across the CARIFORUM region indicated that they were much better off as a result of certification by a private scheme.

General: Private Certification Standards are here to stay. CARIFORUM countries need to work together to develop measures that will allow SMEs to adapt.

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APPENDICES

Appendix 1 Questionnaire/Interview Guide

A STUDY ON THE IMPACT OF PRIVATE STANDARDS ON CARIFORUM COUNTRIES

The objective of the study is to identify the challenges and opportunities impacting the ability of farmers, fisherfolk, processors, exporters and others involved in the food value chain in CARIFORUM countries, to comply with private standards. Recommendations will be made to address these requirements and increase the ability to gain market access for your products.

Most survey participants will be aware of the sanitary and phytosanitary requirements that are contained in international trade agreements and conventions. These are considered to be public standards and are usually complemented by national legislation to ensure food safety and animal health and prevent the international spread of plant pests.

Private standards, the focus of this study, do not have legislative enforcement. They came onto the international trading scene early in the 2000s as a result of consumer pressures for food safety, sustainable agriculture and fisheries, worker's health and rights, and environmental protection amongst others.

Currently there are many different private standards (such as GLOBALG.A.P., Fair Trade, BRC among many others)—sometimes described as voluntary standards—that use certification programmes for agriculture, aquaculture and fishery products. Although voluntary in theory, in practice, market access may be restricted or denied if producers, processors, storage facilities and transporters do not participate in a certification programme approved by the client (e.g., importer, wholesaler, retailer).

Your participation in this survey will provide essential information to evaluate the impact of these private standards in your sector and in your country and to formulate recommendations on how CARIFORUM countries can improve their market access.

Please be assured that your responses will remain confidential and will not be publicly identified with your name or company name, nor attributed to you, in any reports.

Please complete the attached questionnaire and feel free to add any additional comments that you feel will help to assess the specific situation in your country.

QUESTIONNAIRE

Name of respondent:
Company:
Position in company:
Address:
Email:
Telephone:

I The people and their products

1. Role in the food supply chain e.g., producer, processor, broker/middle man, exporter, other?
2. How many employees do you have?
3. Full time employees
4. Seasonal and part-time
5. Do you supply the local market, the export market – or both?
6. If you DO export:
   Which products Volumes Markets
7. If you DO NOT currently export:
   Have you tried? Will you in future?
8. If you tried to export in the past what problems did you face?
9. If you are thinking about exporting in the future what do you see as the main:
   Challenges? Opportunities?
10. Over the past 10-20 years: have customers/markets changed? (Local, regional and international)
    Customers Markets
11. What has caused these changes? Please note whether changes due to different public (government) or, private (commercial) requirements.

II Government versus non-government requirements

1. What food safety requirements do you currently have to comply with? (Identify those for local, national or export markets)
   Public Private
2. Are you aware of requirements of private certification programmes such as GLOBALG.A.P. (Good Agricultural Practices), Primus, Fair Trade, etc.?
3. How did you find out about private standards and certification programmes?
4. Are you certified under one of these private certification programmes?
5. If not, have any of your clients/buyers requested that you be certified?
6. Did you try to become certified?
   If yes, what measures were taken?
   If not, why not?
7. Has this impacted on your potential sales?
8. If you wanted to be certified to a private standard, what kind of assistance would you need in order to:
   Prepare for Maintain

III The Costs

1. If you have chosen not to participate in a private certification programme, what has been the impact on your business?
2. If you do participate in a private cert. programme:
   - 2.1 Have you incurred additional costs that are a direct result of seeking certification?
   - 2.2 (Question eliminated)
   - 2.3 What is the approximate cost to you for:
     Initial certification Ongoing certification
   - 2.4 Who monitors compliance with these requirements? (for government; and for private standards)
   - 2.5 Eliminated –see 2.3

IV The Benefits

1. Does private certification increase the sales potential of your product? (Please explain why/why not)
2. Do you receive a better price for your product because you are in a private certification programme?
3. If you receive a better price, does it offset your additional costs?
4. Is your business better off - or worse off - because of your participation in private certification programme?
5. If you are not benefiting directly, who do you think benefits from private certification programmes?
6. Do you see any other benefits to your business, or society in general related to private certification programmes?

V General Comments

Do you have any other observations/comments on the use of private certification programmes in your country or other CARIFORUM countries?

Appendix 2: Survey Analysis

As reported in Section 3 *Methodology*, interviews were conducted in Belize, the Dominican Republic, Jamaica, Saint Lucia and Saint Vincent and the Grenadines over a four-week period in December of 2015 and January of 2016.

The interview process was complemented by written questionnaires (see Appendix 1) sent to all CARIFORUM countries by IICA. The IICA Country Representatives assisted with the organisation of the interviews and managed the process of distributing and collecting completed questionnaires within their country.

No. of Survey Responses (includes interviews and questionnaires)

Country	Government	Processors	Associations	Farmers/Exporters
Antigua and Barbuda	0	3	0	0
The Bahamas	0	0	0	0
Barbados	0	0	0	0
Belize	5	3	0	4
Dominica	0	0	0	0
Dominican Republic	17	2	4	13
Grenada	1	1	2	0
Guyana	0	0	0	0
Haiti	0	0	0	0
Jamaica	12	2	3	5
St. Lucia	0	0	4	12
St. Kitts and Nevis	0	0	0	0
St. Vincent and the Grenadines	11	0	5	13
Suriname	0	0	0	0
Trinidad and Tobago	0	2	0	1
Total	**46**	**13**	**18**	**48**

1. As can be seen from the table on survey responses, only one half of the CARIFORUM countries actively participated in the study.
2. The visits and interviews were selected to provide representation of different size economies, and agriculture and fisheries commodities.
3. Commodity groups represented include fresh and processed fruits and vegetables, fresh and frozen fish and seafood, poultry, beef and dairy.

Appendix 3: Organisations Consulted

JAMAICA (December 2015)

- Bureau of Standards Jamaica
- Plant Quarantine Unit, Ministry of Agriculture and Fisheries
- Foreign Trade Unit, Ministry of Foreign Affairs and Foreign Trade
- Jamaica National Agency for Accreditation
- Jamaica Exporters Association
- Rural Agricultural Development Authority (RADA)
- Grace Food Processors
- Technological Solutions Limited
- Jamaica Broilers Group
- Jamaica Agro-Processors Association
- Salada Foods
- Rainforest Seafoods
- Tropical Foods Distributors
- Valley Fruit Company

DOMINICAN REPUBLIC (December 2015)

- Junta Agroempresarial Dominicana (JAD)
- Asociación Dominicana de Exportadores de Vegetales Orientales (ADEXVO)
- Dirección Nacional de Vegetales Orientales, Frutas Frescas y Productos Afinespara la Exportación (DINVOFEX)
- Oficina de Tratados Comerciales Agricolas
- Patronatos Nacional de Ganaderos
- Departamento de Inocuidad Agroalimentaria del Ministerio de Agricultura
- Industria Cárnica Nacional (INCARNA)
- Comité Nacional para la Aplicación de Medidas Sanitarias y Fitosanitarias (CNMSF)

BELIZE (January 2016)

- Belize Agricultural Health Authority
- Directorate for Foreign Trade
- Caribbean Regional Fisheries Mechanism
- Citrus Producers of Belize Ltd
- Belize Aquaculture Limited
- Hot Mama's
- Marie Sharp's Fine Foods Limited
- Hot Pepper Farmer, Santa Marta

SAINT LUCIA (January 2016)

- Ministry of Agriculture, Food Production, Fisheries and Rural Development
- St Lucia Floral Cooperative Society Limited

- Orising Brothers Honey Producers
- Belles Ruches Apiary
- Farmers with Disabilities Beekeeping Association
- St Lucia Association of Beekeepers
- Mille Fleur Honey Producers Cooperative
- St Lucia Poultry Cooperative
- Fond Assau Agro Processing
- Exporter (from Canelles)
- Farmers (tree crop, root crops and vegetable, egg producer, small ruminant)

SAINT VINCENT AND THE GRENADINES (January 2016)

- Ministry of Agriculture, Forestry, Fisheries and Rural Transformation
- Department of Trade, Ministry of Foreign Affairs, Trade and Commerce
- SVG Bureau of Standards
- Caribbean Farmer's Network (CaFAN)
- National Fairtrade Organization
- Vincy Klus Inc.
- Pringa's Natural Flavour
- Calliaqua Fisherfolk Cooperative
- Vincy Fresh Limited
- Aurora's
- Good Will Fishermen Cooperative
- National Fisheries Marketing Limited
- Farmers from LaCroix, Diamond, South Rivers and Colonaire

The following countries/persons were not visited by the author. Responses were obtained from electronic questionnaires.

ANTIGUA AND BARBUDA

- Susie's Hot Sauce
- Antigua Dairy Limited
- Anonymous (producer, processor, middle man and/or exporter)

GRENADA

- Grenada Cocoa Association
- Grenada Co-operative Nutmeg Association (GCNA)
- Marketing and National Importing Board

TRINIDAD AND TOBAGO

- Nestlé Trinidad and Tobago Limited
- Caribbean Treats (2010) Limited
- Vemco Limited

Other organisations consulted via Skype, e-mail exchange or telephone:

- CARICOM Regional Organization for Standards and Quality (CROSQ)
- Caribbean Agricultural Health and Food Safety Agency
- CanadaGAP
- GLOBALG.A.P. North America Inc.
- Perry Johnson Registrars Food Safety Registrars Inc.
- PrimusLabs

Appendix 4: Generic Checklist of Control Points in Private Standards

The bodies that establish private standards usually make a disclaimer that their standards do not replace legislated requirements.

This appendix is an illustrative but not exhaustive list of some of the control points that are evaluated under private standards. It is intended to give the reader a sense of the scope of requirements that need to be met in order to qualify under any particular private standard. Each standard has its own distinct way of documenting their requirements. The following list simply provides general categories of concern and the type of details that need to be checked.

Some private standards disqualify a farm if one or more of their specified critical control points is contravened, for instance, untreated animal manures are being used where the country regulations/guidelines ban the use such materials. Other systems use major and minor infractions and recommendations where results are calculated using a mathematical formula to determine certification success or failure.

A sampling of these requirements follows:

Employee hygiene

- Written risk assessment for hygiene
- Visible hygiene procedures for workers and visitors
- Written procedures to address risks including emergency procedures
- Employee activities—eating or drinking or using tobacco products in harvest/packing/storage areas
- Documented employee competence for handling hazardous materials
- Clothing, and jewellery no risk to contaminate product
- Latex free gloves are in good condition and used where appropriate
- Toilets and hand washing facilities sufficient in number and appropriate locations (less than 5 minute walk)
- Separate facilities for men and women
- Minimum one toilet for 20 employees
- Toilets clean, paper available, stored properly and disposal bin present
- Documented waste disposal method
- Cleaning and servicing records available and up to date
- First aid kits available at all sites
- Staff trained in first aid always available
- Management member identified as responsible for worker safety
- Non-perfumed soap available
- Hand washing prior to entering site to begin work and after breaks
- Fresh potable water available to employees
- Etc.

Equipment Hygiene

- Sanitizing procedures documented and followed
- Harvest tools easy to clean and maintain
- Re-usable containers maintained free of contamination
- Harvest tool dip solutions tested
- Food grade lubricants used on equipment
- Calibrated annually

Farm/ranch management

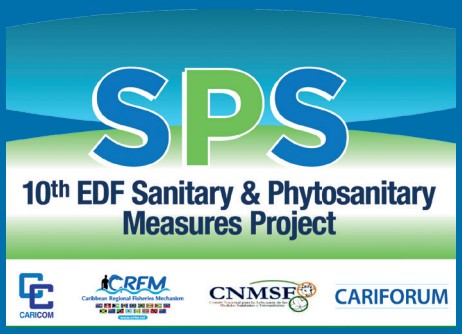
- GAP manuals developed and available
- Reference system for all fields, greenhouses, plots, pens in production
- Recording system for all activities in these locations
- Risk assessment available showing suitability of each production unit
- Microbial tests on water
- Management plan documented to manage risks
- Records kept and available for required time period
- Records of equipment and personnel hygiene kept
- Staff food safety training events held and recorded
- Record of minimum annual self-assessment
- Corrective actions taken on non-conformance
- Pollution management procedures documented and followed
- Environmentally safe holding areas for fuel
- Safe water disposal
- Wildlife management plan
- Ecological areas for natural flora and fauna
- Was land previously used for animal husbandry

Product/crop

- Traceable to lot/field/site/greenhouse
- Segregation from non-certified products
- Records of purchases kept
- Integrated Pest Management
- Pest control programme to prevent contamination in storage/transportation
- Post-harvest treatments
- Production records kept
- Food fraud and food security policies in place
- Withdrawal periods following pesticide use documented and followed

Other

- Records of pesticide and fertiliser application, handling, storage and disposal
- Soil management, fumigation
- Harvest and post-harvest handling procedures
- Packing and storage areas



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