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Promoting Agricultural Trade in CARICOM: Some Perspectives

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Abstract

Economic theory has established that the basis for international trade is the welfare gains available to trading partners on account of the economic efficiencies obtainable, with specialisation influenced by the comparative advantage to be had. Decisions on trade by economic agents are informed by the policy environment within which they operate, for their economic benefit. Analysis of intra-CARICOM trade data reveals a greater propensity for extra-regional rather than intra-regional agricultural trade, despite the recognized natural resource base in many CARICOM countries. Examination of the countries' trade data, within the Standard International Trade Classification (SITC) food groups, gives an indication of national food demand profiles. Reviews of trade and production data suggest comparative production capabilities. An evaluation of the comparison of food demand profiles and countries' production capabilities provides an indication of issues that warrant attention in elaborating a policy framework to promote increased agricultural trade within CARICOM. Case study analyses illustrate the potential for increased intra-regional agricultural, pointing to specific issues that ought to be addressed. Many of these require national level attention involving multi-party collaboration while some can benefit from regional level collaborative measures.

Keywords: Agricultural trade policy, food demand profile, agricultural production, CARICOM

Introduction

Economic theory has established that through international trade welfare gains are available to trading partners. This is on account of the economic efficiencies obtainable because of specialisation influenced by the comparative advantage obtainable. Beginning with the acceptance of this principle, the paper first briefly examines some theoretical and regulatory issues as well as practical benefits from trade, providing some illustrations thereof. This section also reviews the circumstances that influence economic agents' decisions on trade. Section 2 draws on analyses of intra-CARICOM trade data to provide a profile of the food demand and food production within CARICOM countries. It also examines

distribution issues. Section 3 briefly reviews the prevailing agricultural policy framework within CARICOM within the context of the likelihood of it fostering agricultural trade. Section 4 examines some case studies pertaining to trade and potential trade in specific commodities. The next section discusses issues pertinent to targeted agricultural trade promotion within CARICOM, drawing on the countries' food demand and food production profiles as well as the production marketing and distribution issues previously discussed. Some concluding comments follow.

Pertinent Trade Issues

Theoretical basis and regulatory influences

The economic benefits to be derived from trade are grounded on the principle of comparative advantage that illustrates the welfare benefits two countries can both derive from trading with each other, provided that the relative production efficiencies are different in the trading partners. The benefits consequent upon trade follow since the countries are able to consume at levels outside their standard production possibility frontiers. A country's competitive advantage is influenced by its natural resource endowment and the use of its factors of production by the economic agents.

Trade in food, animal and plant products is also influenced by concerns for consumer health and food safety as well as the desire to protect the environment of the recipient country from invasive animal and plant pests and diseases. These concerns have led to a suite of regulations for respective products being traded or likely to be traded, covering issues such as food safety and human health hazards, labeling and quality standards, and the control of animal and plant pests and diseases. Associated with these regulations are the attendant responsibilities of the regulatory agencies of the respective trading partners (Josling, Roberts et al. 2004).

Illustrations of some benefits from trade

One outstanding example of economic benefits from trade is the experience of Australia and New Zealand where those benefits eventually resulted in economic and social benefits to both countries. Both have experienced growth in their economies, increased efficiency and international competitiveness as well as job creation and consumer welfare benefits

(Australian High Commission in New Zealand 2003).

The role of economic agents

Economic agents are the principal actors involved in trade. Among these are primary producers, middle men (hucksters/traffickers), shippers, wholesalers and supermarkets. The involvement of each economic agent is influenced by their respective perceptions of economic gain from their participation in the specific trade activity. The producers respond to the perceived consumer demand, supermarkets' orders reflect consumer demand and the traffickers seek to supply the supermarkets. Shippers' involvement relates to the inter-island movement of the goods. In this milieu, the role of governments is to establish a policy and regulatory framework to facilitate efficiencies in the trade and promote consumer and environmental safety. Despite their involvement in the negotiations of trade agreements, governments are not party to the decisions of economic agents involved in trade activities.

Food Demand, Production and Distribution Considerations

Demand characterisation from food import data

Analysis of the food import data shows that the top ranking food import division varies across the countries. The food division, 'meat and meat preparations' Standard International Trade Classification (SITC 01)¹ holds the top rank for each of the members of the Organisation of Eastern Caribbean States (OECS). Cereal and cereal preparations (SITC 04) is the top food import division for Barbados, Guyana, Jamaica, and Suriname. For Belize it is

¹ Standard International Trade Classification (SITC) Revision 3 code

dairy (SITC 02) while for Trinidad and Tobago it is vegetables and fruit (SITC 05) (see Table 1).

Detailed examination of the OECS imports of meat and meat preparations (SITC 01) at the commodity level shows a demand for *cuts and offals of fowls* in all of the countries. There is also a demand for *bone infrozen cuts of sheep* in St. Kitts/Nevis and St. Lucia and for *fresh swine meat* in St. Kitts. Within the meat and offal preserved n.e.s. sub-group (SITC 017) there is a demand for chicken sausages in all the countries and for *ham and cuts thereof* in Antigua/Barbuda, Grenada, St. Kitts and St. Lucia. When the top four food import divisions for the OECS countries are compared for the years 2009 and 2006 there is some reordering within the ranking but the same SITC divisions are evident (See Table 2).

The other CARICOM countries share some commonality of demand in a few of the food sub-group categories as can be observed in Table 2. Detailed examination reveals that in the milk and milk products sub-group (SITC 022) both Belize and Guyana exhibit demands for various types of milk and cream products. Within cereals and cereal preparations (SITC 048) there is a strong demand for breakfast food cereals among Barbados, Belize, Guyana, and Trinidad and Tobago. Also within this sub-group, sweet biscuits and bread, cakes, pastries, biscuits and bakers' wares are in demand in Barbados, Belize, Suriname and Trinidad and Tobago. Sweet biscuits are in demand in Guyana in this sub-group also. In the vegetables sub-group (SITC 054), potatoes, garlic, onions and carrots are some of the items in demand in Barbados and Trinidad and Tobago, while within the vegetable, root/tuber and preparations sub-group (SITC 056) potato products, various vegetable products and vegetable meal/flour are food items in demand in Barbados, Jamaica and Trinidad and Tobago. In the meat and

offal preserved n.e.s. sub-group (SITC 017) both Jamaica and Suriname show a demand for canned chicken sausages and canned corned beef, among other products. In Jamaica there is a demand for goat meat and frozen sheep carcasses in the meat n.e.s. fresh/chilled/ frozen sub-group (SITC 012) and for various fruit and vegetable juice products such as frozen orange juice, pineapple juice, apple juice and other single fruit and vegetable juices within the sub-group fruit and vegetable juices (SITC 059).

The varied food demand profile among the CARICOM countries can be further refined by filtering the imports to show only those greater than \$1.5 million United States dollars (USD), in Tables 3 and 4 respectively, for the OECS countries and the other CARICOM countries.

This analysis illustrates that the demand for various food items varies markedly across the CARICOM countries, despite commonalities across some with respect to certain items. It also suggests possible SITC food groups for focus in supplying the respective countries food demand.

Countries' production inferences from trade data

Review of the main food commodities exported by the countries provides some insight into their production profiles. Among the products exported by the OECS countries are: Live animals (SITC 001) by St Kitts/Nevis, St Lucia and St Vincent/Grenadines; Meat (SITC 011) by Antigua/Barbuda, Dominica and St Kitts/Nevis; Milk and milk products (SITC 022) by St Kitts/Nevis, St Lucia and St Vincent/Grenadines; Fresh fish (SITC 034) by Antigua/Barbuda, Dominica, Grenada, St Kitts/ Nevis, St Lucia and St Vincent/Grenadines; Crustaceans-fresh (SITC 036) by Antigua/Barbuda; Grenada, St Kitts/ Nevis and St Vincent/Grenadines; Vegetables-fresh (SITC 054) by all

countries except Montserrat; Vegetables, roots and tubers (SITC 056) by Dominica, St Lucia and St Vincent/Grenadines; Fruits and nuts (SITC 057) by all countries; Fruits- preserved (SITC 058) and Fruits/Vegetable juices (SITC 059) by Dominica, Grenada, St Lucia and St Vincent /Grenadines; Honey (SITC 061) by Grenada, Montserrat, St Kitts/Nevis and St Lucia; Coffee (SITC 071) by Grenada, St Kitts/ Nevis and St Lucia; Cocoa (SITC 072) by Dominica, Grenada and St Lucia; Spices (SITC 075) by Dominica, Grenada, St Kitts/Nevis, St Lucia and St Vincent/Grenadines; and Animal feeds (SITC 081) by Grenada and St Vincent/Grenadines (CARICOM Secretariat 2011). The filtering of exports to reflect only those greater than one million USD provides a pragmatic indication of countries' export production profile. For the OECS states, it reveals that Grenada and St Vincent and the Grenadines each export five SITC food groups in excess of the specified ceiling. These are fresh fish, meal/flour, cocoa, spices and animal feeds for Grenada; and rice, meal/flour, vegetables, fruits/ nuts, and animal feeds for St Vincent and the Grenadines. For the other OECS countries, Dominica exports vegetables – fresh and fruits/nuts while St Lucia exports fruits/nuts (see Table 5).

Applying this criterion, the export profile of the other CARICOM countries is somewhat broader. For those countries it includes other meat (SITC 012); Milk and milk products (excluding butter) (SITC 022); Butter and other fats/oils from milk (SITC 023); Eggs etc. (SITC 025); Fish – dried, salted, smoked (SITC 035); Maize (SITC 044); Sugar-confectionery (SITC 062); Chocolate and food preparations with cocoa (SITC 073); and Margarine /shortening (SITC 091). More specifically, the subsets of exports greater than one million USD for the other CARICOM countries include Live animals other than of division 03 for Barbados and Guyana;

Meat and offals preserved for Barbados, Jamaica and Trinidad/Tobago; Fresh fish for Belize, Guyana and Trinidad/Tobago; Crustaceans -fresh for Belize, Guyana and Jamaica; Meal/ flour for Barbados, Jamaica and Trinidad/Tobago; Cereal and cereal preparations for Barbados, Jamaica and Trinidad/Tobago; Vegetables-fresh for Belize, Guyana, Jamaica and Trinidad/Tobago; Fruits and nuts for Belize, Guyana, Jamaica and Trinidad/Tobago; Fruits-preserved for Guyana, Jamaica, and Trinidad/Tobago; Fruits and vegetable juices for Belize, Jamaica and Trinidad/Tobago; Sugars/ honey for Barbados, Belize, Guyana, Jamaica and Trinidad/Tobago; Spices for Jamaica; Animal feeds for Jamaica and Trinidad/Tobago; and Margarine/shortening for Barbados and Trinidad/ Tobago (see Table 6).

Distribution considerations

There are several critical issues impacting on both in country and intra-regional food distribution. Among these are consumer and supermarket requirements, producer capabilities, market intelligence constraints and transportation facilities. The demographic characteristics of the workforce, where both husband and wife now work, while living further away from their workplace, influences the demand for more convenience food items. Further, both households and institutional consumers desire high quality food items. However, most domestic suppliers are challenged to deliver their products appropriately packaged at the desired quality level. For both the local and domestic markets, producers need to be sensitised about the importance of size standardisation of their products as well as the need for the maintenance of good quality. Yet some are very reliable in providing supermarkets and institutions with consistent and timely supplies (Gordon 2009).

There is need for a market intelligence system for use by farmers in their production decisions. Currently, most producers seemingly respond simultaneously to a perceived market demand usually resulting in a glut on the market with the crops being harvested simultaneously. A market intelligence system will also help in disseminating information on available produce to potential buyers. Also, the lack of adequate transportation is a major impediment for intra-regional agricultural trade. The majority of the vessels used have inadequate or do not possess any cold storage facilities. So the quality of produce suffers in transit when say tomatoes are taken from a chilled storage environment in Trinidad/Tobago, transported in a boat at ambient temperatures, then returned to chilled storage upon arrival into St. Vincent/Grenadines. One St. Vincent/Grenadines distributor was stymied in getting frozen products² out of Barbados, since December 2007, because Geest Lines stopped taking break bulk cargo and no alternative shipping was available (Gordon 2009).

Despite some of the issues cited above, a St Vincent/ Grenadines distributor identified more than one dozen vegetables in high demand at his supermarket and emphasised his preparedness to source any of these items locally or from within the region provided there was assurance of a reliable supply, acceptable quality and dependable transportation. (Gordon 2009).

Prevailing Policy Framework in Support of Agriculture and Agricultural Trade

Beginning in the early 2000's the policy framework in support of agriculture and agricultural trade was reflected in the Jagdeo Initiative (JI). The core of the JI strategy was the identification of and

relaxation of key binding constraints to agricultural production within the region. In this regard nine priority sectoral constraints were highlighted namely: (1) limited and inadequate levels of new investments; (2) deficient and uncoordinated risk management measures; (3) fragmented and disorganised private sector; (4) inadequate research and development; (5) outdated and inefficient agricultural health and food safety systems; (6) inefficient land and water distribution and management systems; (7) inadequate transportation systems particularly for perishables; (8) weak and inadequate information and intelligence systems, weak markets and lack of linkages and participation in growth market segments; and (9) lack of skilled human resources (CARICOM Secretariat 2007).

Consequent upon an apparent lack of impact following the identification of the above key binding constraints, and in an effort to promote desired action re increased agricultural production and productivity, a decision was taken by the Council for Trade and Economic Development (COTED) (Agriculture) to establish Technical Management Advisory Committees (TMAC) for each of the constraints. Each committee was chaired by the Lead Country Minister (or nominee) and comprised representatives from relevant regional technical agencies. The TMACs were also assigned adequate institutional support (CARICOM Secretariat 2008).

The major deficiency with the JI and the TMAC approaches is the absence of a focus on specific commodities, production targets or target markets. Given the milieu of issues impacting on consumption, production and distribution of agricultural produce within CARICOM, it is argued that a fundamental template on which all policy interventions should be framed is the pursuit of a targeted approach based, *inter alia*, on specific national markets; commodity and agri business enterprise

² Chicken sausages, Vienna sausages, breaded flying fish, popcorn chicken and similar products.

selection guided, *inter alia*, by: projected demand or near term supply capacity; distributors' willingness to promote the sale of domestic food; producer capacity and preparedness to meet market requirements; tourism hospitality sector expressed willingness to use domestic food; producer capacity and preparedness to implement good agricultural practices and good manufacturing practices; and specific and tangible multi-party collaboration on product development and marketing involving: private sector investors, technical and technological support agencies, distributors and relevant public sector bodies. Targeting will also promote the optimisation of agricultural production and support activities in light of the differential agro-ecological conditions that exist within and among countries (Gordon 2009).

Agricultural Trade Catalysation Illustrated through Case Studies

Case study 1: trade in beef from Guyana

Guyana's potential for producing and exporting beef to its CARICOM partners has long been acknowledged. However, one of the major constraints to this being effected is the presence of foot-and-mouth disease in neighbouring Brazil together with the fact that the disease had been present in Guyana in the past, in the districts that bordered Brazil. Guyana has been free of the disease since 1978 and maintains protective measures at the border with Brazil where the disease is prevalent, to prevent the spread of the disease to the country. Based on concerns over weaknesses in these measures, the Government of Guyana, sought to strengthen its surveillance systems with inputs from the Pan American Agricultural Health Organisation (PAHO). Subsequently, in a continuing effort to secure access for its beef to the CARICOM

market, the Government of Guyana obtained certification from PAHO as a country free of foot-and-mouth disease without vaccination (PAHO/WHO 2001). Potential regional trading partners had implied that this certification was a prerequisite to trade in beef being initiated. Yet to date, trade in beef from Guyana to its CARICOM partners has not materialised despite efforts of a Guyanese entrepreneur whose numerous attempts to initiate such trade have been frustrated, except for a few shipments to Grenada. Among the challenges faced was acceptance of the product by wholesalers and retailers who were skeptical about receiving from a new source despite being assured of competitive terms. Prior to the initial shipment to Grenada the CARICOM institutional arrangements for agricultural health clearance for such trade, involving inspections and reporting by the CARICOM Veterinary Council, was protracted over a period in excess of three years (Habibula 2006). Subsequent shipments were made to Grenada, the last being in 2009. Currently, in response to a strong local demand, the firm is concentrating on the local market while expanding its ranches in preparation for the resumption of exports (Habibula 2011).

The above circumstances exist in a situation where imports of meat, from SITC 011 and SITC 012, collectively exceed \$1.5 million USD in 10 CARICOM countries (see Table 3 and Table 4). It is argued that trade in this commodity can be facilitated through a targeted strategy that includes, *inter alia*: 1) focused trade missions involving potential distributors, suppliers and agricultural health personnel from the countries involved; 2) specific agreement on the relevant agricultural health protocols between the trading partners; and 3) discussions with potential shippers concerning appropriate refrigerated transportation conditions and shipping schedules.

Case study 2: trade in sheep and goat meat from selected Eastern Caribbean countries

In Jamaica there is a strong demand for goat meat and frozen sheep carcasses in the meat n.e.s. fresh/chilled/ frozen sub-group (SITC 012), yet about 80% of Jamaica's goat meat demand is imported from Australia and New Zealand (Gordon 2009). These circumstances exist within the context of the Caribbean Agricultural Research and Development Institute (CARDI) having responsibility for the development of the regional small ruminant industry with research centers established in Jamaica and Trinidad/Tobago (CARDI 2010). The CARDI small ruminants programme includes components and activities important to the viability of small ruminant production and productivity. It also includes training and technology extension to producers, but falls short of collaboration with entrepreneurs to promote supply to targeted markets, whether in Jamaica or other countries (CARDI 2010). As a consequence, while the small ruminant production technology being developed by CARDI is potentially relevant to the industry, it is currently having little impact on the catalyzing of trade in sheep and goat meat within the region despite the strong demand evident in some countries (see Table 3 and Table 4). As with beef, a similar targeted strategy is being advocated to catalyse intra-regional trade in this commodity.

Case study 3: trade in fresh vegetables from selected Eastern Caribbean countries

There is a strong demand for fresh vegetables in all of the countries with each experiencing imports in excess of \$1.5 million USD (see Table 3 and Table 4). Among the OECS countries, Dominica and St Vincent/Grenadines both show good

production potential in fresh vegetables with exports exceeding 1.0 million USD (see Table 5); clear evidence of the trade promoting actions of economic agents in those countries. For one St Vincent/Grenadines distributor, the experience of locally produced vegetables competing with imports is such that his preference is for the local item; provide it satisfies his quality, scheduling and other product standards, which concerns are shared by other distributors (Gordon 2009). These circumstances suggest that there is potential for the development of intra-regional trade in fresh vegetables produced in selected OECS countries. As with the other cases cited, successful catalysation of such trade will require the pursuit of a targeted strategy in which key participants such as distributors, producers, shippers and agricultural health regulators are closely involved.

Targeted Agricultural Trade Promotion

General issues

The cases cited above point to the importance of a targeted market led strategy to increase agricultural trade. Among other things this will involve: the identification of specific consumer demand; distributors' willingness to promote the sale of domestically produced food; producer capacity and preparedness to implement good agricultural practices and good manufacturing practices in order to supply products of the required standards and quality; transportation and shipping arrangements that maintain product quality and ensure timely delivery; and multi-party collaboration involving: agri-business entrepreneurs, technical and technological support agencies, distributors and agricultural health and food safety regulatory bodies.

Agricultural health considerations

Respective countries' agricultural health and food safety systems must be upgraded to provide confidence in the monitoring and certification of the agricultural health status of the traded items, as required to support intra-regional and international trade. Since the required upgrading will take time, it could be complemented by the immediate establishment of agreed protocols for intra-regional trade in specific fresh and processed food items as was done to facilitate the resumption of intra-regional trade in selected items post the advent of the pink hibiscus mealy bug. Regarding the upgrading of agricultural health and food safety systems, one strategy could be to seek to achieve the harmonisation of standards and regulations across the countries. But the experience in the region is that the adoption of harmonized legislation has proven to be rather protracted³. Another likely more pragmatic approach is the pursuit of separate internationally acceptable national standards and regulations, together with the countries' acceptance and implementation of the 'mutually recognition' principle⁴, a system currently practiced in the European Community to avoid the delays inherent in seeking harmonisation of regulations among the states (Pelkmans 2003).

Transportation matters

³ The adoption of harmonised animal health regulations, based on prepared drafts, took more than a decade.

⁴ The principle of 'mutual recognition' refers to an importing country accepting that the regulatory objectives of the exporting country in safety, health, environment and consumer protection are equivalent to its own even if the specifications of the exporter's regulations differ from its own Pelkmans, J. (2003). "Mutual Recognition in Goods and Services: An Economic Perspective. ENEPRI Working Paper No. 16." [Centre for European Policy Studies \(Brussels\), ENEPRI \(European Network of Economic Policy Research Institutes\) Working Papers](#)

The availability of adequate and cost-effective transportation for intra-regional agricultural trade is a huge constraint. Currently, agricultural entrepreneurs from St. Vincent/Grenadines are engaged in intra-regional agricultural trade to various Caribbean destinations⁵. The operators of the vessels used indicated that the vessels have refrigerated holds. However, the efficiency of those refrigeration facilities is questionable since some entrepreneurs have recently suffered significant losses during the shipment of their cargo. In addition, the boats stock cargo in the hold as well as on deck resulting in the some of the cargo being subject to exposure to ambient weather conditions during the voyage. Further, the packaging used is not standardised. Currently produce is shipped to Barbados in ventilated 50 lb. cartons as required by the Barbados animal and plant health regulatory authorities. In contrast, the authorities in the other regional markets accept shipments in bags or cartons of varying weights (Gordon 2010).

The relaxation of the transportation constraint is a prerequisite to promoting increased intra-regional agricultural trade. It will require the design and implementation of policy incentives that will encourage the owners of the ships to accept the risk and invest in larger vessels equipped with appropriate refrigerated storage facilities. These will have to be national policies of the vessels' home state. Governments or Port Authorities in the destination markets may wish to consider implementing complementary policies that contribute to lower costs through reduced berthing charges, and consequently to investment in the upgrading of shipping infrastructure.

Production improvements

⁵ Barbados, Trinidad/Tobago, Anguilla, St. Kitts, St. Martin, Tortola and Virgin Gorda with occasional visits to Dominica and St. Lucia.

In order to consistently supply the targeted markets with products at the required standards and quality, many producers will need to upgrade their practices. The majority of farmers use rain fed production systems as opposed to irrigated or greenhouse systems (Gordon 2009), and are therefore unable to stagger their production (Gordon 2010). This results in uneven supply to the market and a glut when the majority of farmers harvest their produce. The maintenance of acceptable quality standards is also an issue, except for a few producers, because of poor handling practices. In addition, intermediaries or vendors often do not use appropriate or standardised packaging when transporting produce from the farm gate to the respective markets, with the produce being generally packed in sacks, cardboard cartons or wicker baskets. The adoption of good agricultural practices (GAPs), by producers and vendors, will result in the delivery of produce of acceptable standards and quality and serve to reduce transaction costs such as the time supermarkets spend in sorting and grading their purchases (Gordon 2010).

The Caribbean Farmers Network (CaFAN) classifies Caribbean farmers into three groups namely, commercial, semi-commercial and subsistence. Commercial and semi-commercial farmers respond to market signals, pursue technological innovations through workshops and training sessions as well as implement standard business practices¹. Subsistence farmers pursue farming as a hobby (Greene 2010). This suggests that commercial and semi-commercial farmers should be targeted when seeking production improvements.

Another critical production improvement challenge is encouraging producers to collaborate through groups or

associations. Distributors have expressed a strong preference for working with producer groups which, among other things, will facilitate the transmission of market demand projections and other relevant market intelligence (Gordon 2009). National governments may need to consider a special 'development incentive' to encourage farmers to cooperate under a legal entity that embodies several farms. This can serve to improve land management, reduce transaction costs and improve production and marketing efficiencies (King 2011).

Multi-party collaboration

There is considerable scope for multi-party collaboration in the promotion of intra-regional agricultural trade involving subsets of producers/producer groups; distributors; shippers; technical support agencies; national governments/national regulatory agencies; and regional agencies. For optimum effectiveness, such collaboration is best undertaken with focus on a targeted market led strategy. For example, activities to encourage increased intra-regional trade in vegetables can be developed through 'mini export promotion missions' directed at specific markets with arrangements such that all participants contribute tangibly towards the costs of each mission, despite its being coordinated by a specific national or regional agency. This will facilitate the early identification and resolution of likely bottlenecks to the potential trade.

Conclusion

The data clearly indicate the food demand across the countries and their respective production profiles potential in response to that demand. The case studies analyses' illustrate the potential to satisfy the identified demand through intra-regional trade, with a focused, targeted and market led trade promotion strategy. It is also

¹ Farming is the sole source of income for commercial farmers while semi-commercial farmers have other business interests.

evident that the traditional approach to agricultural policy formulation and implementation within the region, examined elsewhere by Gordon, VanSickle et al. (2007), has been less than successful as it pertains to promoting intra-regional trade in agriculture. In light of these circumstances it is argued that multi-party collaboration as outlined herein, focused on specific products and markets, can serve to successfully catalyse intra-regional agricultural trade.

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Table 1: Top Four Food Import Divisions by Country, ranked by Value of Imports (Excluding Miscellaneous) (Import year indicated)

SITC Food Divisions	Countries												
	Antigua/ Barbuda (2007)	Barbados (2009)	Belize (2008)	Dominica (2009)	Grenada (2009)	Guyana (2009)	Jamaica (2009)	Mont-serrat (2009)	St.Kitts /Nevis (2009)	St. Lucia (2009)	St. Vincent / Grenadines (2009)	Suriname (2008)	Trinidad/ Tobago (2009)
Meat/Meat Preps. (01)	1	4		1	1			1	1	2	2	2	4
Dairy (02)	4	3	2	3	3	2		4	3	4	3	4	3
Fish (03)							3		4				
Cereals (04)	3	1	1	2	2	1	1	3		1	1	1	1
Vegs. & Fruit(05)	2	2	4	4	4	3	2	2	2	3	4	3	2
Sugars (06)						4	4						
Coffee. Tea/Cocoa (07)													
Animal feeds (08)			3										

Source: Compiled by author from trade data supplied by the CARICOM Secretariat

Legend: Imports indicated by SITC sub-groups in descending order of value from 1 to 4

Table 2: Comparison of Top Four Food Import Divisions by Country, ranked by Value of Imports (Excluding Miscellaneous) (Import years indicated)

SITC Food Divisions	Countries												
	Antigua/ Barbuda (2007/2006)	Barbados (2009/2006)	Belize (2008/2006)	Dominica (2009/2006)	Grenada (2009/2006)	Guyana (2009/2006)	Jamaica (2009/2006)	Mont-serrat (2009/2006)	St.Kitts /Nevis (2009/2006)	St. Lucia (2009/2006)	St. Vincent / Grenadines (2009/2006)	Suriname (2008/2006)	Trinidad/ Tobago (2009/2006)
Meat/Meat Preps. (01)	1/1	4/4		1/1	1/1			1/1	1/1	2/1	2/1	2/2	4/
Dairy (02)	4/4	3/3	2/1	3/3	3/2	2/2		4/4	3/	4/4	3/4	4/	3/3
Fish (03)							3/3		4/4				
Cereals (04)	3/3	1/1	1/2	2/2	2/3	1/1	1/1	3/3	/3	1/2	1/2	1/1	1/2
Vegs. & Fruit(05)	2/2	2/2	4/4	4/4	4/4	3/3	2/2	2/2	2/2	3/3	4/3	3/3	2/1
Sugars (06)						4/4	4/4					/4	/4
Coffee. Tea/Cocoa (07)													
Animal feeds (08)			3/3										

Source: Compiled by author from trade data supplied by the CARICOM Secretariat

Legend: Imports compared in respective years, by value, with imports indicated by SITC sub-groups in descending order of value from 1 to 4

Table 3: Main Food Commodities Demand in the OECS Countries: Imports greater than \$1.5 million United States dollars (most recent year)

Food Groups (SITC code)	Top OECS Country Commodity Imports by Food Groups						
	Antigua/ Barbuda (2007)	Dominica (2009)	Grenada (2009)	Montserrat (2009)	St. Kitts/Nevis (2009)	St. Lucia (2009)	St. Vincent /Grenadines (2009)
Meat (bovine) (011)	*					*	
Other meat (012)	*	*	*		*	*	*
Meat/offal (preserved: nes) (017)	*	*	*		*	*	*
Milk & products: excl. butter (022)	*	*	*		*	*	*
Cheese/Curd (024)	*		*		*	*	*
Meal/Flour of wheat (026)		*					
Fresh fish (034)	*				*		
Fish dried/salted/ Smoked (035)	*		*			*	
Fish/ Crustaceans (037)						*	
Wheat/Meslin (041)			*				*
Rice (042)			*			*	*
Meal/Flour (046)	*					*	
Cereal & Cereal preps. (048)	*	*	*		*	*	*
Vegetables fresh(054)	*		*		*	*	*
Vegetables, roots, tubers (056)	*					*	
Fruit/Nuts (057)	*					*	
Fruits/ preserved/ preps. (058)	*					*	
Fruit/Veg. Juices (059)	*				*	*	
Sugars/Honey (061)	*	*	*			*	*
Animal feeds (081)		*			*		
Margarine/ Shortening (091)	*		*			*	*

Source: Compiled by author from trade data supplied by the CARICOM Secretariat
 Legend: Imports greater than \$1.5 million United States dollars indicated by *

Table 4: Main Food Commodities Demand in Selected CARICOM Countries: Imports greater than \$1.5 million United States dollars (most recent year)

Food Groups (SITC code)	Barbados (2009)	Belize (2008)	Guyana (2009)	Jamaica (2009)	Suriname	Trinidad /Tobago
Live animals other than of division 03 (001)				*		*

Meat (bovine) (011)	*			*		*
Other meat (012)	*			*	*	*
Meat/offal (salted) (016)	*				*	*
Meat/offal (preserved: nes) (017)	*	*	*	*	*	*
Milk & products: excl. butter (022)	*	*	*	*	*	*
Butter & other fats/oils from milk (023)				*		*
Cheese/Curd (024)	*	*	*	*	*	*
Eggs, birds, egg yolks, etc. (025)	*		*	*		*
Meal/Flour of wheat (026)						
Fresh fish (034)	*			*		*
Fish dried/salted/Smoked (035)	*			*		*
Crustaceans, , mollusks etc. fresh (036)	*			*		*
Fish/ Crustaceans (037)	*		*	*	*	*
Wheat/Meslin (041)	*	*	*	*		*
Rice (042)	*			*		*
Maize (excl. sweet corn), unmilled (044)	*		*	*	*	*

Source: Compiled by author from trade data supplied by the CARICOM Secretariat
 Legend: Imports greater than \$1.5 million United States dollars indicated by *

Table 4 (cont'd): Main Food Commodities Demand in Selected CARICOM Countries: Imports greater than \$1.5 million United States dollars (most recent year)

Food Groups (SITC code)	Barbados (2009)	Belize (2008)	Guyana (2009)	Jamaica (2009)	Suriname	Trinidad /Tobago
Meal/Flour (046)	*		*	*	*	*
Other cereal meals/flours (047)				*		*
Cereal & Cereal preps. (048)	*	*	*	*	*	*
Vegetables fresh(054)	*	*	*	*	*	*
Vegetables, roots, tubers (056)	*	*	*	*	*	*
Fruit/Nuts (057)	*			*		*
Fruits/ preserved/ preps. (058)	*			*	*	*
Fruit/Veg. Juices (059)	*		*	*		*
Sugars/Honey (061)	*		*	*	*	*
Sugar confectionery (062)	*		*	*	*	*
Coffee & coffee substitutes (071)	*	*	*	*		*
Chocolate & food preps. With cocoa ((073)	*			*	*	*
Tea & mate (074)				*		*
Spices (075)				*		*
Animal feeds (081)	*	*		*	*	*
Margarine/ Shortening (091)	*	*		*		*

Source: Compiled by author from trade data supplied by the CARICOM Secretariat

Legend: Imports greater than \$1.5 million United States dollars indicated by *

Table 5: Main Food Commodities Exported by OECS Countries (Exports greater than 1.0 million United States Dollars)

Food Groups (SITC code)	Antigua/Barbuda (2007)	Dominica (2009)	Grenada (2009)	Montserrat (2009)	St. Kitts/Nevis (2009)	St. Lucia (2009)	St. Vincent /Grenadines (2009)
Fresh fish (034)			#				
Rice (042)							#
Meal/Flour (046)			#				#
Vegetables fresh(054)		#					#
Fruit/Nuts (057)		#				#	#
Cocoa (072)			#				
Spices (075)			#				
Animal feeds (081)			#				#

Source: Compiled by author from trade data supplied by the CARICOM Secretariat

Legend: Exports greater than \$1.0 million United States dollars indicated by #

**Table 6: Main Food Commodities Exported by Selected CARICOM Countries
(Exports greater than 1.0 million United States Dollars)**

Food Groups (SITC code)	Barbados (2009)	Belize (2008)	Guyana (2009)	Jamaica (2009)	Trinidad /Tobago (2009)
Live animals other than of division 03 (001)	#		#		
Meat/offal (presv.n.e.s.) (017)	#			#	#
Milk & products: excl. butter (022)					#
Cheese/Curd (024)				#	
Fresh fish (034)		#	#		#
Fish dried/salted/ Smoked (035)			#		
Crustaceans, , mollusks etc. fresh (036)		#	#	#	
Rice (042)			#		
Meal/Flour (046)	#			#	#
Cereal & Cereal preps. (048)	#			#	#
Vegetables fresh(054)		#	#	#	#
Fruit/Nuts (057)		#	#	#	#
Fruits/ preserved/preps. (058)			#	#	#
Fruit/Veg. Juices (059)		#		#	#
Sugars/Honey (061)	#	#	#	#	#
Sugar confectionery(062)					#
Coffee & coffee substitutes (071)				#	
Cocoa (072)				#	
Chocolate & food preps. With cocoa (073)					#
Spices (075)				#	
Animal feeds (081)				#	#
Margarine/ Shortening (091)	#				#

Source: Compiled by author from trade data supplied by the CARICOM Secretariat

Legend: Exports greater than \$1.0 million United States dollars indicated by #

