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Non-tariff Barriers to Trade: What Does the Experience of Guyanese Exporters of Food and Agriculture Products Reveal?

Dianna DaSilva Glasgow
PhD student, Sir Arthur Lewis Institute for Social and Economic Studies
University of the West Indies, St. Augustine Campus, Trinidad and Tobago
Roger Hosein
Senior Lecturer, Department of Economics, Faculty of Social Sciences
University of the West Indies, St. Augustine Campus, Trinidad and Tobago

This article reports on the results of a survey conducted among exporters of food and agriculture products from Guyana to determine what regulations exporters consider burdensome to comply with when exporting. Using simple and stratified sampling techniques, we surveyed 74 exporters, covering micro/small, medium and large firms in ten food and agriculture subsectors. The results suggest that exports are hindered not so much by the technical requirements of export markets, but rather by the institutional inefficiencies that prevail in local agencies that play a role in the export process, particularly as it relates to obtaining certification and undergoing inspection.

Keywords: burdensome, exports, food and agriculture, Guyana

Introduction

Several empirical studies have concluded that non-tariff regulations such as technical measures may hinder trade (Crivelli and Groschl, 2012; Disdier,

Fontagne and Mimouni, 2008; Chen, Yang and Findlay, 2008; Yunus, 2009), particularly for agricultural products (Crivelli and Groschl, 2012). Such measures hinder trade because of the significance of the compliance costs they impose, which are onerous for small exporters from developing countries, who are already beset by capacity constraints (Fontagne et al., 2015; Okello and Swinton, 2007).

However, other authors (World Bank, 2005; Grübler, Ghodsi and Stehrer, 2016; Beghin, 2013; Otsuki, Wilson and Sewadeh, 2001; Xiong and Beghin, 2013) provide a contrary argument, arguing instead that regulations can catalyze trade. This of course requires proactivity and prudent planning (Ma and Lu, 2011; Hobbs, 2010). As Grübler, Ghodsi and Stehrer (2016, 2) posit, "Non-tariff measures need not be non-tariff barriers."

The conclusions of these authors reflect the standards-as-barriers versus standards-as-catalyst argument in reference to technical measures – Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) regulations. However, Aitici (2013) concludes that there are actually three effects associated with regulations: trade-reducing, trade-enhancing and trade-neutral effects. This complication reinforces the importance of single-country analyses, as not every country will be affected in the same manner.

It is within this context that this article examines how Guyanese exporters are affected by non-tariff regulations. The article aims to evaluate exactly their opinions on whether non-tariff regulations are burdensome to exports in the key markets they export to, in order to be able to contribute to the debate regarding the impact of such measures on trade. To this end, a survey was conducted among exporters of food and agriculture products across five administrative regions of Guyana.

Methodology and Data

This study follows largely a quantitative design, with primary data obtained through a survey among exporters of food and agriculture products from Guyana. The survey-based approach is particularly important since it allows for understanding the issues from a micro perspective as opposed to the more common approach of using secondary data to examine anomalies in trade flows.

The survey follows authors such as Sandrey et al. (2008), World Bank (2005) and ITC (2013) in focusing on exports from a single country but on multiple non-tariff measures. This is done to gauge firms' experience with all categories of non-tariff measures in order to be able to determine exactly which categories of measures can be seen as posing hurdles to trade. Measures are specified following the UNCTAD Multi-Agency Support Team (MAST) Framework, which identifies 16 categories of measures broadly categorized as import and export technical and non-technical measures (UNCTAD, 2012).

Data and Data Source

The survey was conducted among exporters of food and agricultural products from across five administrative regions1 of Guyana. Food and agriculture is defined to cover any economic activity that falls under chapters 01 to 24 of the Standard Industrial Trade Classification system (SITC) nomenclature.

Data on exporters were obtained from several government agencies, including the New Guyana Marketing Corporation (GMC); Guyana Manufacturing and Services Association; Guyana Rice Development Board (GRDB); and The Seafood Processors and Trawlers Association. Given that each agency has a different sector focus, it was necessary to consult with all of them to produce a list of exporters that was comprehensive of the entire food and agriculture sector.

The sample of exporters was selected using simple random and stratified sampling techniques. Stratification was done by size, which was determined based on the number of employees, where a micro/small firm has 0-19 employees, a medium firm 19-99 employees and a large firm 100 or more employees (Ramalho, Meza and Saliola, 2014).

With a confidence interval of 95 percent and a confidence level of 5 percent, a total sample of 74 exporters was yielded (see table 1).

Table 1 Sample Size and Interviews Completed by Strata

Strata	Population size	Sample size	% representation of total sampling frame
Micro/Small	53	43	58
Medium	20	16	22
Large	18	15	20
Total	**91**	**74**	**100**

Source: Authors

While the sample consisted of individual firms, the unit of analysis was the main export commodity to CARICOM and non-CARICOM markets, respectively. This facilitated comparative analysis as well as provided the capacity for an increased number of observations. Related to the latter, the total number of observations upon completion of data collection was 113 units.

The survey solicited firms' views on all government and private regulations they are required to comply with when exporting. Exporters were first of all asked to identify all regulations they have to comply with when exporting, both those of the importing country and those of the home country, and to rate them using a four-point likert scale ranging from 1, "not burdensome" to 4, "very burdensome". This was followed by two

questions asking reasons why a measure is or is not considered burdensome. This was done using a five-point likert scale ranging from 1, "strongly disagree" to 5, "strongly agree".

To ensure the questions were effectively structured and could be easily understood by respondents, the questionnaire was pre-tested and reviewed by three experts[2] in the field of trade policy.

Data Collection Process

The data collection process lasted for approximately five months, from January 18, 2017 to May 28, 2017. The overall response rate was 81 percent.

Data were collected via both telephone (54 percent) and face to face modes (46 percent). The former was used to circumvent the cost of travel to out-of-town regions and was a more convenient option for some respondents, whereas the latter was used to ensure a higher response rate.

For each firm it was necessary to select a respondent with the knowledge to provide the information needed. This resulted in interviews being done with mainly top managers/owners and export officers, to a limited extent.

Prior to the actual conduct of interviews, respondents were asked to read a letter of introduction providing information on the focus of the study and addressing issues of confidentiality etc. Interviews had an approximate duration of 30 minutes.

Data Analysis

Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS) database. To ensure that no data entry errors were made, some questionnaires were randomly extracted and checked. Checks were also made using descriptive statistics.

Findings

Sample Demographics and Respondent Profile

More than 80 percent of the respondents who participated in the survey hold key decision-making positions in their firms, mostly as senior managers or owners. However, there is a clear dominance of males as managers: 73 percent of respondents were males compared to 27 percent females (see table 2). Ironically, however, most firms are female-dominated. For the firms surveyed, about 60 percent of them had more than 50 percent females in their workforce.

Table 2 Respondent Profile

Gender		
	Frequency	**Percent**
Male	54	72.97
Female	20	27.03
Total	74	100.00
Designation		
	Frequency	**Percent**
Owner/Manager	51	68.92
Other manager	6	8.11
Marketing manager	7	9.46
Export officer	8	10.81
Administrative officer	2	2.70
Total	74	100.00

Source: Authors

Some 70 percent of the surveyed firms were found to be located in region 4, Demerara–Mahaica, whereas 11 percent of firms were located in either region 2 or 3, 6 percent in region 5 and 1 percent in region 6. These regions all lie along the narrow coastal belt which extends from Venezuela in the west to Suriname in the east. Even though this belt accounts for only 7.5 percent of Guyana's 219,000 sq km of land, it houses more than 90 percent of the population (Daniel, 1981). Region 4 in particular is the most populous region in Guyana and houses the capital city, Georgetown, which is the site of the main business district in Guyana due to more developed infrastructure and better access to support services such as shipping facilities etc. In fact, the coastal plain houses all but one of the country's major urban centres. Therefore, the regions along this belt are the socio-economic hubs of the country. Further, due to the soil composition, the coastal belt is endowed with fertile agricultural lands and is a major area for the production of agricultural crops (see figure 1). In particular, key crops such as rice, sugar and cash crops are grown there. Therefore, these are the economic sectors that were found to be dominant in the survey. Seventeen of the 42 micro and small firms export fruits and edible nuts (08) alone, while most of the large firms are involved in rice (05) or fish (03) exportation.

The small size of the exporting firms may be linked to the fact that many of them are not involved in actual production but simply procure from farmers for the purpose of exporting. Medium firms are also involved mainly in rice (10) and seafood (03) exportation (see table 3).

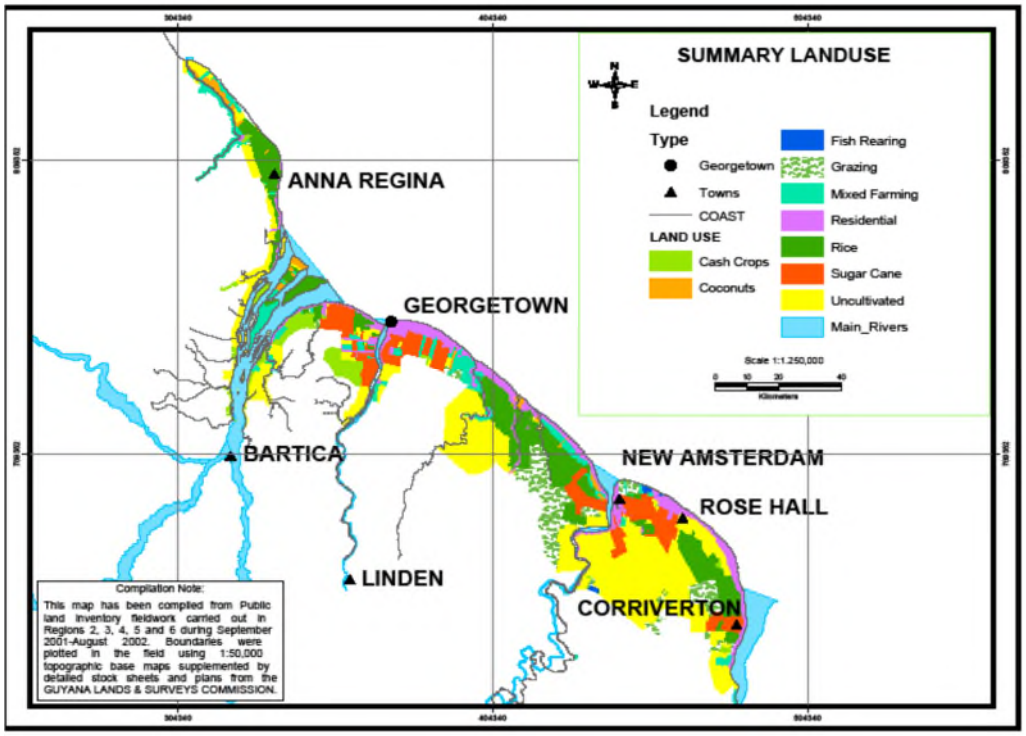

Figure 1 Map showing land use patterns on the coastal zone.
Source: GLSC (2008)

Table 3 Sectors of Activity Covered (HS classification)

	Company Size			Total
(HS classification)	**Micro/small**	**Medium**	**Large**	
01 – Live animals	1	0	0	1
03 – Fish and crustaceans…	9	5	4	18
04 – Dairy produce…	0	0	1	1
07 – Vegetables and certain roots and tubers…	5	0	1	6
08 – Fruit and nuts…	17	1	0	18
10 – Cereals	3	8	5	16
17 – Sugars and sugar confectionery	0	0	1	1
19 – Preparations of cereals…	0	1	1	2
21 – Miscellaneous edible preparations	5	1	0	6
22 – Beverages, spirits and vinegar	2	1	2	5
Total	42	17	15	74

Source: Authors

The survey took a comparative approach, obtaining data on the leading CARICOM and non-CARICOM markets for each exporter, where applicable. Sixty-two percent of surveyed firms were exporting to non-CARICOM markets, mainly the United States and Canada, whereas 38 percent were exporting within CARICOM, mainly to Trinidad and Tobago and Jamaica.

Of the 25 firms exporting within CARICOM that provided information on the year they started exporting, 80 percent of firms only started exporting from the year 2000, indicating that the CARICOM market is a fairly new market that has only recently been explored by firms (see table 4).

Table 4 Market Group by Export Year

	Market group		Total
	CARICOM	Non-CARICOM	
before 1960s	2	0	2
1970s	0	1	1
1980s	1	5	6
1990s	2	11	13
2000	11	18	29
2010+	9	10	19
Total	**25**	**45**	**70**

Source: Authors

Firms were asked to indicate whether they follow an internationally recognized quality certification or quality management system. Only 13 firms responded affirmatively. Of these 13, 46 percent were HACCP (hazard analysis critical control points) certified; another 46 percent had ISO and 8 percent (1 firm) had other forms of international certification, including U.S. Department of Commerce (USDC), British Retail Consortium (BRC) and National Sanitation Foundation (NSF) certifications. This firm reported dealing with very large buyers in the United States that are involved in further retailing and therefore request these additional forms of certification.

Those being HACCP certified were found mainly in the fish industry. HACCP certification is mandatory to export to the EU and U.S. markets but is not compulsory for export within CARICOM. Therefore, the firms having these certification systems are exporting mainly to the U.S., EU and Canadian markets.

The finances required for achieving certification are tremendous: one firm reported spending over US$8 million to obtain international certification. Therefore, only the

very large firms have international certification, as they are able to meet the financial requirements to achieve same.

Firms' General Views on How Burdensome Are Regulations

Government regulations

The government regulations identified by exporters fall under Sanitary and Phytosanitary Measures (SPSMs), Technical Regulations, Non-technical Measures and Export Measures, with most of the regulations falling under SPSMs, since mainly primary bulk products are exported from Guyana (see table 5). Generally, exporters do not view the regulations themselves as being burdensome. Of the exporters surveyed, 70 percent believe that regulations are not burdensome, while the other 30 percent view regulations as being either slightly burdensome, burdensome or very burdensome.

Table 5 Views Regarding Government Regulations

	Not burdensome	Slightly burdensome	Burdensome	Very burdensome	Total
SPSMS					
Prohibitions or restriction of products or substances for SPS reasons	0	0	0	0	0
Tolerance limits for residues and restricted use of substances	1	0	0	0	1
Labelling, marking and packaging requirements	26			5	31
Hygienic requirements	15	1	2	0	18
Treatment for elimination of plant and animal pests and disease-causing organisms	31	3	3	1	38
Other requirements on production or post-production processes	0	0	0	0	0
Regulation of foods or feed derived from, or produced using, genetically modified organisms	0	0	0	0	0
Conformity assessment related to SPS	46	8	3	1	58
SPS measures n.e.s.	2	0	0	0	2

	121 (82%)	**12 (8%)**	**8 (5%)**	**7 (5%)**	**148**
Technical regulations					
Prohibitions or restrictions on products or substances	1	1	0	0	2
Tolerance limits for residues and restricted use of substances	3	0	1	0	4
Labelling, marking and packaging requirements	24	3	2	1	30
Production or post-production requirements	0	0	0	0	0
Regulation on genetically modified organisms (GMOs) (for reasons other than food safety) and other foreign species	0	0	0	0	0
Product identity requirement	4	0	0	0	4
Product quality or performance requirement	4	2	0	0	6
Conformity assessment related to TBT	10	1	2	3	16
TBT measures n.e.s.	0	0	0	0	0
	46 (74.2%)	**7 (11.3%)**	**5 (8.1%)**	**4 (6.5%)**	**62**
Non-technical measures					
Pre-shipment inspection and other formalities	45	8	20	11	84
Price control measures	0	0	0	0	0
Licences, quotas, prohibitions and other quantity control measures	15	0	1	9	25
Charges, taxes and other para-tariff measures	0	0	0	2	2
Finance measures	0	0	0	0	0
Anti-competitive measures	0	0	0	0	0
Trade-related investment measures	0	0	0	0	0
Distribution restrictions	0	0	0	0	0
Restriction on post-sales services	0	0	0	0	0

Subsidies	0	0	0	0	0
Government procurement restrictions	1	0	0	0	1
Intellectual property	0	0	0	0	0
Rules of origin	31	5	1	2	39
	92 (61%)	**13 (9%)**	**22 (15%)**	**24 (16%)**	**151**
Export measures					
State trading administration	3	0	2	0	5
Export price control measures	0	0	0	0	0
Measures on re-export	0	0	0	0	0
Export taxes and charges	1	0	2	0	3
Export technical measures	27	6	4	2	39
Export subsidies	0	0	0	0	0
Export measures n.e.s.	29	5	12	8	54
Export-licence, -quota, -prohibition and other quantitative	28	7	1		36
	88 (64%)	**18 (13%)**	**21 (15%)**	**10 (7%)**	**137**
Grand total	**347**	**50**	**56**	**45**	**498**
% of total	**69.68**	**10.04**	**11.24**	**9.04**	**100**

Source: Authors

Conformity assessment related to SPS is viewed as the most burdensome SPS regulation. Twenty-one percent of the respondents identifying this regulation identified it as being either slightly burdensome, burdensome or very burdensome. It includes obtaining quality, weight analysis, health and phytosanitary (plant health) certificates, where necessary; producing a HACCP or quality control plan; registering with the Food and Drug Authority of the United States prior to exporting; and demonstrating compliance with traceability requirements through mock recalls, unique abbreviations for vessels in the case of fish exports, etc.

Certificates are obtained through key support agencies. For instance, the National Agricultural and Research Extension Institute (NAREI) provides health certificates for fruits and vegetables indicating that products are free from pests and diseases.

Other burdensome regulations are labelling, marking and packaging requirements, hygienic requirements, and treatment for elimination of plant and animal pests and disease-causing organisms. Of the respondents identifying labelling, marking and packaging requirements, 16 percent indicate that requirements are very burdensome. Concerns with labelling centre on the fact that differences exist across markets, buyers may require labels carrying their name and using a particular material that cannot be sourced locally.

With regard to technical regulations, measures identified as being burdensome include prohibitions or restrictions on products or substances such as additives; tolerance limits for residues and restricted use of substances; labelling, marking and packaging requirements; product quality or performance requirements; and conformity assessment related to TBT. Among these, conformity assessment related to TBT was identified as being the most burdensome category of regulation; 19 percent of the 16 respondents identifying this regulation noted that it was very burdensome.

With regard to non-technical measures, burdensome regulations include pre-shipment inspection and other formalities; licences, quotas, prohibitions and other quantity control measures; charges, taxes and other para-tariff measures; government procurement restrictions; and rules of origin such as obtaining the CARICOM certificate of origin for exports within CARICOM. Pre-shipment inspection and other formalities is the most burdensome non-technical requirement, with 46 percent (39) of respondents indicating that it is either slightly burdensome, burdensome or very burdensome. Pre-shipment inspection generally relates to inspection conducted by support agencies to ensure that the product complies with basic health requirements. For rice, inspection is done by the Guyana Revenue Development Board (GRDB); for fruits and vegetables, inspection is done by NAREI; and for seafood, inspection is done by the Fisheries Department; the Veterinary public Health Unit inspects all meat processors.

General inspections for narcotics are done by the Guyana Revenue Authority (GRA), Customs Anti-Narcotics Unit (CANU) and the Drug Enforcement Authority (DEA) for all products exported out of Guyana. The inspections are done simultaneously by all of the agencies. However, exporters expressed concerns regarding the timeliness, the fact that several agencies are required to be there, and the careless manner in which perishable and fragile products are handled during these inspections.

With regard to export measures, the burdensome regulations are state trading administration; export taxes and charges; export technical measures; export measures n.e.s.; and export-licence, quota, prohibition and other quantitative restrictions. The

most burdensome regulation is export measures n.e.s. Among the 54 respondents who identified this regulation, 46 percent (25) noted that it is burdensome.

State trading administration is relevant to the rice industry, as only the GRDB is authorized to export rice. Therefore, all rice exporters must submit contracts that must be vetted by this body.

Export measures n.e.s. covers requirements such as customs procedures and documents, city council cold storage fees, commercial invoices, shipping bills and the preparation of CARICOM invoices.

Generally, the most burdensome regulations are non-technical measures and export measures. Overall, 16 percent of respondents identified non-technical measures as being very burdensome and 15 percent as being burdensome. With regard to export measures, 7 percent of respondents identified measures falling under this category as being very burdensome and 15 percent as being burdensome. In each case, the specific regulation of concern is inspection by certifying agencies.

Private requirements

Firms were asked whether importers impose additional requirements other than what is mandatory at the government level. Sixty-one percent of respondents (69) responded affirmatively while 39 percent of respondents indicated that no additional requirements are imposed.

The additional requirements identified by exporters relate to size, quality, labelling and packaging (see table 6). Sixteen percent of respondents identified size and packaging as being the main additional requirement imposed by buyers. For instance, for fruits and vegetables, importers may require products of a particular size. In the fisheries sector, buyers may demand fish cut to a particular size. Related to packaging, exporters have indicated that some buyers require particular materials, bags of a particular size or products packed a certain way in containers. In addition, 15 percent of respondents indicated that buyers put pressure on them where quality standards are concerned, while 8 percent of respondents indicated that importers impose additional requirements where labelling is concerned, such as including the importer's brand on the label.

Among the additional requirements imposed by buyers, 33 percent of exporters indicated that size was the most difficult requirement. A further 33 percent of respondents indicated that none of the additional requirements are difficult, as they consider the requirements as being a normal part of the business process, while 24 percent considered quality to be the most difficult requirement (see table 7).

Table 6 Additional Requirements of Importers

	Frequency	Percent
Size	18	16
Quality	17	15
Labelling	9	8
Packaging	18	16
Other	7	6
Total	**69**	**100**
Note: not applicable to 44 respondents		

Source: Authors

However, exporters also considered labelling requirements to be burdensome; 33 percent (3 of 9) of the respondents identified labelling as an additional requirement of importers. In addition, 43 percent (3 of 7) identified other regulations. For instance, the largest exporter of fish out of Guyana deals with very large buyers in the United States who require additional forms of certification. The exporter is required to produce a sustainability certificate (marine stewardship council), which they consider burdensome to obtain and maintain. Other requirements include additional requirements for fumigation of rice and for fish exporters, producing a HACCP plan.

Table 7 Most Difficult Private Requirement

	Frequency	Percent
Size	7	33
Quality	5	24
Other	2	10
Nothing	7	33
Total	**21**	**100**
Note: not applicable to 92 respondents		

Source: Authors

Reasons for Burdensome Regulations

Government Regulations

Respondents who indicated that government regulations are burdensome were asked to provide reasons for their opinions. At the top of the list was lengthy processing times (39 percent), particularly at customs (see table 8). This is followed by 'other' factors (37 percent), with concerns mainly centred on the inspection process at the customs authority, including the availability of customs officers; the burdensome nature of

inspection when the scanner is not working due to the time it takes for manual inspections to be done; absence of cold storage for fish; a tedious airport inspection process; increased cost of inspection; damage to products from inspection; and discrimination and inflexibility of staff. One exporter indicated that the process for document submission is laborious, as it must be done physically. Another exporter identified poor record keeping by farmers/companies that products are sourced from, which is an important component of traceability under the United States Food Safety Modernization Act (USFSMA). Another respondent cited limited worker understanding of what is required.

The 'other' factors category is followed by administrative procedures to demonstrate compliance (17 percent) and the high cost of compliance (15 percent).

Table 8 Reasons Government Measures Are Considered Burdensome

	Yes		No		Total	
	Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**
Measures are too strict	5	7	67	93	72	100
Lack of laboratory and other relevant facilities locally	5	7	67	93	72	100
Administrative procedures to demonstrate compliance	12	17	60	83	72	100
Lack of transparency	0	0	72	100	72	100
Poor access to or high cost of information	1	1	71	99	72	100
High cost of compliance	11	15	61	85	72	100
Insufficient access to scientific/technical expertise	0	0	72	100	72	100
Inadequate financial resources	0	0	72	100	72	100
Limitations in own country's administrative arrangements for SPS requirements	0	0	71	100	71	100
Lengthy processing time	28	39	43	61	71	100
Other (specify)	26	37	45	63	71	100

Source: Authors

Exporters who indicated that regulations were not burdensome were also asked to indicate reasons for their opinions. The leading reason provided by firms is their experience in the market (table 9). This was the view of 60 percent of respondents. Many have been exporting the same product for a number of years and are therefore familiar with the requirements and processes for exporting. Further, 28 percent indicated that institutional support was the main reason they did not consider regulations to be burdensome. Firms in the rice industry and the non-traditional crops sector receive

assistance for managing the export process from the GRDB and the New GMC, respectively.

Table 9 Reasons Government Regulations Are Not Considered Burdensome

	Yes		No		Total	
	Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**
Experience of the company in the market	52	60	34	40	86	100
Ease of obtaining information	3	4	82	96	85	100
Cost of compliance is low	1	1	84	99	85	100
Process is simple (due mainly to computerization)	10	12	74	88	84	100
Institutional support	24	28	61	72	85	100
Other	10	12	75	88	85	100

Source: Authors

Twelve percent of respondents also said that the compliance process is simple because everything is computerized, and therefore all that is required is an update for each shipment. Another 12 percent indicated 'other' factors were responsible for their views. Among the other responses, 3 firms indicated that complying with regulations is a normal part of doing business, another 3 identified the relationship they share with support institutions, and 2 respondents pointed to the involvement of the importer in the export process. Importers may make arrangements for testing etc., which makes exporting easier. Another exporter indicated that the process is managed by a broker who gets all of the paper work done.

Private requirements

Exporters were asked to identify reasons they consider private regulations burdensome. Forty-four percent of respondents who generally say private requirements are either slightly burdensome or burdensome identified the high cost of compliance. In addition, 13 percent said measures are too strict and 50 percent identified other reasons (table 10).

Table 10 Reasons Private Measures Are Considered Burdensome

	Number of responses					
	Yes		No		Total	
	Frequency	%	Frequency	%	Frequency	%
Measures are too strict	2	13	14	88	16	100
Lack of laboratory and other relevant facilities locally	0	0	16	100	16	100
Administrative procedures to demonstrate compliance	0	0	16	100	16	100
Lack of transparency	0	0	16	100	16	100
Poor access to or high cost of information	0	0	16	100	16	100
High cost of compliance	7	44	9	56	16	100
Insufficient access to scientific/technical expertise	0	0	16	100	16	100
Inadequate financial resources	0	0	16	100	16	100
Limitations in own country's administrative arrangements for SPS requirements	0	0	16	100	16	100
Other (specify)	8	50	8	50	16	100

Source: Authors

Among the 'other' reasons identified, 2 exporters pointed out a challenge in finding products with the physical specifications required by importers, particularly related to size consistency due to the fact that they may be sourcing from several buyers in different geographical areas. Two respondents also indicated that the additional requirements imposed may differ by importer, while another 2 highlighted the time to comply with requirements as a challenge.

Exporters were further asked whether importer-specific requirements have intensified over the last five years. This was done since Hobbs (2014) argues that private standards have increased much more than government regulations. Shafaeddin (2007) and Hobbs (2014) also argue that private requirements are more burdensome than mandatory government regulations. However, the majority of firms (12) disagreed; only 9 firms agreed that importer-specific requirements have intensified over the last five years, while 5 remained neutral.

Conclusion and Policy Implications

This study took an aggregate approach, focusing on all subsectors of the food and agriculture sector. The findings from this aggregate approach indicate that generally exporters do not consider non-tariff regulations to be burdensome to exports of food and agriculture products. By and large, this is linked to experience in exporting as well

as institutional support. The importance of experience is supported by Hollensen (2007) and Johanson and Vahlne (1977), who alluded to the fact that experience reduces 'the liability of foreignness'. Wall, Minocha and Rees (2010) also underscore the importance of building relationships in order to be able to access international markets.

However, the aggregate approach muffles the fact that specific sectors are affected differently, as some exporters did indicate that regulations are burdensome. This indicates that examining the standards-as-catalyst versus standards-as-barriers view requires more specific and fewer aggregate studies.

The results do confirm however, that concerns vary by regulation type. Generally, exporters found labelling, technical measures and non-technical export measures to be more burdensome to exports relative to the other categories of regulations. As argued by Lee, Gereffi and Beauvais (2012), the cost of compliance is an important factor that makes complying with technical measures challenging, especially for small exporters.

Notwithstanding the aggregate focus of the study, an interesting finding is the fact that generally exporters are less affected by the technical requirements of both the importing and exporting country; rather, they consider non-technical requirements and export measures, especially obtaining certification and inspections, to be more burdensome to exporting. Their concerns stem from inefficiencies in how the process is managed, including the fact that document submission is still a physical process, is time consuming and can be laborious where several signatures from different agencies are required. Further, shipments can face delays where the inspection process is not done expediently or scanning devices are not working. This points to institutional inefficiencies as barriers to trade as argued by Verwaal and Donkers (2003), or what the International Trade Centre (ITC, n.d.) describes as procedural obstacles.

The following are important policy implications emanating from the findings of the study:

- It is important that exporters build networks through relationships with support institutions and buyers so that they are better able to comply with regulations.
- It is necessary to streamline the operations of support agencies so that institutional inefficiencies are eliminated. In particular, it is important to implement a fully computerized system for document submission so that processing times are reduced.
- It is also critical to enhance the physical capacity of agencies responsible for inspections to ensure the inspection process remains an automated one to avoid unnecessary delays to exporters.
- Responsible agencies, locally, need to manage the export process for better compliance with traceability requirements and perhaps allow for a more concentrated export supply chain led by experienced exporters.

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Endnotes

[1] 2 (Pomeroon–Supenaam), 3 (Essequibo Islands–West Demerara), 4 (Demerara–Mahaica), 5 (Mahaica–Berbice) and 6 (East Berbice–Corentyne). These are the key regions producing food and agriculture products in Guyana (Daniel, 1981).

[2] Dr. Mark Bynoe, Executive Director of Development Policy and Management Consultants; Nigel Durant, Trade Specialist with the CARICOM Secretariat and Bernard Black, Senior Customs Officer with the CARICOM Secretariat.