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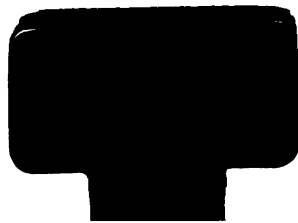
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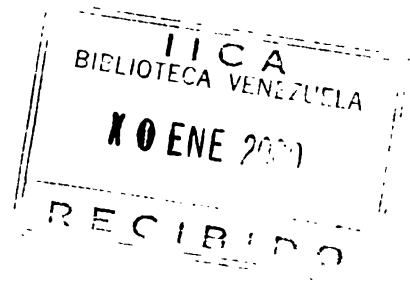
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Global Market Integration and the Agri-Food Sector Workshop
The Challenge for Small Economies ~ Surviving and Succeeding in the Global Economy

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**"Grenada's Foreign Trade Policy and The Agricultural Sector
~ Perspectives and Future Directions"**

Address by the

**Prime Minister of Grenada
Dr. The Hon. Keith Mitchell**

**to participants of the Global Market Integration and the Agri-Food Sector Conference
August 27th, 1998, Mt. Helicon**

Mr. Chairman, distinguished members of the head table, friends from the OECS countries and Barbados, other visitors, ladies and gentlemen. It is indeed a pleasure to address you this evening. I take this opportunity to commend the Inter-American Institute for Co-operation on Agriculture (IICA), the U.S. National Centre For Food and Agricultural Policy and the Ministry of Agriculture, Lands, Forestry and Fisheries for organising this very important and timely workshop.

The New National Party Government firmly believes that the agricultural sector must continue be an engine of growth and development in the Caribbean Region. Agriculture has always been difficult and the issues which emerge within the context of trade and adjustment are among the most sensitive for policy-makers and other stakeholders.

Globalisation, including the liberalisation of trade, have become key issues in the 1990s. The Government of Grenada recognises that the bedrock of the world trading system and that of the World Trade Organisation must be the liberalisation of trade. However, just as the sugar industry in the United States, the rice industry in Japan and the dairy industry in Europe require time to adjust to the forces of competition, so too do the industries in small countries. That is why Grenada views the 1997 WTO decision on the European Union banana regime to be an unjust one.

Although an agreement and its outcome may be internally logical and legally defensible, this does not necessarily render it morally sound! Despite our disappointments with the WTO ruling, comply we must. We now have a new set of proposals from the European Union, which can provide some relief for the banana producing countries of the sub-region. Proposals to revitalize Grenada's banana industry have been incorporated into the EU's programme for the Windwards. I am therefore happy to report that if all goes well, Grenada should be exporting bananas by October of this year.

In relation to the post-Lomé negotiations, we believe that the era of non-reciprocal agreements is at an end. This is why we have been engaged at the highest levels with our partners in the EU. We now have a set of proposals which should embrace the aspirations and economic interests of CARICOM, as well as the sub-region. The NNP Government favours the proposed option of "differentiated treatment". This enables us to embrace Caribbean partners such as Cuba and the Dominican Republic in a more meaningful manner. In my capacity as Outgoing Chairman of CARICOM, as Minister of Finance and as a statistician, I am amazed that it took us 10 years to prove what anyone who sells fruit and has had to pack it in small spaces, already knows. The pyramid style is the most difficult way to stack fruit. I am similarly amazed with the debate over the limitations of small size and the implications for trade between blocs of countries of varying size and development.

While there is no strong correlation between size and macro-economic management or growth, small island developing states face significantly different challenges to those of larger nations. Because of these differences, I have some difficulty with the decision to proceed with the Free Trade Areas of the Americas (FTAA) negotiations as a "single undertaking". This leaves us with the task of securing remedial terms for inclusion in the hemispheric arrangement through the working group in small economies. At best, this is a major compromise.

Given the pace of the two processes - FTAA and post-Lomé -, if we "run a tight ship" in coordinating our positions through the Regional Negotiating Machinery (RNM), we can benefit from both. An important aspect of the foreign policy agenda as it relates to Agriculture, concerns arrangements with our CARICOM partners. During my tenure as CARICOM Chairman, our emphasis focused on:

1. Expanding the common market;
2. deepening the integration process through the Single Market and Economy programme, and
3. sensitizing the Region to the role of Science and Technology in Human Resource Development.

Ladies and gentlemen, there are essentially two spheres of influence - the North American Free Trade Agreement (NAFTA) and Mercosur. With the conclusion of free trade agreements between Mercosur-Chile and Bolivia, indications of a free trade agreement between the Andean countries and Mercosur and the reluctance to expand NAFTA on terms acceptable to most non-founding third countries, CARICOM, the Central American Common Market (CACM) and the Dominican Republic are essentially "the odd men out".

Beyond this expansion, we in CARICOM feel it is imperative to re-negotiate our arrangements with Venezuela and Colombia - perhaps with the aim of modifying these into free trade agreements. This would make involvement with these countries more manageable after 2005, and would enable us to include commodities excluded from current agreements. On the other part of the agenda related to the Single Market and Economy Programme, let me first say that we are committed to the process. Of course, there is some disappointed at the progress in areas such as the free movement of labour, uniform implementation of the Common External Tariff and the slow pace of harmonization in taxation policy and economic incentives.

In relation to agriculture, during my tenure as Chairman of CARICOM, a study was initiated "to inform changes in the CET for agriculture". This is being conducted by IICA and will address many of the limitations of the current CET regime. There are concerns, however, about the issue of safeguarding the integrity of domestic agriculture from pests and diseases within the Common Market. The elimination of non-tariff barriers which are not scientifically based is certainly justified. But, we also need to accelerate the development and implementation of modern sanitary and phytosanitary legislation. In relation to the movement of labour, Grenada supports the decision that graduates of regional institutions are allowed to work freely within the Common Market.

While I have focused extensively on the foreign trade policy sphere, it would be remiss of me not to discuss domestic policy reforms. A country's foreign trade regime should support and re-enforce its domestic policies. My tenure as Chairman of CARICOM and my deep involvement with the integration process have taught me the following lessons:

Lesson A: competitiveness cannot be achieved in an unstable environment, whether it is economic, social and/or political instability. In terms of the economic dimension, macro-economic stability, stable exchange rates, low inflation and market-based interest rates are necessary if the domestic agenda is to support the international policy agenda.

As for the social dimension, consideration of equity and access to resources by all is a necessity.

The political dimension demands good governance based on dialogue among all key social partners and stakeholders. Transparency of actions and support for democratic institutions are critical to building the political base necessary to undertake reforms.

Lesson B: Among all CARICOM countries, the lack of institutional reform has hampered the adjustment process for agriculture. Major concerns relate to public service reform, as well as reforming the ministries of agriculture, reducing the role of government and building new strategic partnerships.

Lesson C: The most difficult negotiations are at home. When you can respond to the demands of farmers and consumers, half the battle is over.

Lesson D: Agricultural reform means more than manipulating tariffs. It means building supply capability based on clear market signals, good technology delivery systems, aggressive marketing and accurate and timely information for our farmers.

For Grenada, this conference is taking place at a time when the vital signs for the agricultural sector are improving. With a clear vision of the challenges and opportunities ahead, and a genuine commitment to face them head on, the revitalisation of agriculture will be realised.

In closing, ladies and gentlemen, I take this opportunity to congratulate everyone on a most successful workshop, and I wish you the very best in your deliberations tomorrow. I look forward to receiving the final report. I do hope you are taking time to enjoy the beauty of the Spice Isle. Thank you and good evening.



Global Market Integration and the Agri-Food Sector Workshop
The Challenge for Small Economies ~ Surviving and Succeeding in the Global Economy

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Global Market Integration and the Agri-Food Sector Workshop

The Challenge for Small Economies ~ Surviving and Succeeding in the Global Economy

Background

The decade of the 90s represented a turning point for the agri-business sector in many countries in the Americas. The changes in the global economic and trading environment, occasioned by the 1994 GATT Agreement and the establishment of the World Trade Organisation (WTO) brought agriculture under the multilateral disciplines of the WTO. For Caribbean countries, this is a particularly tumultuous period as they are also engrossed in several high level negotiations, including the Free Trade Area of the Americas (FTAA) and a successor arrangement to the Lomé Convention. Developments relating to the landmark 1994 Agriculture Agreement as well as the developments regarding the deepening of the CARICOM integration process hold significant implications for the agri-food sector competitiveness.

Even as the region enters into negotiations on the WTO mini-Round and the FTAA, and discusses arrangements for a post Lomé IV arrangement, trading patterns will continue to change led by new products and/or market saturation for other products. In response, Caribbean countries will need to seek facilities which will enable them to take advantage of these emerging market opportunities. In order to do so, these countries must acquire, rather quickly, the knowledge and competence necessary to better position their products, firms and industries in the global marketplace. Providing relevant information to enhance the knowledge of public and private sector actors was one of the primary objectives of a series of sub-regional workshops on Global Market Integration and the Agri-Food Sector conducted for Caribbean member states in 1998. Specifically, the workshops sought to:

- strengthen the knowledge base regarding the on-going process of integration at the sub-regional, regional and hemispheric levels;
- deepen understanding of the implications resulting from the implementation of

commitments under international and regional trade agreements;

- build capacity to assess the scope of agricultural production and trade policy within the context of global integration; and to
- increase awareness in critical areas, particularly those related to sanitary and phytosanitary (SPS) issues and food safety requirements for agri-food export products to major markets.

This second workshop in Grenada, was financed by the Inter-American Institute for Cooperation on Agriculture (IICA) with support from the US-based National Centre for Food and Agricultural Policy (NCFAP). The Ministry of Agriculture, Land, Forestry and Fisheries cooperated in the hosting of the workshop and special events for the participants. The workshop was targeted at persons directly involved in agri-business development from both the public and private sectors in the OECS Countries of St.Vincent and the Grenadines, St.Lucia, Dominica, St.Kitts, Antigua and host country Grenada, as well as Barbados.

Access to and effective use of information is fundamental for successful agri-business. Conferences such as this one, is just one medium through which relevant and current information is disseminated. The collaborating institutions anticipate that effective use will be made of the information provided in this workshop report and that the information would contribute towards improving the position of the region's agri-food sector in its efforts to respond to the opportunities and challenges of the new millennium. We look forward to continued collaboration in the goal to prepare the Caribbean's agricultural sectors to meet the emerging opportunities and adjust to the challenges of the 21st Century.



Module I - Small Economies within the Context of Global Integration

Trade Policy in Small Island Economies: Agricultural Trade Dilemmas for the OECS

Timothy Josling

Professor and Senior Fellow, Institute for International Studies, Stanford University

Introduction

The organization of Eastern Caribbean States (OECS) faces a basic trade policy dilemma as it approaches the new millennium. Do they embrace globalism and encourage free trade and investment, hoping to find lucrative niches in the world marketplace? Or do they request others to respect their small size and vulnerability and to allow them to maintain a trade policy built on domestic protection and references from abroad? The dilemma is particularly acute in the area of agriculture. The embrace of globalism probably implies some fairly major shifts of cropping pattern and reduced level of agricultural output of traditional export crops. Maintaining preferences suggests continuing with the same staple export as have been sold in the past. Though much of the Caribbean faces the same choice, the small size of the OECS economies makes the issue more acute. It has become seen as a "small island" problem.

This paper is based on the simple premise that the problems faced by small economies and islands are sufficiently different to those encountered in larger economies to make it worthwhile to afford them special consideration. This does not imply that small economies have more problems or that they are in all respects disadvantaged. It certainly does not mean that they are always poor. But it does mean that standard economic policy recipes may not have to be modified to take account of special circumstances arising from being "small" and surrounded by water. If so, then this has relevance for their current agricultural policy dilemma.

I am conscious of the fact that most economists and trade officials working in the Eastern Caribbean are well aware of the differences that being small entails. But I have not seen a systematic treatment of the implications of small size insularity in a structured way in an attempt to shed light on current agricultural policy dilemmas facing the OECS. The basic question that I will pose is whether being a small island economy (SIE) changes the menu of trade policy choices and leads one to pick a different path to that normally recommended by development professionals.

The motivation behind such an inquiry is straightforward. The Eastern Caribbean region contains some of the world's smallest states. The World Trade Organization (WTO) has already made its presence felt in the region, and not as a defender of the status quo for small islands. If the future Lomé agreement leads eventually to free trade with Europe, these states would be competing directly with the economic might of the EU. The FTAA, if it materializes, would throw these states into deep trade agreements with some of the largest economies such as the US and Brazil. Countries worry about disparities of size in regional trade blocs. Issues such as the unequal size of Mexico and Canada vis-à-vis the US within NAFTA, and the Andean countries vis-à-vis Brazil and Argentina in an expanded MERCOSUR crop up constantly.¹ But these economies are arguably much more alike than, say, Canada is to Grenada or Venezuela is to St. Lucia. Can Grenada and St. Lucia swim in the same economic waters as Canada or Venezuela, let alone the US and Brazil?

The structure of the paper is as follows. The first section postulates some obvious not important impacts, both economic and from a policy perspective, of being a small island economy. This followed by some implications for trade policy of this set of economic and political conditions. A third section relates this to the current trade issues of the OECS, as regards such issues as the renegotiations of Lomé, the FTAA, the deepening of CARICOM and the next WTO round.

A. The Economics of being a small island economy

The word economy can be used to describe any group of activities involving production, exchange and consumption, tied together by common rules and operating intensively within a group. An economy does not have to be any particular size. At the one extreme are households, particularly in developing countries, which often resemble rudimentary economies. At the other extreme one can imagine an

¹ The Andean Pact was originally set up in large part because the countries of the Andean Region felt that Brazil, Argentina and Mexico were gaining too much of the benefits from the Latin American Free Trade Area (LAFTA).

economy the size of North America or Western Europe. But the size of the economy has certain implications that change its nature. At the risk of oversimplification, the main features of a small economy can be encapsulated as follows. A small economy has only limited scope for making use of economies of scale; possesses no large consumer markets; is a very open economy, with trade being a higher percentage of GDP; has relatively small impact on other countries' markets; and is rather vulnerable to outside shocks of an economic, climatic or other nature.

In addition to these "size" features, the fact of being an island is also significant. Again, drawing with a very broad brush, islands have certain economic characteristics, which adversely impact income, such as high transport costs, although this may be offset somewhat by the inherent benefits of a long coastline. Similarly, islands are often vulnerable to weather extremes but favoured by isolation from disease and rarely short of water. Each of these characteristics will be discussed briefly below; the policy implications follow in a later section.

1. No economies of scale

The relative lack of economies of scale makes a substantial difference to the structure of the economy. Most economies have a wide variety of firms of different sizes. In the small economy, this luxury is not available. Instead, one or two patterns may emerge. Either the economy becomes very specialised relative to larger countries or the average size of enterprise remains small. In the former case, the economy is very vulnerable to demand swings. In the latter case the cost remains high relative to larger economies. This is the fundamental dilemma of policy makers in such economies: they cannot both diversify and achieve low costs.

2. No large Consumer Market

The lack of a large home market also has substantial implications for the economy. First, consumer choice is itself likely to be limited. The cost of keeping a full range of goods on the shelf will be prohibitive. Modern wholesaling and retailing themselves exhibit economies of scale. The same dilemma will therefore emerge as in the production sector. Small enterprises will perpetuate high costs: large firms are likely to be very risky. Secondly, the economy is likely to be in a difficult position when it comes to attracting outside investment, or even keeping local investment at home. Not that there may not be worthwhile investment opportunities, but the attraction of entering into a small market to an

outsider is likely to be limited. The fixed costs are likely to be large relative to the scale of investment. The small size of the market has at least two other implications of importance to trade policy. First, transport costs may be raised by the inability to buy in bulk. But secondly, on the other hand, bulk goods when they come in can swamp the domestic market. Once again, the choice is between low costs and instability.

3 Very open economy

It goes without saying that the smaller economies are more open. A closed small economy could exist, but would be rather poor. Trade has more benefits to a small economy. A chance of being able to produce any good efficiently is more remote the smaller the economy. Most goods will be imported at considerably lower cost than they can be produced at home. The gains from trade will be a higher proportion of national income. The burden of protection is also likely to be substantial, as it reduces the benefits of trade.² The high degree of openness in turn has a number of implications for policy, discussed below.

But the main characteristics of extreme openness are the combination of high risk coupled with potentially high returns from entrepreneurship in the global marketplace.

4. Small Impact on other economies

Not all the features of small economies are negative. Being small can at times be useful in international trade markets. For one thing, one is more likely to be able to exploit a niche market without raising the fears of the domestic producers or alerting larger competitors. In general, being small players in other markets is probably advantageous, but it raises problems of achieving the volume needed to engage in advertising, and the difficulties of keeping up regular supplies. Moreover, small shifts in the large overseas market can have a magnified effect on the small supplier.

5. Vulnerable to external "events"

The other side of the coin to being "invisible" in foreign markets is that being small can magnify the impact of an external economic event, or a weather-related disasters that disturbs the economic resource base. World market price changes for the small

² Another way of expressing this is that the ratio of tradable to non-tradable goods is high for small economies. This has implications for financial management of the economy (see Yotopoulos, 1996)

range of goods that are produced can have a devastating impact. Loss of crop through flooding or wind damage can make a dent in GNP in a way not possible in larger countries.

6. High transport costs

The main feature of an island is also the most obvious: it is surrounded by water. Along with being surrounded by water comes the disadvantage of having no road access. Road and rail are usually the cheapest form of transport for goods and are often for raw materials. In particular they are efficient ways of transporting small amounts of a good. Thus exporters face higher marketing costs and manufacturers and consumers face higher import costs. A higher share of GDP goes on "unproductive" transport activities. On the other hand, certain services have low transport and communication costs and are not dependent on rail and road access. And goods (and people) travelling by air can get to an island as cheaply as if air journey were the same distance over land.

7. High ratio of coast population

Islands have certain assets which have significant economic value. One major advantage enjoyed by most countries in the region is the high ratio of accessible coastline to population. Combined with the equitable climate, the coast has enormous attraction for those that live most of the year a long way from the sea. The tourist industry is a reflection of the high demand for coastal vacations, whether experienced by sea or by land. The coast is also rich in fish, and the seabed sometimes yields mineral and oil deposits. The smaller the island the more each inhabitant, on average, 'owns' of this prized asset the coastline.

8. Vulnerability to weather disturbances

The downside of being surrounded by water is that weather disturbances often develop over the ocean and hit the coastal areas of landmasses the hardest. Small islands are naturally most subject to major disaster from hurricanes and tropical storms, and their economies are likely to be proportionately badly hit. On the other hand, though it is small comfort, international help will normally be more effective the smaller the country.

9. Natural barriers against disease

Insularity provides a barrier to the spread of many pathogens. Whereas the movement of people and goods over the centuries has provided adequate vectors for pest infestation, small islands are still relatively more disease-free than large landmasses.

This is increasingly important in a time of stringent sanitary and phytosanitary barriers and the availability of premiums for organic crops.

10. Adequate water supplies

One resource that is rarely scarce on an island is water, though desalination costs often make sea water expensive to use. Some flat islands in the region suffer from periodic droughts but most have enough elevation to attract clouds and fairly regular rainfall. This resource again should not be downplayed: coupled with warm temperatures, water availability gives the Caribbean an advantage over many parts of the world in the production of agricultural and horticultural crops.

B. The policies of being a small island economy

In addition to the economic characteristics of being small, countries can also suffer from the politics of limited size. Focusing on those aspects of political life of particular relevance to trade policies, one can identify five characteristics: limited resource pool for the public service; the greater degree of clout in international organizations which do not weigh votes by population; the improved access to political actors by individuals; the high number of administrators per capita; and the relative paucity of interest groups. The politics of island countries also have some features which set them apart; definable and more easily defended borders; easier identification of cultural roots; less interaction of politicians; more parochialism in policies; and a greater tendency to use the border for administration. These factors will be discussed in turn, before drawing out the trade policy implications.

1. Limited human resource pool for administration

The smallness of the country of necessity implies a small pool from which to draw political and administrative personnel. This does not of course mean that excellent administrators and politicians do not emerge from small countries, but their numbers are likely to be roughly in proportion to the population. The resources of a small country are much likely to be strained by the demands for trade officials to take part in discussions than are those of a medium sized or large country. Those individuals that excel are likely to be quickly promoted and removed from the trenches.

2. More weight per person in international organizations

Ironically, the importance of a country in international affairs does not always go with size.

Small states have small weight in such institutions as the IMF and the World Bank, where contributions and capital underwriting, matter. But in the UN agencies, and in the General Assembly, each country (nominally) carries the same weight. Thus a region of small countries potentially has a large bloc of votes which may be used to pursue its own agenda would be of interest to other countries which would welcome their support in exchange for help in other areas. The WTO and other institutions that operate on consensus also by implication give higher weight to smaller countries.

3. Better access by individuals to politicians and administrators

Small economies have better access between the public and the business groups. This is in part a function of a smaller number of schools and universities to which both the businessperson and the administrator may have gone. But it also follows from the small number of firms which any particular minister has under his/her jurisdiction. Parliamentary constituencies are small, and anyone who wants to be active in a political party is likely to be welcomed.

4. More bureaucrats per person

Reinforcing that tendency for business to have easy access is the fact that there are likely to be a large number of bureaucrats per head of the population, reflecting the lack of economies in administering policies. This also implies a high administrative cost in small countries, which translates to a high burden on firms. This exacerbates the problems of attracting investment and running business in a way that is competitive with larger countries.

5. Fewer interest groups

Although each businessperson may have ready access to politicians, the politicians are likely to be confronted with fewer interest groups. If most of the products consumed are imported then the pressure from producers is not going to be so great as in larger countries. The lack of pressure groups does not mean a lack of pressure on politicians. In fact it may be easier to deal with lobby organizations than individuals who demand access to the minister's ear.

6. Secure definable borders

In addition to the above political features in small economies, islands have some features of their own. One is the ease of defining borders and the relative ease of defending them. Islands probably spend less time worrying about border disputes than other countries, and this can improve trade relations.

Defense costs may be less in the sense that incursions are less likely, but cost per head of defending on a long coastline could be high.

7. Cultural identity easier to define

The sociological parallel to a coastline-defining border is that islanders typically have a strong sense of identity, with somewhat casual movement between countries and more loyalty to a particular nation. As with the ease of defining a sea border, the culture can be defended and preserved easier than in one more itinerant population. Of course in the case of the Caribbean, with so much migration, voluntary and otherwise, this trait may be obscured.

8. Transport cost high for political interaction

The counterpart to high transport costs for goods is that the cost for travel will put a cramp on the ability of civil servants to travel abroad for meetings. This must act to increase the difficulty of collective discussions and decisions, however, technology is once again coming to the rescue, with cheaper ways of communication which in part will substitute for meetings.

9. Border provides convenient point of administration

A sea border can be useful for economic as well as defense monitoring. Islands typically use the border for raising taxes and for controlling markets. Collection of statistics is also often done at the border. This emphasis on the border goes directly against the trend to de-emphasize borders between countries in a global (or regional) marketplace. This poses certain problems, which will be discussed below.

10. Inward looking attitudes likely to be prevalent

At the risk of appearing critical of island politicians, there is a tendency for attitudes to be a little parochial. This is true of large islands, such as Japan or the UK. On the other hand, islands often have a global perspective on world affairs rather than a continental perspective. This mixture of chauvinism and internationalism permeates the history of the region since the Sixteenth Century, when European families were once trying to establish independent settlements and yet were pawns in the power games of Europe.

C. Trade characteristics of a small island economy

A number of conclusions suggest themselves on the basis of these brief observations with respect to the

pattern and type of trade. These tendencies are likely linked to trade policy considerations.

1. Imports have natural protection

Islands have natural protection as a result of high transport costs. This could be enough to keep small import-competing enterprises competitive in an open trade system (i.e. without tariff protection as well). However, lack of economies of scale implies that the goods that are competitive are those that emphasize quality and timeliness rather than the mass-produced 'commodities' that larger countries are able to produce more cheaply.

2. Exports have additional costs

As suggested earlier, the additional transport cost associated with insularity impose a cost on the user of the imported items, as well as on the seller of exports. The exchange rate cannot adjust to offset this cost item: the disincentive to imports tending to push the rate up and the barrier to exports pushing it down. The volume of trade is less than if transport costs were lower, even though it might be higher than if the same sized economy were not an island. Exporters cannot avoid the extra costs when selling goods. Luckily, in the case of service exports, many consumers bear the transport cost themselves (tourists) sometimes enjoying the experience of their shopping expedition (tour boats). This alone gives the economy a tilt toward service industries.

3. Limited range of goods both exported and imported

The range of goods produced in a small island economy is likely to be very limited. As mentioned, this is a reflection that there is likely to be a cost advantage in a smaller number of product lines. But the import range is also going to be limited as a result of small consumer markets and relatively homogeneous tastes. This limited range of traded goods can simplify trade policy considerably. This offsets some of the extra burden which small economies have when it comes to trade diplomacy. But it also is the main reason for the added vulnerability of the small economies.

4. Imported instability likely to be a problem

Unstable import prices can have a devastating impact on small economies for two reasons. First the narrow export base as a result of the limited number of commodities produced implies large swings in terms of trade when world prices fluctuate. This has in the past been offset by preferential trade agreements, which have acted to fix the export price for major commodities. If the importing country

moves away from such a policy, unstable import prices can also destabilize an economy, particularly when the import item (such as petroleum) is important in the cost of manufacturing.

5. More direct link between exports and imports

In a large economy it may be difficult to see the link between exports and imports: in a small economy the link is self-evident. A tax on imports raises prices; increases domestic factor costs, and lowers foreign exchange outlay which tends to strengthen the currency. The export sector is hurt by the higher prices for input items, competes for the same domestic factors, and suffers from reduced foreign demand, as exports become more expensive. In a large economy these effects are real but indirect. In a small economy they are direct and visible. This puts an interesting light on trade policy, which typically separates import from export policy from export promotion decisions.

6. Comparative advantage in goods and services with low transport component

The high transport cost inherent in being cut off from overseas markets implies that the set of goods for which a small island economy has a comparative advantage will include those with low transport costs. This set will include services which are sold electronically and those where the consumer bears the transport cost. But it also includes goods which have a high value by weight. Many of the newer areas of trade policy, such as the liberalization of the services market, will have a considerable relevance to the Eastern Caribbean region for this reason.

7. Comparative advantage in coastal goods

The most obvious place to look for cost advantage is in the use of abundant resources. This means the sea and the beach, together with the accommodation which affords access and views. The issue is not so much whether to develop the market in coastal services but how much and in what way. Competition among neighbouring islands can keep down the profits: cooperation can prevent conflicting claims and exploit the possibility of multi-island vacations. Common policies to manage in a sustainable way the rewards from other coastal and offshore endowments are also likely to be mutually beneficial.

8. Export of cultural goods favored

If the proposition that island cultures are easier to preserve, one should expect to see a comparative advantage in goods with a cultural content. This should show up in musical and artistic exports, based

on indigenous cultural roots, and could also involve inter-island cooperation. Cultural exports are also stimulated by the existence in overseas countries of emigrants from islands, a common phenomenon not unrelated to their small size and limited economic scope.

9. Domestic market not of interest to larger countries

The fact that the domestic market is not large has the side-effect that it is not likely to be of great interest to others. This has the negative implication that market-driven investment is likely to be less than for larger countries. Small islands are not so likely to be production points for the multinational company looking to sell into the local market: such firms will supply these small markets from other countries. These may be in some cases designed to attract such overseas concerns, by allowing for instance for bank secrecy.

10. Tariff revenue larger part of government budget

The larger role in the border as a way to raise taxes implies that tariff revenue is usually going to be a larger part of the government receipts than in other countries. This poses some problems for liberalization policy, as tariff has to be replaced with direct or indirect taxes. However, tariffs are not necessarily the most appropriate way of raising government funds. Moving to other forms of taxes may encounter political resistance, but make economic sense. Broad-based consumption taxes could replace tariffs as the main form of revenue,

D. Trade policy in a small island economy

The combination of economic and political features listed above, along with the trade characteristics, should give the trade policy of small island economies a particular flavor. The following generalizations follow from the propositions above.

1. Trade policy is very important

If trade gains are more important to small island economies it is not surprising that trade policy is the lifeblood of political life and economic strategy. Every politician in the region is aware of such issues as the EU banana controversy and most businessmen would be well aware of the main trade links of their island. The same is decidedly not true in larger countries, where only recently have trade issues made front-page news. The importance of trade policy has its drawbacks: casual remarks and deeds in other countries can have a disproportionate impact on a small island. But at a time when trade is

expanding more rapidly than production in the world, having a business population that is actively engaged in trade must be advantageous.

2. Need for clearly-articulated trade philosophy

Along with the importance of trade policy comes the obligation to articulate trade goals and philosophies. When trade is so important to daily life of the population, it can be important for the government to have the support and understanding of the public in matters of trade negotiations and relations with other countries. This poses problems, not least because trade policy should have a steady long-term component which allows investment and market development whereas the search for consensus in political life often requires flexibility.

3. Border controls more effective

Trade policy in a small island economy is domestic policy operated at the border. Each firm and household will feel the impact of trade policy. As a result, there will be more opportunities to regulate the domestic economy at the border. But ironically the closer links to the world market (i.e. the greater the proportion of traded to non-traded goods) the more important it is to go along with relative price signals from the world market. The cost of distortions in the real exchange rate could be much worse the smaller the economy. Operating at essentially world prices may prove the best way of ensuring that the economy is not distorted by a real exchange rate markedly out of line with that explicit in the market.

4. Administration of SPS easier

One significant advantage that island economies have is that they can maintain pest-free zones more easily than continental countries. With the growth of high quality trade in agricultural goods and foodstuff the maintenance of credible domestic health controls is accentuated. Islands should exploit their relative lack of pest infestations.

5. Vulnerability to 'events' abroad

The additional vulnerability of small island economies gives a particular twist to trade policy. It suggests that contingent protection in the form of safeguards and anti-dumping legislation is likely to be more important. This is exacerbated by the 'one shipload' problem, where the quantities imported can easily swamp the domestic market. It is likely that trade policy in small economies should essentially concentrate on the short run and decline the role of longer run economic management. That way the price and investment signals that come

through from the world market are not distorted either by short run noise or long run bias.

6. Integration with other economies is more difficult

The absence of a land border with neighboring countries, together with the higher cost of interaction at the level of trade officials pose difficulties for economic integration. Natural trade partners may not be next door. Markets cannot practice some restraining arbitrage, and the consumer has less idea what market conditions are like in other countries. On the other hand, the desire to cooperate may increase with a shared sense of isolation and vulnerability. Common language and heritage may also offer some the natural reluctance of islanders to cooperate with neighbors. The OECS stands as an example of successful integration at a level, which exceeds that of CARICOM as a whole as well as most other regional agreements.

7. Trade policy cooperation is more necessary

Despite the additional difficulty in coordination, the benefits of economic integration are likely to be greater than the larger, continental countries. Ironically, the greater the gains from trade, the more trade creation there is likely to follow from regional integration.

Unfortunately, the possibility of trade diversification also increases. This suggests that low external tariffs are essential to prevent high cost trade from starting up within the region. In general, the OECS and CARICOM tend to have fairly low tariffs. But in agriculture the CARICOM Common External Tariff, at 40 %, is supporting highly un-economic trade flows and preventing countries from making full use of world markets.

8. Rules-based trade system advantages

Small island economies stand to gain from trade rules which prevent larger countries from exercising their commercial muscle. Thus the advantage of the WTO is that the rules can be applied equally to the US and Europe as to Grenada and St. Lucia. The dispute settlement process is neutral with respect to size. Of course, some members will always seem more equal than others, as a result of political clout. But a rule-based trade system moderates the impact of power to the advantage of the small.

9. Greater weight in UN-type or consensus agencies

The benefits of being small show up particularly in those institutions which are based on 'one country

one-vote', as mentioned above. This includes the WTO, which works on consensus. Even the Lomé convention has institutions which attempts to give small members an equal voice. The question is how to make use of this disproportionate influence without causing the larger countries to become disenchanted. Playing the right cards is important for small states, whether in CARICOM, the FTAA or indeed in the WTO. But on the right issue, there is no reason why an OECS country should not make its presence felt in an effective way in these negotiating fora.

10. Coordination of public and private sector trade policies easier

A major benefit for trade policy in small island economies should be the greater possibility of coordination between the public and private sector. The combination of limited resources in the public sector and intense interest by the private sector suggests that the private sector itself could play a major role in the preparation, if not the negotiating, stages of trade talks. Clearly the public sector has to establish the objectives, consistent with government policy, but the private sector could develop strategies and provide analysis. Such an approach by CARICOM countries could resonate in other parts of the trading world.

E. Implications for Eastern Caribbean Agricultural Trade Policy

1. Diversification is not a panacea

The standard remedy for economies with a narrow range of export commodities is diversification. The OECS has preached this strategy for years, and the EU has financed diversification schemes. But the logic of the argument above is that diversification needs to be carefully interpreted in the case of the Eastern Caribbean. To move into crops where scale economies are important may not be wise. Diversification into small-scale agriculture could saddle the islands with high cost production. On the other hand, switching say, into another monoculture could be risky. Farmers may need to have some form of income insurance against poor crops. This may be better than self-insurance by within-farm diversification.

2. Trade remedy laws are very important

What seems beyond doubt is that vulnerability to sudden import surges, often in the form of one boat-load of produce, is a serious problem. This suggests that anti-dumping and safeguard policies are vital. These could usefully be coordinated, as the

information needed is similar in neighboring islands. A combined safeguard action by OECS, or CARICOM could have a more effective deterrent value than individual action by one state at a time.

3. Open markets are still best

Beyond the logic of safeguards and trade remedy laws, it is not easy to see why small island economies should retain tariff (and non-tariff) protection. Natural protection keeps the cost of imported materials high and makes it difficult to be competitive. Adding to the burden on exporters and consumers seems pointless. Indeed the wide range of exceptions which are allowed under the CARICOM CET for non-local goods suggests that this message has already been incorporated in policy. But the 40% CET on agricultural goods sticks out as an anomaly. The economic prospects for the region as a whole would be better with lower protection and more consistency in application.

4. Rule-based multilateral system is a guard against aggressive regionalism

It is unfortunate that the WTO has received a bad press in the region as a result of the banana dispute. A rule-based trade system is the best guarantee for small countries. For the reasons given above, the influence of small countries is magnified by voting systems not based on population or size. Moreover, a strong multilateral system based on rules can

counter the weight of regional blocs. Thus the OECS countries stand to benefit by strong rules which make the FTAA consistent with the WTO. It is even possible that in the longer run, obliging the EU to comply with the WTO for the terms of the Lomé Convention could benefit the OECS.

5. Service-based Export economy inevitable

The islands of the Eastern Caribbean are rich in resources which can be used to provide services. Where those services can be transported cheaply, or where the consumer comes to the area to collect them, the transport cost disadvantage is minimized. This suggests that most of the countries in the region will need to exploit their comparative advantage in services, including, but not limited to tourism as a way of developing their income potential. Agriculture is not however, inconsistent with service provision. Service activities do not in general compete for farmland and good farming practice can be complementary to tourism. As the Europeans point out, in a somewhat different context, rural areas are multifunctional. The challenge for the region is to develop both agriculture and tourism, along with other service activities, in a way that provides lucrative markets for farmers and off-farm income sources in rural areas and yet maintain the landscape as a public good.

Trade Performance Indicators for the OECS and Barbados Agricultural Sectors: Issues and Context

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Introduction

This paper will explore the trade performance as well as the trade policy regime of the economies of the OECS and Barbados and identify policy options for these countries in relation to the major trade agreements to which they are a party (WTO Agriculture Agreement, LOMÉ, CARIBCAN, CBI, CARICOM-Venezuela, CARICOM-Columbia) and the proposed FTAA. The paper will conclude with some discussions of the importance of the on-going policy dialogue and formulation of a negotiations agenda for the agri-food sector.

Trade Structure and Performance.

The trade share accounting (TSA) method was employed to examine the trade performance of the OECS countries and Barbados as well as the other CARICOM countries for the period 1985-1995. The

TSA method expresses the change in the aggregate market as the net effect of individual components. Our present interest causes us to focus almost entirely on the total market effect results as well as the results for individual commodity markets. The change in the aggregate market shares is, in all instances derived from the net effect of all individual markets. The analysis is based on two data-bases, UN/FAO and the analysis of the US market based on data obtained from FATUS. Although the analysis of aggregate market shares is conducted based on consistent data up to 1995, this exercise is truly a work in progress.³

³ The difference between this result and our earlier finding that intra-regional agricultural exports had declined is explained by the inclusion of Suriname in the present analysis. In strict terms since Suriname was only admitted

World agricultural trade is divided among the various regional integration groupings of importance to the OECS and Barbados (ECS and BRB, respectively). The integration groupings adopted were CARICOM (CRM) and the OECS as a sub-group, Latin America and the Caribbean as a group (LAC), Andean Pact countries (And) and Venezuela (VEN) and Columbia (COL) as individual countries within the group, European Union (EEC), NAFTA (NFT) and Mexico (MEX), the US (USA) and Canada (CAN) as individual countries within the group, Central American Common Market (ACM), MERCOSUR and Asia (Asi).

The analysis was conducted at the 3-digit level and the 100 commodity groups examined ranged from bulk agricultural products to fertilizers. The lack of substantial trade for several of these commodities as well as for MERCOSUR renders further analysis and reporting futile. Commodities which are relatively unimportant to CARICOM as well as the analysis with respect to trade flows with MERCOSUR will not be presented in this paper. In short the first result of the TSA is that agricultural trade flows between CARICOM and MERCOSUR are negligible. Agricultural firms and industries located within these two integration groupings are therefore not in direct competition with each other in the sense that they do not trade in each other's market. Whether or not CARICOM and MERCOSUR producers trade in the same third-country market will depend to a large extent on the commodity and the size of the market among other factors.

With respect to trade flows within CARICOM, Table 1 indicates that intra-regional exports increased slightly from 11.53% to 11.79% over the two sub-periods 1985-1992 and 1993-1995, respectively. The OECS accounted for 31.46% of CARICOM export share in the 1985-1992 period declining to 22.7% since 1992. Conversely, OECS exports accounted for 11.46% of CARICOM's total agricultural exports in the period prior to 1992. Since then OECS exports have declined to less than 4% of CARICOM exports. Intra-OECS agricultural exports as a share of CARICOM exports declined from 35.4% to under 1% over the two sub-periods, and from 4% to an infinitesimal share of world exports. Agricultural trade between CARICOM and the wider Caribbean (English, French, Dutch and Spanish speaking countries), as well as between the OECS and the

to CARICOM after 1995, and thus should not be included in the analysis.

wider Caribbean added less than 1.5 percentage points to the export shares recorded for CARICOM over both sub-periods. This may be indicative of the tendency towards trade expansion among members of a Customs Union. However it might also be the result of the language and other cultural barriers as well as internal restrictions in the markets of the wider Caribbean. Given the high level of incomes and consumer purchasing power in many of these markets as well as their proximity to the countries of CARICOM and the OECS in particular, attention should be accorded to the identification of the causes of this slow growth in relation to CARICOM exports.

CARICOM's exports remained constant with the ACM at 0.03 of 1% throughout the two periods and there was virtually zero trade with OECS territories. The Andean Pact (And) countries accounted for 0.5 of 1% of CARICOM's export Share. The majority of CARICOM's trade was with Venezuela, which accounted for 93.5% in the pre-1992 period and 82% of the export share between 1993-1995. Considered together Latin America and the Caribbean (LAC) accounted for only 14.3% of CARICOM's agricultural exports shares in the period prior to 1992 and 13.8% between 1993-1995. For the OECS the corresponding figures were 12.3% and 4.9%, respectively. In short while the Latin American and Caribbean markets have maintained their relative position for CARICOM exports as a whole, the LAC market has declined in importance for the OECS economies. As a share of exports between the two sub-periods, the LAC market has become relatively more important for Barbados, increasing from 20.9 to 35.5% as a share of that country's world agricultural exports.

The EEC continued as the leading market for CARICOM exports, 69.7% pre-1992, 67.8% between 1993-1995. The dominance of the export shares to the EEC is indicated in Table 1. For the OECS the export shares to the EEC were consistently around 77%. Grenada, St. Vincent and Antigua experienced declines in their trade shares to this market. CARICOM exports to NAFTA increased from 13.27 to 14.4 % over the pre and post-1992 period. Exports were concentrated to the US which accounted for roughly three quarters of CARICOM's exports. There was a slight increase in Canada's trade share from 20 to 23% of the NAFTA total. The continued increase in the export trade shares to NAFTA provides weak confirmation that there was no immediate negative impact on agricultural imports to the US from CARICOM

resulting from the tariff preferences advanced to Mexico (See "NAFTA or NOT: Implications for CARICOM Agriculture" Antoine, P., and Taylor. T.G. (1993). The Asian economies continue to be

insignificant export markets for CARICOM and the OECS, export shares grew from 2% to 2.7% over the 1985-1995 period.

TABLE 1 - AGRICULTURAL COMMODITY EXPORT SHARES BY DESTINATION AND SUB-REGION
PRE-CET (1985-1992) AND POST-CET (1993-95)

Crms to Wld	DESTINATION BY REGION												
	CRM/Wld	ECS/CRM	ECS/Wld	DR/CRB	CRB/Wld	LAC/Wld	Ven/And	And/Wld	USA/NFT	NFT/Wld	ACM/Wld	EBC/Wld	Asi/Wld
Pro-CET Export Shares %, (1985-1992)													
Fr. CRM	11.53	31.46	3.63	0.75	12.96	14.33	93.51	0.50	75.65	13.27	0.03	69.68	2.07
From-ECSs	11.46	35.26	4.05	0.00	11.77	12.20	20.84	0.03	70.04	2.58	0.00	-	0.53
Ann	2.33	36.48	0.85	-	2.80	3.43	70.27	0.19	55.22	8.11	0.01	70.89	12.25
Dom	2.74	32.34	0.89	-	3.81	3.96	28.57	0.02	70.73	0.95	0.02	93.95	0.58
Gdn	10.45	34.36	3.59	0.00	10.47	15.44	22.74	0.08	49.78	9.82	0.00	69.30	2.69
Skb	9.40	44.11	4.15	-	9.96	10.82	-	0.07	81.22	34.39	0.08	54.43	0.28
Stu	8.27	40.79	3.37	-	8.19	8.28	100.00	0.08	67.19	0.47	0.00	91.21	36.51
Svg	24.42	32.07	7.83	-	24.79	24.84	60.66	0.04	33.24	0.62	-	74.41	0.12
Mr	0.96	41.86	0.40	-	1.14	1.14	-	0.00	36.68	7.81	-	89.80	0.29
Bar	19.74	52.61	10.38	0.08	20.29	20.90	41.29	0.16	68.71	14.51	0.00	61.40	1.93
Jam	8.58	25.04	2.15	1.72	8.63	9.35	97.26	0.12	82.63	21.13	0.00	62.79	5.41
Guy	4.95	12.12	0.60	0.00	6.78	6.84	100.00	0.07	78.55	5.26	0.00	87.40	0.42
T&T	41.49	33.16	13.76	1.54	43.61	47.91	99.74	4.02	91.13	14.93	0.08	35.65	0.67
Btz	6.76	0.60	0.04	-	6.78	11.39	98.12	0.21	70.85	48.67	0.14	47.23	4.24
Sur	0.56	71.76	0.40	0.00	9.41	9.44	0.08	0.01	88.77	0.37	0.02	89.50	0.30
US\$'000													
Post-CET Export Shares %, (1993-1995)													
Fr. CRM	961,411	11.79	22.70	2.68	0.69	0.04	5.30	82.79	75.46	14.40	0.03	67.88	2.76
From-ECSs	102,093	2.38	2.38	0.01	0.00	2.45	5.00	0.25	85.55	11.58	0.00	78.12	1.88
Ann	7,541	0.04	0.00	0.00	-	0.04	5.30	0.50	97.57	51.32	0.00	25.59	9.48
Dom	37,380	0.74	0.00	0.00	-	3.23	3.39	0.00	94.90	1.00	0.00	91.43	2.99
Gdn	12,924	0.94	0.00	0.00	0.00	3.71	7.88	-	89.18	20.31	0.00	61.65	0.26
Skb	13,720	1.16	0.00	0.00	-	1.21	1.23	-	100.00	5.47	0.02	92.99	0.26
Stu	77,829	2.10	0.00	0.00	-	1.89	2.20	0.00	68.08	0.59	0.00	97.17	0.82
Svg	39,446	10.04	0.00	0.00	-	12.05	12.21	-	49.79	0.99	-	86.93	0.08
Mr	3,253	0.31	16.47	0.05	-	2.25	2.76	0.49	99.30	1.46	-	91.07	0.12
Bar	48,531	33.45	54.49	18.23	0.00	32.39	35.84	100.00	52.97	1.66	0.03	59.25	1.55
Jam	278,939	4.33	0.00	0.00	0.00	3.90	4.72	25.33	81.07	21.60	0.01	65.27	7.93
Guy	144,411	2.49	0.00	0.00	0.00	3.01	3.14	100.00	41.47	11.95	0.02	85.39	0.03
T&T	138,841	51.20	23.63	12.10	1.09	55.39	58.90	99.43	89.47	12.90	0.14	26.65	0.93
Btz	108,498	3.94	2.19	0.89	-	3.95	5.05	-	66.94	29.13	0.04	65.81	0.78
Sur	46,560	0.00	0.00	0.00	0.00	3.59	3.59	-	85.21	0.18	0.00	94.51	0.38

Source: ICA © 1998

Table 2. indicates that CARICOM's imports are less concentrated than its export performance. Imports are however dominated by NAFTA which accounted for 52.5% of import shares prior to 1992, growing to 56.7% after 1993. EEC imports ranked second, accounting for 20.87% and 18.71% of CARICOM import shares in the pre- and post 1992- period, respectively. Import shares for the OECS indicate a slightly lower concentration on NAFTA imports (41.4% and 44.4%, respectively) and a higher concentration on imports from the EEC compared to the wider CARICOM grouping.

Intra-regional imports accounted for 10.34% of the total import shares between 1985-1992, expanding

to 11.43% over the 1993-1995 period. Intra-OECS trade as a share of CARICOM trade averaged 32.24% in the pre-1992 period and 6.65% as a share of world trade. Data limitations precluded the accurate computation of intra-OECS import shares for the period 1993-1995. Imports into CARICOM from the Dominican Republic (DR) averaged 6% of total imports from the Caribbean over the pre-1992 period. Import shares for the OECS was 5% for the corresponding period.

Import shares for the DR declined in the period since 1993. Central American Common Market (ACM) import shares remained small throughout, averaging 1.7% in the pre-1992 period and just over 0.6 of 1%

in the period 1993-1995. Import shares for the Andean Pact countries grew marginally but remained low, averaging just over 1% for the 1993-1995 period. Import shares were also insignificant for Asian imports which averaged 1.5% throughout the period. Import shares for Latin America and the Caribbean (LAC) declined slightly from 19% prior to 1992, to 18.99% in the post 1993 period. In general LAC was of slightly greater importance to CARICOM and more so for the OECS as a source of imports rather than a destination for exports.

Based on existing trading patterns, the TSA underscores the importance of the trading relations with the EEC and the US and to a lesser extent Canada for both CARICOM and OECS agriculture. However, it also highlights the limited trading relations with the wider Caribbean and Latin America and should signal to both policy makers and the private sector the need to more thoroughly

explore the fundamental reasons for this lack of trade particularly with our Spanish speaking neighbours. The reasons for the dispassionate approach by agri-food sector participants in CARICOM and the OECS to the FTAA process is to some extent understandable, since as the analysis indicates, these countries do not presently compete in the same markets with many of their Latin American counterparts. This is quite obviously a myopic view of global and hemispheric market integration. Indeed within the process of global market integration and market opening it is the FTAA and the tremendous market access potential which it will provide which could be a major boon for CARICOM and OECS agriculture. While some agri-food industries will come under competitive pressure from imports, because of the potential opportunities it is essential that agriculture not be left out of the emerging trading relations.

TABLE 2 - AGRICULTURAL COMMODITY IMPORT SHARES BY SOURCE AND SUB-REGION
PRE-CET (1985-1992) AND POST-CET (1993-95)

To. CRM	SOURCE BY REGION														
	Crn	Wld	CRM/Wld	BCS/CRM	BCS/Wld	DR/CRB	CRB/Wld	LAC/Wld	Yes/And	And/Wld	USA/NFT	NFT/Wld	ACM/Wld	EEC/Wld	Asi/Wld
	Pre-CET Import Shares %, (1985-1992)														
To. CRM	10.34	28.69	2.97	5.96	10.52	18.99	43.76	0.67	87.94	52.85	1.69	20.87	1.58		
To-ECs:	20.62	32.24	6.66	4.88	22.87	28.32	15.66	1.82	92.88	41.40	0.28	20.88	0.88		
Ann	19.24	30.76	5.92	1.18	19.73	21.74	13.91	0.39	96.23	49.14	0.82	27.25	0.23		
Dom	32.41	46.23	14.98	2.62	34.16	40.24	18.00	1.11	85.71	25.54	1.13	28.74	1.69		
Gda	24.67	16.27	4.01	10.60	28.84	33.12	20.69	1.54	84.65	23.41	0.44	34.60	2.80		
Skb	6.22	28.64	1.78	2.70	6.45	7.43	22.22	0.25	95.72	81.57	0.88	9.80	0.07		
Sha	25.83	43.84	11.12	6.68	28.22	33.56	21.06	1.96	85.85	27.59	0.35	34.83	1.85		
Mar	17.20	49.36	8.49	-	17.22	21.61	19.33	0.27	93.82	15.61	0.00	62.52	0.83		
Srg	20.78	10.53	2.19	2.68	21.58	42.72	5.95	0.80	97.31	36.98	0.85	19.91	0.87		
Bar	21.64	18.75	4.06	1.66	21.64	26.78	50.78	0.67	74.97	39.54	0.61	18.38	1.90		
Jam	8.36	14.41	1.20	8.89	8.35	18.52	14.38	0.42	90.37	62.34	2.92	11.79	1.62		
Guy	12.40	3.20	0.40	0.82	12.47	29.87	100.00	3.83	97.31	52.13	7.83	16.04	1.20		
T&T	10.18	47.87	4.87	7.55	9.63	16.76	32.13	0.57	79.23	46.96	1.81	22.99	2.76		
Btz	3.27	6.50	0.24	0.22	3.68	17.87	70.41	0.42	75.33	46.48	4.57	39.29	0.83		
Sur	1.26	0.88	0.00	30.91	2.32	11.22	78.34	2.91	95.62	34.82	2.20	50.55	2.52		
	US\$'000														
	1993-95	Post-CET Import Shares %, (1993-1995)													
To. CRM	922,218	11.43	5.71	0.65	2.45	11.36	18.87	53.51	1.06	90.38	56.76	0.59	18.71	1.56	
To-ECs:	135,040	19.06	0.01	0.00	0.11	10.28	24.23	36.56	0.48	94.06	44.72	0.08	26.60	0.61	
Ann	29,494	18.24	0.83	0.01	0.35	18.13	19.82	35.29	0.86	96.30	55.30	0.81	21.77	1.54	
Dom	16,874	16.49	0.88	0.00	0.35	16.58	38.38	38.93	0.48	95.81	28.71	0.14	27.34	1.92	
Gda	18,257	30.10	0.88	0.88	0.88	30.14	33.13	32.52	0.38	90.35	32.49	0.80	28.25	0.17	
Skb	9,889	16.55	0.88	0.88	0.88	16.56	17.71	0.88	0.17	91.01	48.91	0.81	30.62	0.83	
Sha	34,687	20.44	0.88	0.88	0.88	21.66	24.72	37.17	0.92	88.93	36.47	0.83	34.84	0.82	
Srg	23,812	11.69	0.88	0.88	0.81	11.76	14.77	40.43	0.59	97.62	63.88	0.87	20.99	0.82	
Mar	2,187	27.79	0.88	0.88	-	27.79	31.87	0.88	0.88	97.71	42.83	2.50	23.17	0.16	
Bar	109,639	28.82	18.14	5.08	0.94	27.84	33.81	50.77	1.59	78.68	36.50	0.47	16.69	1.85	
Jam	250,866	11.69	0.88	0.88	7.83	11.89	19.63	30.50	0.63	93.08	61.51	0.76	11.86	1.31	
Guy	48,821	23.94	0.88	0.88	0.84	23.93	27.99	99.14	3.48	92.49	45.77	0.84	19.62	1.80	
T&T	212,945	5.53	5.63	0.31	3.39	4.86	13.31	64.32	1.30	84.02	55.87	0.64	21.58	3.23	
Btz	43,366	7.94	7.11	0.56	0.82	7.94	21.89	77.69	0.89	72.17	55.28	3.32	25.96	3.21	
Sur	38,179	2.17	0.88	0.88	0.88	2.17	7.08	54.45	1.23	95.23	44.98	0.64	44.71	3.88	

Source: IICA ©1998

Use of Trade Policy Instruments

The slow growth in intra-regional agricultural trade has and continues to be a fairly bothersome issue for policy makers and agri-food sector participants alike. This slowdown has been more severe for the countries of the OECS than for the MDC of the common market. At the minimum it is not unrealistic to expect a Customs Union to foster trade among its constituent members. While it is true that as some countries institute broad-based economic reforms, including the liberalization of trade policy regimes, various industries will react differently. Agriculture's increasing lack of participation in intra-regional trade provides some cause for more thorough explanations. A thorough exploration of these issues requires that analysis be undertaken at the commodity, or failing this, the industry level. While this analysis is beyond the scope of the present paper, a 1996 OECS/ADCU study⁴ reported on the results of Nominal and Effective Protection Coefficients as well as Nominal Tariff Equivalents⁵, which provide useful insights into the actual operation of the tariff and non-tariff measures on "agricultural programme commodities".⁶

In general the OECS/ADCU study indicated that the tariff and non-tariff measures had a distortionary impact on the market for agricultural commodities. The NPCs tended to be somewhat high and were appreciably lower for the Windward, than for the Leeward Islands. For the commodities and countries examined, the level of protection afforded the agri-food sector was significant as indicated by the positive values of the EPC measures. That NPCs exceeded EPCs in absolute values, suggests that producers are being supported through product markets and are being effectively taxed through factor markets. The NTE provides a fairly diverse picture of the significance

of non-tariff measures to the commodities examined for the OECS. In general terms the NTEs were higher for the Leewards than for the Windward Islands, with Dominica and St. Lucia possessing relatively lower NTEs than both St. Vincent and Grenada.

While no explicit estimates of NTE were undertaken for Barbados, an IICA study concluded that "non-tariff trade barriers should be removed immediately on essential agricultural production inputs. On final goods, it is difficult to justify the magnitude of an equivalence tax required to offer the same protection to agricultural products as the existing NTBs, therefore NTBs should be retained at least until 1998. This would give policy makers time to assess the implications of lowering the CET."⁷ The NTE estimates confirmed that the use of NTB to OECS agriculture is quite pervasive. This was also the case for Barbados where of the six types of NTBs used, four affected the agricultural sector: prohibitions, price controls, quotas and quantitative restrictions.

In addition to the NTE estimates, which are admittedly commodity specific, compelling evidence on the use of NTBs is obtained from the trade policy regimes of the countries themselves. A summary of the trade policy regime for the OECS and Barbados is presented in Appendix Table 1. Again this information is a really a work in progress and therefore is not expected to be comprehensive. The indicators of investment and the investment regime are perhaps a less complete than the information on trade policies.

According to Appendix Table 2, tariffs for the OECS and CARICOM exceed those of either the CACM or NAFTA. In addition many commodities are controlled by marketing and or state trading boards. That quantitative restrictions and non-automatic licenses are applied to several food products and to beverages is evident (Table 3). In fact trade and competition policies for beverages between the MDCs of CARICOM and the OECS continued to be the source of much tension. In addition to the QRs indicated in Appendix Table 4, a number of other measures are applied within CARICOM and even among OECS countries

⁴ Antoine. P and Pemberton. C., "Economic Incentives and the Agri-Food Sector of OECS Countries: A Quantitative Assessment." (1996).

⁵ The NTE measure provides an indication of the extent to which non-tariff measures provides protection to domestic producers vis-à-vis foreign competition. The non-tariff measures include, quantitative restrictions as applied through import licensing regimes, quarantine and other border restrictions. The NTE can be measured either in percentage terms or as an "equivalent tariff". The equivalent tariff was adopted as the convention in the OECS/ADCU study.

⁶ Agricultural programme commodities or programme commodities refers to the focus commodities identified in the national diversification strategy of individual OECS territories.

⁷ Antoine. P and C. Mascoll "Evaluating the Impact on the Barbados Agricultural Sector of Altering the Protective Policy Regime: Special Reference to the Common External Tariff." (1994).

which has limited the growth in intra-regional trade.⁸

Both economic theory and empirical studies recognize the relatively higher social cost of NTB and quantitative restrictions compared to tariffs. With the use of a tariff there are essentially two effects: deadweight losses associated with the relatively higher cost of consumption and a revenue transfer effect (part to the producer – part in the form of government revenues). With the use of NTBs, deadweight losses persist and are often amplified as there are additional costs due to additional bureaucratic procedures and generally higher levels of transactions cost.⁹ There is also a loss of revenue in comparison to tariffs. Finger et al (1998) argued that what would be tariff revenue - if a tariff were used - is replaced by a real resource cost.¹⁰ NTBs also have the effect of generating distorted price signals encouraging investment in rent maximizing initiatives. The long term cost of inefficient resource deployment and the inability to adjust or to respond to dynamic market changes usually go unmeasured. Finger et al (1998) contend that such policies (NTBs) prevent trade from having a competitive effect which by extension implies the elimination of its stimulative effect and its ability to impose business discipline and efficiency of resource use.

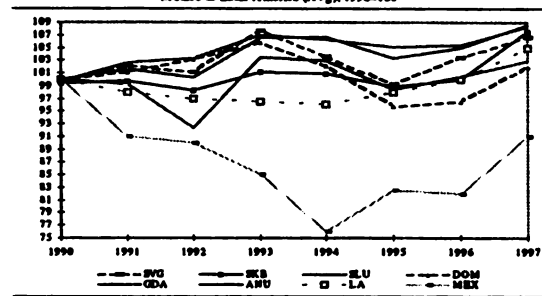
Yet another effect of NTBs relates to their effect on the appreciation of the Real Exchange Rate (RER). RER appreciation has been a feature of CARICOM economies overall since 1994. The appreciation in a country's real exchange rate vis-à-vis competitor countries indicates the relative loss of competitiveness. Real exchange rates for selected OECS countries and Barbados are compared to similar measures for Mexico and Latin America (Fig. 1).

⁸ A brief description of some of these measures is provided in "CARICOM's Agricultural Trade Regime: Observations and Opportunities for Reform" Patrick Antoine (March 1998) published in Proceedings of the Workshop on Global Market Integration and the Agri-Food Sector, March 25-27th 1998 Jamaica, June 1998.

⁹ This is particularly true of the NTB regimes in operation in most of the OECS countries and Barbados, based on the use of licenses which usually require the involvement of both the Ministries of Agriculture and Finance.

¹⁰ Finger, J. Michael, Francis. N., and I. Soloaga. "Trade Policies in the Caribbean Countries: A look at the Positive Agenda". (1998).

Fig. 1: Comparative Real Exchange Rates for OECS Countries, Mexico & Latin America (Avg), 1990-1997



It would be irresponsible not to mention that the use of many of the NTBs which continue to abound in OECS agriculture are contrary to the WTO Agriculture Agreement which has deemed such measures to be inimical to the trade. In this regard it can only be assumed that the continued existence of these measures in the trade policy arsenal of OECS countries as well as Barbados amounts to nothing more than oversight than to determined policy position.

Agricultural Trade Liberalization in the Economies of the OECS and Barbados.

In terms of chronology, the decade of the 1980s corresponds to the era of import substitution for the OECS economies as was the case for most CARICOM countries. The period since 1992 witnesses significant developments in relation to the development of the regional integration process and broad based economic reforms including increased attention to the fiscal policy regime. In the period since 1992, Barbados's overall strategy was also oriented towards maintaining the fixed parity of its foreign exchange and the creation of an enabling environment for foreign investment. Notwithstanding the advances made in other economic sectors as well as at the level of the macro-economy in general, agricultural trade liberalization has proceeded at a rather hesitant pace. Appendix Table 4 reports on the status of economic reforms and trade liberalization, in St. Lucia, Grenada and Barbados.

The liberalization measures instituted by the OECS countries and Barbados hold the potential of providing agriculture with access to cheaper inputs while simultaneously preventing rapid increases in the cost of living. The danger of lagging reforms in agriculture so far behind those of the other economic sector is that when these reforms are ultimately introduced, the benefits of the other reforms are long forgotten and the agricultural sector appears to be adjusting alone.

This quite obviously increases the risks of "backsliding". Of significance is the recent finding that the CARICOM economies which have performed best in relation to agriculture (Trinidad and Tobago, Guyana and Jamaica) are those which have instituted reforms at a faster pace than their counterparts.¹¹ This has obvious implications for the formulation of a trade policy strategy for OECS and Barbados agriculture, particularly in relation to their proposed involvement in the broader hemispheric FTAA arrangement as well as in the definition of their terms of engagement with the CACM, Venezuela and Columbia. If the development of a competitive agricultural sector is the objective of the economies of the OECS and Barbados, then a strategy of "differentiated reciprocity" with varying timetables for phase-out based on the "competitive position" of the individual commodity of industry in question should be pursued.

Agricultural trade liberalization entails much more than the elimination of NTBs or the reduction in tariffs, there is also a significant domestic policy reform agenda which is an important adjunct, but which has been ignored in many of the countries. This has resulted in the import market opening at a faster pace than the realization of export opportunities. Should this trend continue, then agricultural sector participants will become increasingly disgruntled creating opposition to the changes.

Another critical aspect of trade policy is its relationship to investments. Public and private sector investment should be closely related to the evolving market opportunities as well as to the competitiveness of imports (Josling, 1997). Private investment in particular will respond to the incentives provided by these same market opportunities. These incentives include, macro-economic stability which empirical estimates have confirmed is the most important determinant of private sector investment in the case of OECS agriculture (Antoine and Pemberton, 1996). The empirical estimates also indicate that there exist a complementary relationship between public and private sector investment in the case of the Windwards, which implies that government action in certain areas can stimulate or discourage private sector investment. Within the private sector new

forms of cooperation will need to be developed. Already market development and quality controls are emerging as key features of firm/industry success, which again emphasizes the need for public-private sector partnership.

CARICOM countries continue to lag the rest the LAC in the creation of an enabling environment for foreign investment. For agriculture this is amplified by the administrative arrangements and controls which remain in relation to the ownership of land. Still significant restrictions to the removal of the remaining barriers to foreign investment persist.

Towards a Positive Agenda for Agricultural Trade Policy

The overarching objective of the OECS' trade policy framework should be the engendering of competitive agricultural industries by 2005. This will require new modes of institutional cooperation between the public and private sectors. The continuing agenda for public sector action will require inter alia, the creation of an environment conducive to private sector investment which is characterized by modern infrastructure. Market information should be provided on both regional and international market opportunities as well as other public goods without distorting the stimulative effect of price signals to the private sector. In this regard the agenda for agricultural trade policy reform should be viewed from the onset as an opportunity to develop competitiveness rather than as the task of responding to agri-food sector challenges.

The trade policy agenda might be conveniently delineated between (a) issues emerging within the context of the Common Market; and, (b) global and hemispheric issues.

- **Within the Common Market.**

Actions aimed at reforming the CET should be given priority attention. The study to inform adjustment in the CET rates for agriculture is now on-going. However issues which have emerged over the last several years of operation of the CET highlight the following:

- the non-uniformity of CET application;
- possible need for tariff reduction/increase for agriculture as a whole;
- need to eliminate distinction between MDCs and LDCs;
- elimination of use of NTBs to restrict trade;
- reform of rules of origin.

¹¹ See "Current Macro-Economic Situation and Extent of Economic Reform and Trade Liberalization in Participating CARICOM Countries" IICA (1998).

In addition, concerns are beginning to emerge in some quarters that the development of the CSME programme may flounder as increased emphasis is being placed on trade policy negotiations at the global and hemispheric levels. Josling (1997) contends, that the creation of a unified market for goods and services, skilled labor and capital is critical to overcoming the present fragmentation of the regional market. It is therefore essential that the emphasis be maintained on the CSME programme and that concerted efforts be made to coordinate developments in this quarter with the actions and progress of the Caribbean Regional Negotiating Machinery (RNM).

- **Global and Hemispheric Issues**

At the external level emphasis needs to be placed on the upcoming WTO Mini Round on agriculture in 1999. This is not an area which has received enough attention at either the regional or sub-regional levels. In fact in several of the documents referring to developing a strategy for trade negotiations, the fact that this Round is upcoming is quite often overlooked. Issues of significance to CARICOM and the economies of the OECS are as follows:

- a) the administration of the Tariff-Rate Quota (TRQ) system introduced to assure minimum access;
- b) the use and operation of Special Safeguard mechanisms for commodities subject to tariffication and the implementation of export subsidy restraints (particularly from the standpoint of the FTAA and engagement with third countries);
- c) possible amendments to the Agriculture Agreement;
- d) state trading in agriculture, whether under the rubric of Marketing Boards or Marketing Corporations;
- e) issues regarding the relationship between commodity preferences and the multilateral trading system; and
- f) relationship between regional trading blocs and the multilateral process.

Both CARICOM and the OECS sub-region have yet to make effective use of the WTO instruments for agricultural development. Indeed a key opportunity could be lost if the countries fail to develop the consistency between domestic policies and the trade

policy regime. In this regard a careful assessment of the NTBs in place for agriculture would indicate that a significant number of these are ineffective in stimulating domestic production; that their removal would in some instances result in little loss in government revenues; and in still other instances could result in revenue increases. The elimination of many of these NTBs would therefore resound in net welfare gains as well as in lower consumer prices, and would signal to producers the need to invest in areas with higher investment returns. The conversion of many of these NTBs to tariffs at or above the level of the CET will need to be placed squarely on the list of priority actions for agricultural trade policy reform.

In terms of Lomé, three options for developing a strategy with the EU are available:

- Option 1. Non-reciprocity – Essential elements would be to seek WTO extension of the Special and Differentiated treatment clause to cover commodities that are supply vulnerable. This option is valid only as a strategy to buy time for the banana industry. Third best choice.
- Option 2. GSP. Extension to a super-GSP. This option does not cater to the vulnerability of small island states and does not safeguard their traditional market shares.
- Option 3. FTA: Economic partnership agreement with the EU, leading eventually to an FTA. Requires reciprocity (ACP-wide, Regional integration groupings).

For the FTAA process, the following issues are worthy of consideration. The approach to the FTAA as a Single Undertaking Agreement. This is itself controversial due to two strains of competent research. In addition is the issue of the "vulnerability index" based on the relative vulnerability of small islands developing states (SIDS), this is particularly true of the OECS, which have a high degree of vulnerability, (uses indicators which in one way or another relate to trade). Regarding the use of "growth models", there is no established correlation between size and economic growth or macro-economic performance. This suggests that risks and opportunities are no different for small or large economies. Two options are available regarding the approach to the FTAA: either Full participation or Observer status.

Appendices:

**Table 1:
Summary of Trade Policy Regime for the OECS and Barbados**

Trade Restrictions and Arrangements in the OECS & Barbados							
Country	Tariff Structure (%)	Additional Surcharge ^a	QRs & Import License (ML) Required	Other NTBs (State Trading)	Foreign Exchange Transaction	Export Tax & License (XL)	Preferential Trade ^b Arrangements
Antigua & Barbuda*	0-35% for all; 40% for prim. Agric.	CS= 5% CT=10-15%	ML for agric. Goods & other spec. goods	STE for rice & sugar	1% tax application	none	CARICOM OECS
Grenada	0-25% for all; 40% for primary agriculture	CS=5%, ET= 25%, OT	ML for agric goods	STE for some food items	5% ?	XL for agric and tax for sp. Goods	CARICOM
St. Lucia	0-30% for all; 40% for primary agriculture	CS=4%, ET CT= 3-45%	ML for food & other special goods	STE for rice, sugar, flour, fish	2% tax	XL for spec. goods & 2.5% tax for banana(?)	CARICOM OECS
St. Vincent	0-25% for all; 40% for primary agriculture	CT=0-65%, ET CS= 2.5%	ML for food; some banned	STE for oils & fats, sugar, daily prod	none	XL for agric & 2%tax bananas	CARICOM OECS
St. Kitts & Nevis*	0-30% for all; 40% for primary agriculture	CS=3%, ET CT= 15%	ML for some manuf. Goods	STE for chicken, sugar, wheat, eggs	adv. payment	few XL and tax	CARICOM OECS
Dominica	0-30% for all; 40% for primary agric.	CS=15%, ET CT= 25%	ML for manuf. Goods QR for beverages	STE for rice, sugar,	prior approv.	Some XLs req. 1% tax for banana (?)	CARICOM OECS
Barbados	5-20% for all; 40% for primary agriculture	CS=75%, ET VAT-15%	ML & QR for food & other sp. goods	STE for chicken, wine, sugar, milk	1% tax application	XL for some food products	CARICOM

Sources : Trade Policies in the Caribbean Countries: A look at the Positive Agenda. Finger et al, 1998; IICA

Notes: CS =Customs Surcharges; ST=Stamp Tax; CT=Consumption Tax; ET=Excise Tax; VAT=Value Added Tax; OC=Other Charges. B CARICOM = Caribbean Common Market; OECS = Organization of Eastern Caribbean States.

NOTES

* Information not updated as at August 1998.

? Status Uncertain.

Table 2: Average Bi-Lateral Protection Rates by Sector and Region (%)

	Tariff on Imports to United States from				Tariff on Imports to Mexico from:			
	Mexico	Central America	CARICOM	ROW	United States	Central America	CARICOM	ROW
Corn & other feedgrains	18.0	11.9	40.0	11.9	45.0	45.0	40.0	45.0
Other programme crops	0.7	1.5	40.0	1.5	1.9	7.7	40.0	14.2
Fruit & Vegetables	10.5	3.1	40.0	3.1	12.5	3.4	40.0	11.9
Other Agriculture	8.4	9.2	40.0	9.2	8.9	0.3	40.0	11.6
Food Processing	10.8	27.9	40.0	27.9	8.2	8.8	40.0	12.8
	Tariff on Imports to Central America from				Tariff on Imports to CARICOM from:			
	United States	Mexico	CARICOM	ROW	United States	Mexico	Central America	ROW
Corn & other feedgrains	10.1	10.1	10.1	10.1	18.2	18.2	18.2	18.2
Other programme crops	0.0	0.0	0.0	0.0	35.6	35.6	35.6	35.6
Fruit & Vegetables	0.0	0.0	0.0	0.0	28.9	28.9	28.9	28.9
Other Agriculture	0.0	0.0	0.0	0.0	13.7	13.7	13.7	13.7
Food Processing	15.0	15.0	15.0	15.0	19.6	19.6	19.6	19.6

Note: "Tariff" figures include both tariffs and non-tariff barriers (NTBs) for the United States and Mexico only.
Sources: United States tariffs from the US Department of Commerce; US non-tariff barriers from US Department of Agriculture and Clark and Zarrilli (1993); For other countries: UNCTAD, World Bank Country Reports and staff estimates; IICA and CARICOM Secretariat.

Table 3 : OECS & Barbados**Restrictions on Imports from Within CARICOM, QRs and Licensing of Imports from Outside CARICOM**

Country	Restrictions on Imports from CARICOM Partners	Number of product categories subject to QRs or restrictive licensing when imported from outside CARICOM ^a
Antigua & Barbuda*	<ul style="list-style-type: none"> import licenses required for 12 product categories when the imports are from non-OECS 	<ul style="list-style-type: none"> 51- includes most foods, consumer non-durables, households appliances
Grenada	<ul style="list-style-type: none"> duties on cigarettes, rum, motor vehicles import licenses required for 16 product categories - foods, beverages, appliances 	<ul style="list-style-type: none"> 45- food, consumer goods, vehicles
St. Lucia	<ul style="list-style-type: none"> duty on rum from MDC, import licenses required on 30 product categories . 	<ul style="list-style-type: none"> 100
St. Vincent & the Grenadines	<ul style="list-style-type: none"> import licenses required for 16 product categories when imported from Belize or from non-OECS. 	<ul style="list-style-type: none"> 42 - food, beverages, cosmetics, carpets, mats, plastic pipes and tubing (used in the banana industry) recapped tires
St. Kitts & Nevis*	<ul style="list-style-type: none"> import licenses required for sugar, beer, some appliances, foods, beverages. 	<ul style="list-style-type: none"> 45- food, beverages, vehicles, appliances
Dominica	<ul style="list-style-type: none"> duties on cigarettes, rum and motor vehicles from MDCs 	<ul style="list-style-type: none"> 32- food, beverages, consumer non-durables, wooden furniture
Barbados	<ul style="list-style-type: none"> import licenses required for 12 product categories, mostly vegetable oils. 	<ul style="list-style-type: none"> 20- foods, beverages, motor vehicles

Sources : Trade Policies in Caribbean Countries : A Look at the Positive Agenda. Finger et al; IICA

NOTES

* Countries for which information not updated as at August 1998.

Table 4:
Status of Economic Reforms and Trade Liberalisation in Selected OECS Countries & Barbados

	Macro- Economy	Exchange Rate	Fiscal Balance	Tax Reforms	Monetary and Financial Reform	Labour Market	Trade Reform	Agricultural Reform
Barbados	Stabilised	Stable BUT Under Pressure	Improving	Partial	Moderate	Flexible	Moderate	Partial
Grenada	Stabilised	Stable	Stabilised	Partial	Very Little	Fairly Flexible	Little	Little
St.Lucia	Stable	Stable	Stable	Moderate	Little, Inception Phase	Fairly Flexible	Limited	Little

Panel Discussion: Strategies for making the food and agriculture sector more competitive in the world economy

Lead Discussant

Dr. Ardon Iton, Programme Manager, Agriculture Diversification Division
Export Development and Agricultural Diversification Unit (EDADU)

Introduction

Internationally, the food and fibre sector has undergone tremendous changes in the last two decades and predictions are that the rate of change will continue unabated well into the next millennium. Considerable discussion has taken place on the forces driving this change, and although the debate is nowhere near a consensus, the following forces appear to be emerging high on the list of drivers: globalisation and trade liberalisation; technological advances in production; communication and transportation; and consumers' expectations.

Trade liberalisation offers greater opportunities for agricultural producers worldwide to market their products. However, this is not without some consequences and of particular importance to the OECS are the loss of preferential treatment in some markets and the exposure to real competition in an increasingly crowded, complex and changing market place. Globalisation has increased the transboundary flows of goods and services and as a result has altered the marketing strategies employed by firms in the quest for survival. Consumer behaviour has not gone untouched in this sea of change. A few of the more salient changes in consumer behaviour that are driving changes in how business is done in the food system internationally can be listed as follows:

- consumer's increasing demand for:
 - healthier products;
 - environmentally friendly products;
 - convenience;
 - all year round supply of product; and
 - the value for money.

Several of the changes listed immediately above have affected how food is grown, prepared, packaged and labeled, where it is purchased and where power tends to lie in the supply chain. Retailers' close proximity to consumers and their vast amount of information on consumers, provided by scanning technology, have tipped the balance of power in their favour over producers. In an attempt to meet the needs of consumers and remain profitable, retailers are narrowing their supply base

and developing tighter long-term relationships with the remaining suppliers. A holistic view of the entire supply chain is being adopted as a means of removing inefficiencies from the system, minimise distribution and inventory costs and provide the consumer with value for money.

The implications of these changes for agriculture are that farmers will increasingly be producing commodities with specific attributes called for by food processors and other players in the food chain as they respond to the dictates of consumers. Some experts have called the type of farming required to meet discriminating demands of consumers today "Precision Agriculture". If the OECS is to successfully market its non-traditional agricultural products in this environment, fundamental change is required not only by farmers, but by the entire society.

With the uncertainty of the Windward Islands Banana industry coming to the fore in the 1980s, agricultural diversification became a hot topic for Windward Islands leaders and other OECS government officials. The basic proposition then was to find a few crops that could be produced in the islands for export to Europe and the United States. The OECS/ADCU was established in 1989 in an attempt to promote agricultural diversification in the OECS. Under the TROPRO project the OECS/ADC attempted to increase the foreign exchange earnings of member states by exporting non-traditional agricultural products. The initial focus of the programme was on extra-regional markets, such as the United Kingdom, Miami and New York.

Exporting to Europe 10 to 15 years ago was much easier than today. Addresses could be obtained from Trade Promotions Offices, potential clients approached by letter, samples sent to interested importers by sea or air, and the follow-up done by mail and telephone to establish a trade. In essence, an OECS non-traditional agricultural exporter might have never visited the UK, much less New Spitalfields Market, where his/her produce was being sold in the early days. Gone are those days of

“remote controlled selling”. Today, things are drastically different and some of the common phrases associated with agriculture are “remaining globally competitive; environmentally friendly; technologically advance; and sustainable.

Competitiveness is a commonly used term in today’s business lexicon. Some strategy analysts have focused on competitiveness at the national level, others at the industry level and a few at the product level. The definition of the term varies depending on the particular focus. At the country level, for example, competitiveness is the ability of a country to create added value and thus increase national wealth by managing assets and processes, attractiveness and aggressiveness, globality and proximity, and integrating these relationships into an economic and social model. Our focus here is at the product level and for the purposes of brevity, a competitive product is defined as “one that provides the customer with value for money in comparison to the rivals”.

The analytical tools available today to help a company deliver a competitive product in the marketplace are numerous and vary in their degree of sophistication, rigorous cost management techniques, such as Activity Based Costing and Target Costing are now commonly used internationally by food and fibre sector participants. In what follows, an attempt will be made to give a brief overview of agriculture in the OECS, highlight some of the obstacles encountered in marketing of OECS non-traditional agricultural products in these turbulent times and finally, the options available to the OECS to successfully compete in the Agri-Food sector in the 21st Century are discussed.

OECS Agriculture

Agriculture in the member states is dominated by small farmers who produce a variety of crops and rear livestock both for household consumption and the market. However, the agricultural sector generally and production in particular, is constrained by numerous factors, including:

- i. an aging farm population, set in their mode of operation;
- ii. low agricultural productivity and the attendant high cost of production
- iii. small size of farms, many of which are located in steep marginal lands (Tables 1 & 2)
- iv. minimal rationalization of production
- v. the absence of adequate and appropriate information to support strategic planning
- vi. the cyclical nature of supply.

Table 1. Number of Farms and Size Distribution

Selected OECS Country	No. of farms	Size Distribution Acres			
Antigua (1981)	1,988	55.2	40.7	1.5	2.6
St. Kitts (1981)	2,036	57.8	38.2	1.0	3.0
Montserrat (1981)	551	47.5	49.4	2.9	0.2
Dominica (1995)	8,434	13.1	71.6	13.1	2.1
St. Lucia (1996)	13,368	12.2	81.4	5.9	0.5
St. Vincent (1981)	3,032	42.8	54.0	2.7	0.5
Grenada (1995)	11,871	58.0	37.0	4.0	1.0

Source: OECS/ADCU

Table 2: Distribution of Slope Classes in Selected OECS Islands

Slope Class	Antigua		Dominica		Grenada		St. Vincent	
	ha	%	ha	%	ha	%	ha	%
A	1120	4.3	4450	8.1	480	1.6	1225	5.1
B	12290	47.0	1590	3.0	1020	3.4		
C	5525	21.1	6120	11.3	1470	4.9	4900	20.7
D	5170	19.7	15340	28.2	5755	19.2		
E	1940	7.4	18780	34.5	14285	47.6	5715	24.1
F	145	0.5	8080	14.9	6980	23.3	11840	50.1

Source: U.W.I. Trinidad

Based on the experiences of ADCU to date, as few of the major constraints affecting the successful marketing of non-traditional agricultural produce can be listed as follows:

- a) inability to consistently satisfy large orders
- b) lack of a clear identity in extra regional markets
- c) inability to penetrate the supermarkets and multiples in the extra regional markets
- d) poorly developed business relationships between producers, exporters and importers
- e) the marketing concept is not fully understood and appreciated by many regional fresh produce players.

Challenges and Opportunities

First a definition of marketing by McDonald and Morris (The Marketing Plan, A pictorial guide for managers): “The creative management function which promotes trade and employment by assessing customer needs and initiates research and development to meet them. It coordinates the resource of production and distribution of goods and services, determines and directs the nature and scale of the total effort required to sell profitably to the ultimate user”. In a nutshell, marketing is finding out what your consumer wants and providing it at a profit.

The key to marketing globally or otherwise, is serving the customer/consumer - knowing the shoppers, what they want, what is important to them; giving them excitement and value. Based on the consumer characteristics listed in the introduction, the challenges ahead for the OECS non-traditional agricultural sector are formidable and it is imperative that concerted and decisive actions are taken to meet them. In an attempt to identify the strategic options available to the OECS, two opportunities are presented here from a marketing perspective:

The first opportunity for the OECS non-traditional agricultural sector is to be a high volume, low cost producer producing for an undifferentiated commodity market. Based on our experience over the years marketing OECS non-traditional products and the problems encountered in the Windward Islands banana industry to meet volume quotas, one could hardly accept this as a viable strategy to pursue in the short term. Competition in these undifferentiated commodity markets will be very intense, profit margins will be very narrow and one will have to depend on volume to earn an acceptable income.

The second opportunity for the OECS non-traditional agricultural sector is to be a niche market supplier. The discriminating palates of today's consumers have opened a number of specialty niche markets. These markets generally call for smaller scale production units, specialised production and production systems and specialised marketing systems. However, if successfully tapped, these niche markets offer an opportunity to earn tremendous profit. The key here will be a good understanding of market trends and product marketing. Given the limited arable land available for non-traditional agriculture in the OECS today, and the stiff competition agriculture is receiving for this land from other sectors in the economies, in my opinion, the niche market option is the only viable strategy to pursue in the future.

If one agrees with my choice for the OECS - **Niche Market Suppliers** - then the challenges for the OECS non-traditional agricultural sector become relatively well defined. Identifying niche markets takes vision and pursuing them takes courage and nimbleness in production and marketing and a commitment of financial resources to support such

as strategy. We in the OECS all appreciate and to varying degrees, understand the complex challenges associated with remaining globally competitive, environmentally sound and technologically advanced in agriculture. What we need to spend a little time on is the need for a focus. Recent studies by Langham et al (1998) is pertinent in this regard.

In "Understanding Productivity, Its Importance and Relationships to Diversification: Some Agricultural Policy Issues" Langham et al, using data from both Jamaica and Florida found that factors which increase multifactor productivity decrease diversification and vice versa. This suggests that the fundamental economic principle still holds that there are gains to be made from specialisation. This means that it is easier to improve on what is done best rather than to take on new ventures and in the case of the Caribbean, they suggest that it might be better policy to focus on a small portfolio of appropriate crops in which to specialise rather than go for a varied and large mix of crops.

With limited financial resources being made available to agriculture in the OECS by donor agencies, the unavailability of appropriately trained human resources and the urgent need for success stories in the production and marketing of non-traditional agricultural products, the need for a focus is of paramount importance. As was stated earlier, identifying niche markets takes vision and pursuing them takes courage and nimbleness in production and marketing. Being focused calls for discipline - unprecedented discipline. Michael Treacy and Fred Wiersema's book "The Discipline of Market Leaders" offers good guidance for the OECS as they attempt to develop niche marketing strategies for their non-traditional agricultural products. However, the following is a partial list of some of the prerequisites needed to take OECS agriculture successfully into the next millennium:

- 1) a cadre of well-trained, creative and adaptable marketing managers;
- 2) a marketing information system capable of aiding the market planning process to make the transition from market price reporting to market status reporting and market response predicting
- 3) a cadre of farmers of non-traditional crops that see farming as a business and are prepared to produce what the market demands, that is be market-driven. Such producers must build marketing strategies then define production strategies that serve the markets.

- 4) the necessary infrastructural improvements to sustain a successful export programme
- 5) a re-organized Ministry of Agriculture with extension officers capable of stimulating production based on the dictates of the market place
- 6) a new breed of non-traditional agricultural product exporters that recognise the importance of building business relationships
- 7) Research and development institutions that are geared to addressing the daily problems of non-traditional agricultural farmers and not academic publications
- 8) economic policies that are conducive to "Precision Agriculture" and trading
- 9) the rationalisation of production based on scientific information
- 10) the establishment of Production and Marketing Teams for selected crops and a Joint Regional Marketing Programme.

References:

1. Doyle, P. (1995) "Marketing in the New Millennium", *European Journal of Marketing*, Vol 29 No.13, pp.23-41
2. Gronrosse, C. (1994) "From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing", *Management Decision*, Vol.32 No.2, pp.4-20
3. Hughes, D. (1994) (ED) *Breaking with Tradition: Building Partnerships and Alliances in the European Food Industry*, Wye College Press, Ashford, Kent.
4. Iton, C.W.A (1997) "Chanhing Trends in the UK Food Industry: Where Do We Go From Here?" The Agricultural Diversification Coordinating Unit, Discussion Paper.
5. Kinsey, J., Senauer, B., King, R.P. and Phumpiu, P.F. (1996) "Changes in Retail Food Delivery: Signals for Producers, Processors and Distributors", The Retail Food Industry Centre, University of Minnesota, Working Paper 96-03
6. Langham, M.R., Davis, G.G., Pemberton, C.A., Ballyram and Evans, E.A. (1998) *Understanding Productivity, Its Importance and Relationships to Diversification: Some Agricultural Policy Issues*, OECS/ROC Agricultural Diversification Conference, 17-19 March, 1998 St.Georges, Grenada.
7. Shaw, S.A. and Gibbs, J. (1995) "Retailer - Supplier Relationship and the Evolution of Marketing: two food industry case stduies", *International Journal of Retail and Distribution Management*, Vol.23 No.7, pp.7-16.
8. Sisodia, R.S. (1992) "Marketing Information and Decision Support Systems for Services", *Journal of Services Marketing*, Vol.6 No.1, Winter, pp.651-64.
9. Treacy, M. and Wiersema, F. (1995) *The Discipline of Market Leaders*, Addison-Wesley Publishing Company, Reading, MA 01867, U.S.A.
10. Wilson, N. (1996) *The Marketing of Fresh Fruit and Vegetables: All you wanted to know and were too afraid to ask*, Food Industry Management Group, Wye College, University of London.

Summaries of Presentations by Panelists

In addition to the broad overview presented by lead panelist, the following are summaries of the contributions presented by the panelists regarding Strategies For Making The Food and Agriculture more Competitive in the World Economy.

Mr. Francis Robertson

Agency for Rural Transformation (ART) Grenada.

- noted the structural and institutional deficiencies of the Grenadian agricultural and rural sector which adversely affected the sector's ability to contribute to economic growth;
- noted that the emerging characteristics of global environment will impact the pattern of food production, distribution and trade and ultimately, rural well-being;
- emphasised that within these global realities, the deficiencies at the domestic level will constrain the sector's ability to become competitive;
- presented the areas of ART's involvement in facilitating successful agri-food enterprises and marketing, including participation and support to a locally-funded (GRENLEC) Food Security Programme which promoted an "eat what you grow" philosophy, sustainability and improving the quality of life;
- recommended the following areas as requiring consideration in the development of strategies which engender self-reliance, sustainability and overall improvements in standard of living:
 - Government commitment to build and nourish local economies as a first priority

(rationalisation of trade to allow local production and producers to flourish);

- Land use policy that would protect agricultural lands;
- Assertive leadership by the Ministry of Agriculture regarding the focusing of work of regional and international agencies in line with the established priorities of the Grenada Agricultural Sector;
- forging formal linkages with other sectors e.g. Tourism, Agro-processing;
- Political assertiveness at a regional level re: Inequality of the playing field;
- Reallocation of resources to crops with distinct advantages.

Mr. Gregory Renwick

Advisor on Trade and Investment, Ministry of Finance and Planning, Grenada

- noted the influence of the macroeconomic environment on the performance of individual sectors and the overall economy;
- emphasised that the actual economic growth realised fell short of projected growth, a fact which derived in large part from sluggish growth in key sectors;
- noted that open economies generally reported much higher growth rates than closed economies, pointing to the example of Singapore whose economic growth was facilitated by reforms aimed at increasing the level of integration with the global economy;
- stressed that properly managed, openness and liberalisation will assist in stimulating in growth of an economy;
- cautioned however, that the region had to be vigilant in terms of its approach to global integration. In this regard, the importance of creating an enabling environment to facilitate integration into the global economy and simultaneously stimulate economic growth was identified as an imperative.
- stressed the need for investment in research and development and new technologies as a critical enabling factor for agricultural sector development.

Mr. Raphael Brathwaite

National Marketing and Importing Board (NMIB) Grenada

- noted that while existing food security policies continue to be appropriate for the region, it is important to establish a strategy for developing and instituting the necessary regulatory

framework consistent with international trade agreements;

- suggested that such a strategy which supports the development the service industry and small scale agro-industries could be very valuable to economies such as Grenada;
- further noted the importance of human resource development, particularly in terms of educating the agricultural labour force to facilitate the more rapid and efficient adoption of technological and other improvements in the agriculture sector;
- emphasised the need to forge strategic alliances as a means to providing support to programmes aimed at improving the competitiveness of agri-food sector enterprises;
- called for the prioritising of industries in which comparative advantages and linkages with the agricultural sector exist.

Ms. Anthea J. Bullen

Head, Small Enterprise Development Unit Grenada Development Bank (GDB)

- noted that financial support to the agricultural sector between 1992-1996 totaled EC\$0.8 million (or 25% of total funds disbursed);
- emphasised that the GDB viewed the agricultural sector as critical to reviving the rural economy. The role of the GDB in that regard was to provide support through an investment strategy aimed at providing financing towards the establishment of a diversified agricultural sector and local raw material based agro-processing industry;
- noted that the projected investment of EC\$ 5 million in agriculture over the next five-year period was based on technological, institutional, marketing and infrastructural improvements and developments in the sector;
- pointed to the GDB's specific areas and level of investment in agriculture as follows:
 - Poultry, \$2 million over 3 years
 - Aqua-culture and Fishing
 - Vegetable & cut flowers, EC\$1.5m over 5 years
 - Banana production, EC\$1.0m 5 years
 - Agro-processing, EC\$ 3m over 5 years.

Other GDB initiatives aimed at making the agricultural sector competitive in the global market. the Bank included the offer favourable packages to farmers including low interest rates and funds for the purchase of farm vehicles, irrigation equipment and inputs.

Module II - Accessing Global Markets : The European and US Markets

The Future of Lomé - Main Issues

Dr. Anthony P. Gonzales

Senior Lecturer, International Relations - University of the West Indies - St. Augustine Campus

The Lomé Convention which was first signed in 1975 and has been renewed four times consecutively ever since, goes beyond the GSP and affords unlimited non-reciprocal duty-free access to European markets for ACP countries, provided that their goods meet the rules of origin criteria. It also provides market protection for certain basic export staples, such as, sugar, bananas, rice, rum, beef and veal. Some of the basic export commodities of ACP countries are also protected by an export stabilisation mechanism (STABEX) that guarantees stable export earnings mainly from exports to the EU. Such trade assistance is matched by financial and technical support from the European Development Fund which under its regional and national indicative programmes, offers assistance in the development of a wide range of infrastructural projects, provides emergency aid and facilitates structural adjustment.

Over the years, the Lomé Convention has been extended way beyond economic cooperation where it initially started. Today, it includes political, social and cultural dimensions that touch on human rights, good governance and cultural exchange programmes. All these dimensions are interlocked in a web of policy dialogue and conditionalities whose objective is to devise a holistic approach to development.

The new dynamics of globalisation and liberalisation are presenting significant challenges to the ways in which the Lomé agreements have operated and continue to operate. This is evident in the current post- Lomé IV debate where a number of contentious issues have emerged. Following the conclusion of the 1994 Uruguay Round and the establishment of the WTO, developing countries agreed to make several concessions. They committed themselves to tariff bindings and other trade disciplines between the least developed and developing countries. The latter accepted reciprocity (though phased) on a wide range of trade-related matters such as intellectual property rights, trade related investment, standards etc.

Even though it contains such a large number of least developed countries, the Lomé Convention cannot

remain isolated from such important developments in graduation and differentiation. At the heart of the debate is the pace at which ACP countries should integrate into the world economy. It has raised several contentious issues such as:

- the timing and quality of reciprocity,
- the vulnerability of small states,
- the regionalisation of the arrangement and its implications for ACP solidarity; and
- the need to focus on the poorest and neediest.

These are all matters of transitional dynamics which are complex and in the case of the Caribbean, are further compounded by the imperative to make trade policy choices compatible between the Americas (FTAA) and Europe (Lomé).

In the final analysis, the outcome will largely hinge on whether the Caribbean chooses a regional approach or an ACP group approach. The EU's preference is for negotiating separate regional trade agreements under an umbrella ACP/EU agreement. The Caribbean has opted for ACP solidarity, aware of the fact that there are important regional differences to be respected in the negotiation of trade matters. The fact however, that the Protocols are ACP-wide and depend heavily on the collective strength of the group compels the Caribbean to ensure that the ACP solidarity keeps some depth.

So far, the EU has indicated some interest in continuing the commodity protocols. They appear also to be willing to roll over the Lomé Convention for another five years on condition that the ACP countries, at least, the developing ones among them, commit themselves to negotiating a future of reciprocity after 2005. According to the EU, such negotiations should begin in 2002. The ACP countries have some difficulty with this time frame. They do not see ACP regions as being in a position by that time, to start discussing Regional Economic Partnership Agreements (REPAs), the basis of which will be the creation of Free Trade Areas (FTAs) over some transition period that would be WTO compatible.

In recognition of its vulnerability, the Caribbean is seeking a WTO waiver to allow the Lomé

Convention to be extended for a longer period as well as possibly some changes to Article 24 in the WTO which governs the speed and content of the Free Trade Areas. ACP countries have also expressed strong interest in improved provisions for services as well as funds for diversification and enhancing competitiveness.

In conclusion, at present, life beyond Lomé IV is still to be determined. What happens particularly after 2005 remains rather murky. The new political conditions being laid down by the EU are onerous

and in many ways of beyond the boundaries of minimum respect for ACP sovereignty or what little has been left of it. With increasing pressure on the commodity protocols coming from the EU's Common Agricultural Policy (CAP) and the WTO, the future is even much more uncertain for the Caribbean. In these circumstances, increasing the level of competitiveness of export commodities remains the safest option in facing up to that future and particularly, if the region is to successfully continue to access the EU market after 2005.

Changing Consumer Attitudes to Food Safety and Policy Changes in the European Union

Uwe Wissenbach

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Directorate-General XXIV - Consumer Policy and Consumer Health Protection

Introduction

A eurobarometer survey last year revealed the most important question of consumers' concern: Food safety. More than two thirds of European consumers (68%) said they were worried about the safety of their food. The BSE (mad cow disease) crisis had demonstrated all too clearly how consumer health can be put aside. Today, genetically modified food, the use of growth promoters, the existence of pesticide and dioxin residues in food, *salmonella*, *E-coli*, *antimicrobial* resistance add to widespread consumer unease about what they eat.

The European Commission drew lessons from the BSE crisis and decided to place health and food safety at the centre of a new political initiative. For 1998, its work programme defined five priorities:

- i. Employment
- ii. Euro
- iii. Agenda 2000
- iv. the Union in the world, and, last but not least
- v. enforced efforts for health and living quality of the citizens, in particular in relation to food safety.

In the US, health officials estimate that food-borne diseases account for about 9,000 deaths a year. Comparable, consolidated data for the European Union are not available. However, it can be assumed that reported cases are only the tip of the iceberg. In any case, prevention is cheaper than repair. This is why the application of the Hazard Analysis Critical Control Point (HACCP) principle is a cornerstone of our food policy.

In the following, reasons for the European Commission's new impetus on food safety are outlined, followed by a description of this approach, and an attempt to show how the shaken consumer confidence in food safety can be regained.

Food Safety : Concerns and Priorities

According to UK statistics, most cases of food poisoning happen in restaurants, followed by private homes. It is true that each consumer can minimize the risk of food poisoning by properly storing food to avoid cross contamination, by controlling storage temperatures and by thorough cooking. Therefore in terms of HACCP, the kitchen could be seen as the last critical control point. But it would be too easy to load the burden of safe and healthy food only, onto the shoulders of the consumer. BSE has illustrated the importance of preventing contamination at the earliest point in the food – and even the feed chain. Industry and agriculture, commerce and public authorities in the Member States and at European level can therefore not be exempted from their responsibilities. And of course this is valid for those countries which import feed or foodstuffs into the EU as well.

The basic role for assuring the safe production and marketing of food products will always have to remain with agriculture, the industry and commerce. HACCP is an important tool for this. Member States and Third Countries must control the proper use of HACCP systems and, more generally, ensure the respect of European safety standards for food consumed in the Community.

The Commission has induced a new political departure, aimed at gradually establishing a proper food policy to protect consumer health. Food safety is a necessary prerequisite for this and also at the very root of a proper functioning of the market. Therefore food safety is in the interest of both, the consumer and the producer. The Commission's *Communication "Consumer Health and Food Safety"* from 30 April 1997 and its Green Book on food legislation laid the foundations for this food policy. The Green Book will have a follow-up in the of fall 1998 and beyond. The restructuring of the Commission's services and their reorientation towards consumer health already took place on 1 April 1997. It reinforced three complementary instruments which will serve as a platform for an effective policy for the protection of consumers and their health: Scientific advice, risk analysis and control.

Scientific advice, risk analysis and control: The Commission's new approach

a) Scientific Advice

Regulatory measures are often based on scientific advice. The Community obtains scientific advice mainly from the work of its scientific committees. The scientific advice system was overhauled in November 1997 and has now been operating for ten months in the new structure. The mandates of eight specific committees and the multidisciplinary scientific steering committee were revised. The new members were selected through a public call for expression of interest, based on excellency and published criteria. 1126 expressions of interest were submitted to the Commission. 131 experts from the 15 Member States, Norway and Israel were nominated for the first three-year term.

The committees operate independently: they gave themselves their own rules of procedure. Members have to declare an interest if they are not independent in one or the other topic. They nominate a rapporteur for each opinion. Transparency is the third guiding principle of the work of the committees: Names of members, agendas and opinions are publicly available on the internet:

- (<http://europa.eu.int/comm/dg24/> (home page consumer policy and consumer health protection))
- or http://europa.eu.int/comm/dg24/health/sc/index_en.html (scientific committees).

The information is also sent by fax to around 100 consumer organisations immediately after adoption. Minority opinions are also published. Sometimes, preliminary opinions are put on the internet for peer review before the final opinion is adopted. Thus, the latest scientific advice is publicly available with a few mouse clicks. However, a balance between transparency and commercial and scientific confidentiality must be found, to ensure competitiveness of industry and to avoid unnecessary complications.

The scientific committees have an advisory role. They are consulted whenever a legal act requires it, for example in veterinary questions, public health, food safety or safety of cosmetic products. They may also be consulted on other questions relevant to consumer health and food safety. Their task includes to examine critically risk assessments made by scientists belonging to Member State organisations, to develop new risk assessment procedures, and to prepare scientific opinions and evaluate scientific principles on which Community health standards are based. On their own initiative, the members of the committees can draw the attention of the Commission to potential or new risks for consumer health.

Since the beginning of their operation under the new structure in November 97, about 150 meetings of the scientific committees and working groups have taken place. 24 opinions served as a basis for legislation or for authorisation. Principle objectives of this restructuring were consumer health and international trade aspects: For the first, the principle of transparency was introduced. As far as international trade is concerned, there is a genuine attachment to trade as part of consumer choice. Safeguard measures restricting trade are recommended only when there is an overriding need to protect consumer health.

b) Risk Evaluation

It has to be very clear that scientific advice cannot substitute for political decision making and that politicians have to take their own decisions, but they are asked to take it on the basis of sound scientific advice.

It is only the first step of a global risk analysis which consists of risk assessment, risk management and risk communication. A risk analysis unit was established in DG XXIV. Its task is to identify future risks, to follow the methodological work at an international level for acceptable basis of action and

to advise the Commission in case of divergent opinions. The European Union is the largest importer in the world of agricultural and food products and one of the largest exporters. In these circumstances, it must make sure that Community health standards are in line with international rights and obligations, such as the WTO, WHO or Codex Alimentarius.

The WTO dispute on hormone-treated meat and meat products between the European Union and the United States of America and Canada is a good example for the international and trade dimension of health questions. The hormone case is the first important test of the WTO's sanitary and phytosanitary rules (SPS), which took effect in 1995. The SPS rules are intended to make sure that trade measures taken in the name of food safety and hygiene are scientifically justified and are not simply protectionist barriers to trade.

The WTO Appellate Body ruled in February 1998 that the EU ban on the use of hormones for growth promotion purposes in meat was not based on a risk assessment, albeit with a number of important clarifications. According to this ruling, sanitary measures must be based on a risk assessment. However, this risk assessment need not necessarily be quantitative, but can also be qualitative. Thus, it can take into account inspection and control standards. Scientifically credible minority opinions from qualified and respected sources can be an acceptable basis for risk management decisions.

c) Inspection and Control

Like scientific advice and risk management, inspection and control are also geared towards the objective of food safety and consumer health. The former veterinary and plant health control and inspection services of the Commission were transformed into the Food and Veterinary Office within DG XXIV. Control activities are being reorganised in order to cover the whole of the food production chain (from plough to plate). EU-inspectors will also concentrate on auditing national control systems (inspect the inspectors). Priorities for missions and guidelines for inspections have been developed. The reporting system for missions was accelerated from four months to 45 days. Results of inspections are made public on the internet. Thus, the Community has created one of the most transparent inspection systems in the world.

How to regain the confidence of consumers

From the previous chapters, it goes without saying that transparency is the essential part of the Commission's policy to regain consumer confidence. After restructuring, DG XXIV operates inspection and control as well as the science side, which are mutually enriching. Hardly any Member State or Third Country has put into place such transparent control and scientific advice systems. This ensures that the basis on which policy decisions are taken, are comprehensible.

However, scientific advice is often seen by consumers as not being impartial. They see the risk that it is influenced by industrial interests, especially after more and more research is commercially motivated and funded. Literature on «corporate sponsored scientific denials», which cite scientific opinions on tobacco and asbestos as examples, exists. To avoid this, members of the scientific committees have to declare interests, as described. Science can find that a product be harmless at one point in time and become dangerous later, when new scientific findings become available. Consumers fear that this could be the case for genetically modified food. The new Commission proposal on the deliberate release into the environment of genetically modified organisms (GMO) includes a mandatory evaluation of GMOs before approval as well as their reevaluation every seven years. This should go some way to reassure consumers.

If a risk can be quantified, a threshold level of negligible and acceptable risk must be determined. The question of "acceptable risk" might be an ethical issue. To put it bluntly: Society seems to accept the cost of smoking-related illnesses or road accidents more easily than those of food poisoning. If the risk is of a qualitative nature, the question may arise on how best to apply the principle of precaution. Substantial work in the field of environment is already available. It must now be adapted to food and food safety.

In this respect different approaches could arise: Should a product be prohibited as long as science has not yet proven that it is harmless? Or should it be authorised until science has identified real dangers? This is not a theoretical question as can be demonstrated with the example of bovine semen: The risk of transmitting BSE by bovine semen has not been identified. On the other hand it is not proven that it is not dangerous. Should bovine semen be traded freely then ?

There is hardly such a thing as "zero risk" - or it can only be obtained with disproportionately high costs. Therefore political decisions are necessary on how much risk a society has to take. To make sure that people understand these decisions, they must be taken by an open process, taking into account cause and effect and the magnitude of impact. The relationship between science (producing a risk assessment) and the precautionary principle (belonging to risk management) must also be laid open.

Dialogue and communication are therefore important tools to regain consumer confidence. After the BSE crisis, a couple of joint activities and conferences were organised by the European Commission and European Parliament: on meat-and-bone meal and on the principles of Food law. A food safety campaign is planned for the end of this year. The participation in this conference is also an excellent forum for international exchange of information.

Accessing the US Markets for Fresh Agricultural Produce: an APHIS Perspective

Arthur T. Flores

APHIS Attaché, Bahamas

Introduction

The Animal Plant Health Inspection Service (APHIS) is an agency of the United States Department of Agriculture (USDA) with the responsibility of excluding, eradicating, surveying, detecting, managing and regulating exotic pests of either animal or plant origin. In January 1998, APHIS opened its new Centre for Plant Health Science and Technology at North Carolina State University Centennial Campus. The Centre will provide state-of-the art scientific and technical support to APHIS programmes that protect US plant resources and facilitate agricultural trade. The new facility will also house an area office for APHIS Veterinary Services and the State office of Plant Protection and Quarantine programmes.

Enabling Legislation and Regulations

Through the Enabling Legislation and Regulations enacted by Congress and the President of the US, Plant Protection and Quarantine (PPQ) is authorised to carry out the mission of protecting American agriculture from plant pests. Agricultural produce from all Caribbean countries seeking entry into the US are regulated by the PPQ. In addition to a general list identifying approved fruits and vegetables from all Caribbean countries, there are individual country regulations and lists for other approved fruits and vegetables. The regulatory actions presented in the plant import manuals are authorised by several legislative acts:

- Plant Quarantine Act
- Federal Plant Pest Act

These prevent the entry of plant pests and pathogens;

- Federal Seed Act ~ restricts entry of agricultural and vegetable seed to ensure seed purity;
- Federal Noxious Weed Act ~ restricts entry of weeds which are determined to be harmful to agricultural crops, livestock, irrigation, navigation, fish and wildlife resources or public health;
- Endangered Species Act (ESA)
- Convention for International Trade in the Engendered Species of Wild Fauna and Flora (CITES)

ESA legislation provides protection for listed species at two levels - endangered and threatened while the CITES is a multinational treaty that regulates the import, export and reexport of listed species of wild fauna and flora.

In addition to the legislation are regulations governing restrictions and/or prohibitions on the movement of specific items into the US from both its domestic territories and trading partners. These span the range of seeds, specified fruits, tubers and vegetables, sand, soil or earth from territories, nursery stock etc. The following provides country guidelines for selected countries of fruits and vegetables enterable by geographic designations for portions of the US.¹²

¹² ALL: enterability through all geographic designations, NP: North Pacific regions; NA: North Atlantic regions; HI: Hawaii; MB: Mexican Border; SAG: South Atlantic & Gulf; PR: Puerto Rico; VI: US Virgin Islands.

Antigua & Barbuda

ALL		
<i>Allium</i> spp.	Ginger root	Pepper
Arrowroot	lemon (smooth skinned)	Pineapple (prohibited into Hawaii)
Asparagus	lemongrass	Queensland arrowroot <i>Canna indica</i>
<i>Brassica oleracea</i>	<i>Cymbopogon</i> spp.	
Breadfruit	Lettuce	
Cassava	Lime, sour	
Corn, green	Mangosteen	Roselle (calyx)
Carcurbit*	Palm Heart	Strawberry
Dasheen	Papaya (prohibited into Hawaii)	Tomato
Eggplant		
NA		
Avocado	Carrot	pigeon pea* (pod or shelled)
Bean* (pod or shelled)	Citrus*	Radish
Cacao bean pod		
SAG		
	Okra (pod), T101 (p*)	Cacao bean pod
NP		
Avocado	Cacao bean pod	Citrus*

Dominica, Commonwealth of

ALL		
<i>Allium</i> spp.	lemon (smooth skinned)	Pepper
Arrowroot	lemongrass	Pineapple (prohibited into Hawaii)
Asparagus	<i>Cymbopogon</i> spp.	Queensland arrowroot <i>Canna indica</i>
<i>Brassica oleracea</i>	Lettuce	
Breadfruit	Lime, sour	
Cassava	Mangosteen	
Corn, green	Orange sweet (commercial shipments only)	Strawberry
Dasheen		Tangerine (commercial shipments only)
Durian (fruit)	Palm Heart	
Eggplant	Papaya (prohibited into Hawaii)	Tomato
Ginger root		
Grapefruit (commercial shipments only)		
NA		
Avocado	Cacao bean pod	Okra (pod)
Bean* (pod or shelled)	Carrot	pigeon pea (pod or shelled)
	Citrus*	Radish
	Curcurbit*	
SAG		
Cacao bean pod	Okra (pod), T101 (p*)	Cucumber
PR & VI		
Citrus*		
NP		
Avocado	Cacao bean pod	Citrus*

Barbados

ALL		
<i>Allium</i> spp.	Ginger root	Pepper
Arrowroot	lemon (smooth skinned)	Pineapple (prohibited into Hawaii)
Asparagus	lemongrass	Queensland arrowroot <i>Canna indica</i>
Banana (flower, fruit)	<i>Cymbopogon</i> spp.	
<i>Brassica oleracea</i>	Lettuce	
Breadfruit	Lime, sour	
Cassava	Mangosteen	Strawberry
Corn, green	Palm Heart	Tomato
Dasheen	Papaya (prohibited into Hawaii)	
Eggplant		
NA		
Avocado	Cacao bean pod	Okra (pod)
Bean* pod or shelled)	Carrot	pigeon pea (pod or shelled)
	Citrus*	Radish
	Curcurbit*	
SAG		
Cacao bean pod	Melon (<i>Cucumis melo</i> only)	
Cucumber	Okra (pod), T101 (p*)	
NP		
Avocado	Cacao bean pod	Citrus*

Grenada

ALL		
Abiu (fruit)	Eggplant	Papaya (prohibited into Hawaii)
<i>Allium</i> spp.	Ginger root	Passionfruit
Arrowroot	Governor's plum	<i>Passiflora</i> spp.
Asparagus	Imbu	Peach palm (fruit)
Avocado	Jackfruit (fruit)	Pepper
Barabdos Cherry (prohibited into Hawaii)	Jambolan (fruit)	Pineapple (prohibited into Hawaii)
Bilimbi (fruit)	Jujube (fruit)	<i>Piper</i> spp. (fruit)
<i>Brassica oleracea</i>	Langsat (fruit)	Queensland arrowroot <i>Canna indica</i>
Breadfruit	lemon (smooth skinned)	
Breadnut (fruit)	Lemongrass	
Carambola	<i>Cymbopogon</i> spp.	
Cassava	Lettuce	
Cocoplum (fruit)	Lime, sour	Rambutan (fruit)
Corn, green	Malay apple (fruit)	Rose apple (fruit)
Curcurbit* (fruit)	Mammeeapple (fruit)	Roselle (calyx)
Dasheen		Santol (fruit)
Durian (fruit)	Mango	Sapote (fruit)
	Mangosteen	<i>Spondias</i> spp. (fruit)
	Palm Heart	Strawberry
		Tomato
NA		
Bean* (pod or shelled)	Carrot	pigeon pea* (pod or shelled)
Cacao bean pod	Citrus*	Radish
	Okra (pod)	
SAG		
Cacao bean pod	Cucumber	(pod,) T101 (p*)
NP		
Cacao bean pod	Citrus*	

* Ivy gourd (*cocconia grandis*) prohibited into Hawaii.

* If destined to an SAG location, require T104(a) (1). If *Cydia fabivora*, *Epinotia aporema*, or *Maruca testulalis* is found, correct regulatory action must be followed.

* Limited to cultivars of *Citrus reticulata* (for example clementine and Unshu orange) ethrog, grapefruit, kumquat, lemon, lime, limequat, orange, Persian lime, pummelo, sour orange, sweet lime and ugli frit

St. Kitts and Nevis

from both islands		
ALL		
<i>Allium</i> spp.	lemon (smooth skinned)	pepper
Arrowroot		Pineapple
Asparagus	lemongrass	(prohibited into Hawaii)
<i>Brassica oleracea</i>	<i>Cymbopogon</i> spp.	Queensland
Breadfruit	Lettuce	arrowroot <i>Canna</i>
Cassava	Lime, sour	<i>indica</i>
Corn, green	Mangosteen	Strawberry
Dasheen	Palm Heart	Tomato
Eggplant	Papaya (prohibited into Hawaii)	
Ginger root		
NA		
Avocado	Carrot	
Bean♣ (pod or shelled)	Citrus*	pigeon pea (pod or shelled)
Cacao bean pod	Okra (pod)	Radish
SAG		
Cacao bean pod	Okra (pod), T101 (p*)	
from St. Kitts only		
ALL		
	Breadnut, <i>Brosimum alicastrum</i>	Curcurbit♣ Sapodilla
PR		
	Avocado	Citrus*
VI		
	Citrus*	
from Nevis only		
NA		
	Curcurbit♣	
SAG		
	Cucumber	
NP		
	Avocado	Citrus*
	cacao bean pod	

St. Lucia

ALL		
<i>Allium</i> spp.	Eggplant	Pepper
Arrowroot	Ginger root	Pineapple
Asparagus	lemon (smooth skinned)	(prohibited into Hawaii)
<i>Brassica oleracea</i>	lemongrass	Queensland
Breadfruit	<i>Cymbopogon</i> spp.	arrowroot <i>Canna</i>
Breadnut	Lettuce	<i>indica</i>
<i>Brosimum alicastrum</i>	Lime, sour	Sapodilla
Cassava	Mangosteen	Strawberry
Corn, green	Palm Heart	Tomato
Curcurbit♣	Papaya (prohibited into Hawaii)	
Dasheen		
NA		
Avocado	Cacao bean pod	Okra (pod)
Bean♣ (pod or shelled)	Carrot	pigeon pea (pod or shelled)
	Citrus*	Radish
SAG		
Cacao bean pod	Okra (pod), T101 (p*)	
PR		
Avocado	Citrus*	
VI		
	Citrus*	

St. Vincent and the Grenadines

ALL		
<i>Allium</i> spp.	Dasheen	Palm Heart
Arrowroot	Eggplant	Papaya (prohibited into Hawaii)
Asparagus	Ginger root	
Avocado	Governor's plum	Passionfruit
Barbados Cherry	Lemon (smooth skinned)	<i>Passiflora</i> spp.
(prohibited into Hawaii)	lemongrass	Pepper
<i>Brassica oleracea</i>	<i>Cymbopogon</i> spp.	Pineapple
Breadfruit	Lime, sour	(prohibited into Hawaii)
Carambola	Mango	Sapodilla
Cassava	Mangosteen	Strawberry
Corn, green	Mombin, <i>Spondias</i> spp.	Tomato
Curcurbit♣		Tumeric
NA		
Bean♣ (pod or shelled)	Carrot	pigeon pea♣ (pod or shelled)
Cacao bean pod	Citrus*	Radish
SAG		
	Cacao bean pod	Okra (pod), T101 (p*)
PR & VI		
	Citrus*	

USDA/APHIS Actions in Resolving Trade-Related SPS Issues.

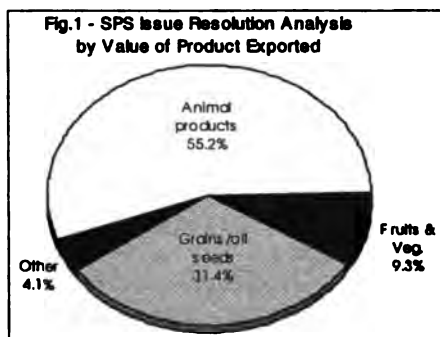
The adoption in 1995 of the WTO's Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) raised the profile of SPS issues as barriers to agricultural trade. Countries who signed the agreement now have a clear obligation to ensure that their import requirements are based on science and are applied in a non-discriminatory manner that does not cause unjustified trade barriers.

For APHIS, an SPS issue arises when an importer requests to "move" something across an international border and it becomes necessary for APHIS scientists and technical staff to discuss with their foreign counterparts scientific issues related to the movement request. An SPS accomplishment takes place when an SPS issue is resolved in a way that enables the movement of commodities and satisfies health concerns of the countries involved. The inclusion of an SPS accomplishment does not necessarily mean that the issue involved an unjustified restriction to trade. Like the US, our trading partners maintain legitimate animal and plant import requirements designed to protect the biological health of their agricultural sectors.

In 1997, USDA actions led to the resolution of 77 SPS issues that enabled US agricultural exports worth almost \$2.2 billion. APHIS and USDA efforts also made possible new or expanded agricultural imports into the US under conditions that met the requirements of the SPS Agreement

while simultaneously safeguarding the animal and plant health in the US. 23 SPS import issues worth over \$9 million were resolved in 1997. The key in the USDA's successes lies in its ability to integrate technical information and trade policy. Numerous SPS issues remain to be resolved and new SPS issues frequently develop. Resolution of these issues requires significant technical expertise, rigorous science-based risk assessments, extensive inter-agency coordination and on-going negotiations with trading partners.

When SPS issues are examined by product type, animal and animal products are the largest category and account for over half the total value of US exports (\$1,202,766,176), grains and oilseeds about 1/3 (\$683,237,816) and fruits and vegetables 9% (\$201,688,552). The category "other" includes nuts, seeds, nursery stock and lumber (Fig.1).



In terms of imports into the US, in 1997, APHIS followed the SPS Agreement's risk assessment principles to enable new imports worth more than \$9 million into the US, without posing a threat to animal or plant health. Table 1 provides a listing of issues resolved to enable imports.

Since ratification of the GATT and the establishment of the WTO, National Plant Health Directors and Chief Veterinary Officers have come under increased pressure to make timely and accurate regulatory decisions about agricultural trade commodities, especially unprocessed plants, plant parts, live animals or animal by-products.

Despite years of formal training, no animal or plant health authority can be familiar with the entire gamut of plant pests that are of potential economic importance, or the various exotic animal diseases that exist in distant countries. National authorities are often requested to conduct complex analysis, such as pest risk assessments or environmental impact studies within a very short time frame, even

when technical staff or comprehensive libraries may be lacking.

The USDA/APHIS aware of the need of foreign institutions linked to plant and animal protection to know about the information available at the US Environmental Protection Agency (EPA), the US Food and Drug Administration (FDA) and APHIS itself, decided to provide to countries, other than the US, different mechanisms, including the Internet and electronic communications, such as e-mail or fax, to obtain information available at these agencies. The information is usually the most up-to-date.

In foreign locations, APHIS-IS (International Services) conducts cooperative agricultural pest and disease programmes and manages preclearance programmes for agricultural products shipped to the US.

New Market Access			
Product	Imported into US from	Trade in 1997 \$'000	Market Potential \$'000
Garlic	All countries	1,250	1,500
Beef	Argentina	345	5,000
Basil	Argentina, Guatemala	0	1
Loek	Belgium, Netherlands	0	40
Babaco	Chile	na	na
Radiccchio	Ecuador, Nicaragua, El Salvador	na	1
Dill	Guatemala	0	1
Mioga ginger	Japan	na	na
Perilla	Korea	0	2
Angelica	Korea	na	1
Avocado	Mexico	1,820	6,000
Strawberries	Morocco	0	35
Beans	Nicaragua	0	150
Eggplant	Nicaragua	0	6
Citrus	South Africa	267	850
Cut flowers	South Africa	0	10
Serrano Ham	Spain	300	450
Ortanique	Spain	na	na
TOTAL		3,982	14,047
Expanded Market Access			
Papaya	Belize	2,515	3,300
Papaya	Costa Rica	1,848	2,000
Swine	Benmark	998	1,300
Peppers	Israel	0	300
Pork	Mexico	0	5
TOTAL		5,352	6,905
NB: na indicates that trade data were not available for the product or were insufficient for a reasonable estimate. 0 indicates that no trade in this product took place with this country in FY 1997.			
Source: USDA Foreign Agricultural Trade of the US and analyst estimates.			

Module III - SPS & Food Safety Export Requirements

Pesticide Residue and Agricultural Exports: The Challenge of Designing and Implementing National Residue Monitoring Programs in the Caribbean

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Abstract

The international directives relating to the control of chemical and non-chemical contaminants which can be found in agricultural products, has forced CARICOM member states to take a more serious look at the question of monitoring and surveillance of these hazards. This is not a simple matter, and must of necessity be based on strong Government support in the improvement of residue testing capability in the region. This paper seeks to explore the problem of pesticide residues, specifically, but also takes a look at some of the broader issues that will affect economic viability of the regions agricultural export sector. The development of a regional monitoring system in this regard is considered to be a key element towards the delivery of safe and wholesome agricultural products to both national and international markets.

1.0. Introduction

Food security and national development are inextricably linked and must be considered to be a priority of Governments in the region. Food security, however, is not limited to increased production, but of necessity must include food safety and protection. This in terms of the quality and wholesomeness of the foods we eat. Of major concern in this regard is the contamination of food supplies by a broad spectrum of chemical, biochemical, microbiological and other contaminants. The implication of the latter in public health over the last two decades has heightened to the point where the presence of such contaminants and their adverse effects, serve as potential barriers to trade in both plant and animal products around the globe.

This increased sensitivity of the consumer has resulted in significant changes in international regulations governing food safety and security. Of particular importance in this international regard, are the specific requirements of the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) effected in 1995 and the need for uniform guidelines to be established for inspection and certification of food products. These regulations, to which

CARICOM countries are signatories, require that edible products entering the international markets must be certified with respect to:

- hygienic practices which govern production of these foods, and
- the levels of biological and non-biological contaminants which may be present in these products.

The regions agricultural sector is faced with a tremendous challenge for the future. This challenge is of a three-fold nature.

- i. to increase the level of science and technology applied to the production of these goods
- ii. to replace a substantial portion of the current large agricultural imports into the region, and
- iii. to facilitate the export of specialized products to the major free trade markets around the world.

One of the critical steps towards realizing the true economic potential within the sector, is in improving our capability to monitor a variety of possible toxic contaminants in both primary and value added products and as such, pesticide residues must be considered, because of their persistence and toxicity.

2.0 Hazardous Contaminants of Concern

2.1 Pesticide Residues

A pesticide may be defined as a chemical compound used externally to kill a pest. In the same breath, a residue may be defined as any compound which accumulates after use whether legally, illegally or by any other means, in the environment (i.e. air, water, soil) in plant, animal and ultimately human tissue. In order to establish a system of monitoring the pesticide residues however, answers must be given to the following question. What pesticide residues should the region's agricultural sector be concerned with?

In December 1997, twenty-four (24) countries agreed to form an Inter-American Network of Food Analysis Laboratories (INFAL). During this meeting, recommendations were made by the chemical contaminant subgroup on six priority contaminants that are of international concern. Heading the list were the Organochlorides (Ocs)

pesticide. These contaminants are used in the management and control of insects and other pests found in both plants and animals (Table 1). International concern in relation to the levels of these pesticides in the food product, stems from the fact that these compounds are:

- lipid soluble and therefore prone to bioaccumulate in fatty tissue
- concentrate in milk, eggs and meat have been suggested to be carcinogenic and along with other pesticides, could cause reproductive disorders.

These contaminants are also of particular concern in high-risk child population, because of the relatively high consumption of whole milk in this group.

Chemical Contaminants of Priority	TEC (%)
1. Organochlorine Pesticides Lindane, endrin, DDT)	90
2. Toxic Heavy Metals (Hg, Cd, As, Pb)	90
3. Sulphonamides	10
4. Aflatoxins	90
5. Paralytic Marine Toxins (PSP, ASP, DSP)	5
6. Additives (NO ₂ /NO ₃)	50

Examples of the use of the organochloride pesticides, are in control of the coffee berry borer beetle (*Hypothenemus hampei* Ferr.) in Jamaica's Blue Mountain Coffee, where increasingly higher levels of endosulfan are being used to control the pest. Accumulation of this pesticide in run off water can find its way into inland fishponds and hence in the population of fresh water tilapia, farmed mainly for export. This fact has led to increased surveillance of endosulfan and its metabolites in these exported products.

Likewise in the treatment of screw-worm (*Cochlimoyia hominivorax* Cowuelet) infestations in both livestock and other livestock animals, the wide spread use of the organochlorides, such as lindane, have up until recently, been used as the major means of controlling this pest in the Caribbean. Preliminary work conducted in our laboratory at the Veterinary Services Division in Jamaica has led to findings of lindane in fat tissue of slaughtered beef and pig and as such the monitoring of this residue, has become even more important.

Another important group of hazardous pesticide contaminates are the organophosphates (Ops). These compounds find use in pest management programs for control of

- Red Rust thrips (*Chaetanaphothrips orchidii*) in bananas
- Citrus root weevil (*Exophthalmus vittatus* among others) in citrus, and
- The Diamondback Moth, (*Plutella Xylostella*) in crucifer crops such as cabbage, cauliflower, broccoli etc.

Diazinon, malathion, parathion and clorpyrifos, to name a few, function by inhibiting the action of the enzyme cholinesterase necessary to effectively control build up of acetylcholine levels. Likewise if found in excessive levels in human tissue metabolism of acetylcholine is also inhibited. These compounds bioaccumulate in muscle and liver tissue (table 2).

Product	Residue	MRL (mg/kgm)
Agricultural Crops		
Banana	Thiabendazole	05.0
Citrus	Thiabendazole	10.0
Cucumber	Deildrin	00.1
Cabbage	Aldrin	00.1
Livestock products		
Pig Fat & Skin	Amitraz	00.40
Goat Meat	Diazinon	00.02
Milk	Lindane	0.008

Methyl bromide (MB) a fumigant used on vegetables and fruits in the region to control the spread of the pink hibiscus mealy bug (*Maconellaicoccus hirsutus*) is known to be an ozone depleting substance. Also, the ability of this compound to bond with DNA, and interfere with DNA replication, makes regulation of the use of this compound important. It should be pointed out, however, that this substance used in quarantine treatment programs in the region for managing the pest however, is not threatening, but must be monitored to ensure safe use of the compound. More importantly, is the fact that its use in the region should facilitate increased inter-regional trade of these products, virtually at a stand still since the pest was first identified in the region.

2.1 Other Contaminants

Although the focus of this paper is on pesticide residues, a brief look must be made on the other important residues of international concern. In this

regard five classes of contaminants are to be considered. Namely the:

- Environmental/industrial contaminants (PCB,PBB,PCT)
- Paralytic marine toxins (Ciguatera, PSB,DSP,ASP)
- Veterinary drug residues (antibiotics, antihelminthics, anticoccidiostats, etc, Table 3)
- Heavy Metal Contaminants (As, Cd,Hg,Pb) and
- Microbiological contaminants.

Class of drug	VDOP	Species
Antimicrobials	Sulphonamides & Tetracyclines	Pig & Poultry (Kidney)
Antihelminthics	Ivermectin, benzimidazoles & Levamisole	Sheep, Goats, Cattle & Fish (Liver, Kidney, Muscle)
Coccidiostats	inophores	Poultry (liver)
Prohibited substances	Clenbuterol, Stilbenes & Chloramphenicol	Cattle and Pigs (Liver, Kidney, retina, bile, urine)

If not effectively monitored, these classes of contaminants are likely to affect the export trade in both plant and animal products from the region. To monitor any of these five categories of contaminants requires a significant investment in both human and financial resources. In each case, specific technical expertise and information are required about the contaminant's toxicity, methods of analysis, which etc. are pre requisites for proper regulation and control of the hazards.

3.0 International Concerns

Several factors have contributed to the international pressures surrounding hazardous contaminants in foods. These factors range from what must be considered the primary objective of providing safe foods to the consumer, to the economic implications of science and technology, which drive increased production. The science and technology behind food production also has a second critical role to play in the international trends we observe; that of Food Security. The result has been the evolution of a number of international protocols and agreements (GATT, WTO, etc.) which affect both food safety and food security at the national and international level.

The issues raised above can be exemplified by specific developments in the European Union and the USA over the past few years. In the EU,

concerns about processing practices in countries wishing to export fish products to the Union, has resulted in the formulation of these goods from "third countries". In addition, directives addressing acceptable levels of contaminants present in animal products, fruits and vegetables have also been listed and are constantly under review. Similarly, in the USA, public concern about microbial contamination in meat (E. Coli O 157:H7), eggs (Salmonella), fruit (Cyclospora) etc., have resulted in public debates and discussions in that nation's food safety system. The result has been in the development of strategies for "Improving the methods of controlling and monitoring food supplies for contaminants".

For the exporting countries of the Caribbean, private sector compliance with HACCP,GMP, GAP, ISO-9000 (quality systems) and ISO-14000 (environmental systems) directives is essential. Likewise, ensuring the competence of public sector testing laboratories through ISO/IEC Guide 25 (General Requirements for the Competence of Calibration and Testing Laboratories) or EU-45000 standards, is also critical. In both cases, compliance or non-compliance to these international directives will influence the region's ability to export to international markets. At the base of these systems is the generation of credible scientific data on contaminants of concern. Generation of credible data however can only be achieved through proficiency testing schemes and the use of validated analytical methods for the control of the contaminants, and therefore this aspect of monitoring for pesticides or any other contaminant, and therefore this aspect of monitoring for pesticides or any other contaminant must be considered a priority.

4.0 Monitoring & Testing Capability

4.1 The Requirements

The development of the region's monitoring capability for pesticide residues cannot be considered in isolation of other hazardous contaminants (particularly in the case of microbiological hazards) all of which can impact negatively on the regions agricultural export. Five criteria can be used as indicators of the residue testing capability within the region and the following categories can be used to assess the Technical Expertise within CARICOM (TEC);

- Research and training capability in the type of contaminant (i.e. pesticide, veterinary drug, etc.)
- Availability of equipment for analyses
- Supporting maintenance services of the equipment

- Availability and accessibility of chemicals and reagents, and
- Presence of validated methods for the contaminant.

For pesticide residues, the major weaknesses in overall TEC, fall in the areas of research and staff training, maintenance, and method validation

The availability of suitably trained staff is the corner stone of any system and must be considered to be a critical parameter in the implementing a residue-monitoring program. The difficulties faced by the region in this area can be pointed to limited research capability and hence the inability to produce highly trained personnel in the field. The current research activities in pesticide, industrial and toxic element analyses at the University of the West Indies, will provide a source of trained personnel in these areas in the future. This however is not the case with the other chemical residues, such as monitoring of veterinary drugs and bio-toxins. Here the problem of obtaining trained staff is even more chronic. Human resource retention in the field is in addition made more difficult when one considers the level of remuneration being offered to those in the field.

For the maintenance category, again the problem relates not only to pesticides, but also in fact to all areas of contaminant testing. This weakness is highlighted in cases where very sensitive and expensive equipment that are used in the assay procedures. For pesticide residues, current routine analyses are conducted by Gas Chromatography (GC). These instruments, costing anywhere between US\$40,000 to \$70,000, require demanding maintenance schedules to ensure accuracy and precision during experiments. For the confirmatory analyses by GC-Mass Spectrometry, the required maintenance is even higher because of the complexity and sensitivity of these instruments.

In the area of method validation, the requirements of ISO/IEC Guide 25 Directives require that all methods used in testing laboratories are assessed for validity. This serves two purposes. First to ensure that within the laboratory there is confidence in the results generated and second, as a defense against illegal challenges to data generated. These two factors must be considered to be of high priority for any successful monitoring programs.

In Table 1, scores have been assigned to each class of contaminant relating to the present level of difficulties in establishing a monitoring system. The

lower scores denote greater difficulties in putting the system in place. Much more work would be necessary to obtain a more accurate picture of the overall technical expertise within CARICOM for residue testing. It should also be pointed out, that these scores represent the innate potential for CARICOM to conduct testing and not actual testing being performed presently for the given hazards. In all categories of hazards, research and hence training capability of present but requires a more focused approach to fulfill the region's international obligations.

4.2 The Challenges

Robinson and Jeggo have four areas that plague regulatory laboratories in developing countries. These are personnel, financial limitations, availability of appropriate assays and establishment of national and international credibility. These represent the challenges which must be overcome if regional food safety and security is to be achieved. Also of importance is the fact that these categories are inter-linked to such an extent that the lack of achievement in any one can lead to trade barriers for exported goods.

5.0 Solutions For Improving Residue Monitoring

The complexity of the issue related to pesticide residue monitoring can only be addressed in two ways:

- Government policies toward food safety must be viewed as a priority and included in their strategic economic planning
- Development of a regional system for the monitoring of hazardous residues in foods. This must include developing laboratories which specialize in particular types of residue analyses.

Probably the most critical element towards meeting the objective of a reliable residue monitoring system for pesticide, veterinary drug, biotoxin and other residues in both agricultural imports and exports, will depend heavily on the government commitment to food safety. The formation of the Inter-American Network of Food Analyses Laboratories (INFAL) is a first step in the process, but this organization must be managed carefully if efficient and effective monitoring is to be achieved in the near future.

Second, the very nature of the Caribbean region makes it impractical for each country to invest in expensive infrastructure, man power etc, to facilitate residue testing. In Jamaica for example, the Government has committed approximately

US\$200,000 towards infrastructure and equipment, to establish a residue monitoring laboratory for foods of animal origin. Yet inputs amounting to almost four (4) times this amount are still required to meet the minimum EU standards for residue testing. The formation of a Regional Food Safety System is the next logical step and in fact, this approach is currently underway through dialogue, consultations and workshops with USDA/FAS and CARICOM member countries from the beginning of 1998. The workshop framework of this system revolves around the three components outlined below:

- i.) Regulatory which includes the strengthening of
 - legislation
 - monitoring and inspection and
 - enforcement
- ii.) Technical Infrastructure including
 - production technologies
 - processing technologies and
 - monitoring technologies
- iii.) Education and Outreach to
 - consumers
 - producers
 - regulators and
 - policy makers

Recently, the Jamaican Government has made a move to address the problem of legislation for residue-monitoring by the introduction of two new Acts. These are the Meat, Meat Products and Meat By-products inspection (Export to specified countries) Act 1989, and the Marine and Aquaculture Products and By-products Inspection Act of 1997.

CONCLUSIONS

There are three dates which CARICOM countries must contend with if the region expects to achieve the objectives of exporting safe foods to the larger markets of the world.

January 1999	WTO Negotiations on Agriculture
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July 1999	Veterinary Drug Testing in the Americas (93/99/ECC)
January 2005	Free Trade Area of the Americas

The challenge of producing foods with safe levels of hazardous contaminants and the ability to test imports for these residues will depend of the region's ability to establish an effective network of laboratories. The dates, which are fast approaching, define the intensity with which we must tackle the challenges.

Government commitment to food safety policies will be pivotal in the fulfillment of the international obligations. Intervention by CARICOM Governments in the development of a regulatory framework, which will enforce food safety standards on producers, is a necessity, and must be considered in the light of the limited volume of exported agricultural products from the region. The objective ultimately is to provide safe and wholesome foods, to both local and international consumers of our agricultural products.

References

1. S.A. Mc. Ewen & W.B McNab, Rev.Sci.tech. Off.Epiz., 1997 16 (2), 683-93.
2. G.V. Pollard, CARAPHIN News, June 1998, No17, p 5-7.
3. W. Cochrane, Inside Laboratory Management, March 1998, 10-11
4. FAO/IAEA Consultants report on ' Veterinary Drug Residues in Developing Countries', Dec, 1997
5. a) FAO Plant Production and Protection Paper, 1998, 145,230
b) FAO Plant Production and Protection Paper, 1990, 103(1), 417.
6. Veterinary Medicines Directorate, Regulation 2377/90, 22 Oct. 1997, Annex 1.
7. Food and Safety form Farm to Table: A National Food-Safety Initiative, Report to the President, May1997.
8. Veterinary Services Division, Annual Report 1996-1997,
9. MOA Data Bank & Evaluation Division 1996
10. M.M. Robinson & M.H. Jeggo, Rev.sci.tech. Off.Int.Epiz., 1998, 17 (2), 454-458.

Food Safety Developments in the US
Mrs. Mary-Ann Keefe
FAS/USDA

This conference presents a wonderful opportunity to share the works of the Foreign Agricultural Service (FAS) in the Caribbean over the past few years and to solicit increased collaboration in our activities. The FAS is committed to the continued expansion of world trade in food products and freer markets. Of course, it is essential that all food safety regulations, including those being developed for fruit and vegetables, are based on scientific principles and are consistent with our international obligations under the WTO and with regional agreements such as NAFTA.

The US government has maintained firm commitment to ensure that the President's food safety initiative is a well coordinated, transparent and consultative effort. The two principal goals of the Foreign Agricultural Services will be to develop the means to identify food-borne cancers more rapidly and accurately and to develop effective interventions to prevent food contamination at each step from farm-to-table. In addition to improving coordination among the Federal agencies, the FAS will serve as a focal point for coordinating research with states, the private sector and academia by means of public-private research partnerships and other means.

Inspection:

The centre-piece of the inspection segment of the initiative revolves around the HACCP concept - science-based preventive approach to safe food production. Under HACCP, the industry identifies possible points in food production, manufacturing and transportation where contamination could occur, called critical control points and then put control measures in place. Last year, a memorandum of understanding was signed forming a public-private partnership for food safety education. The partnership members included FDA, CBC, USDA, industry, consumer groups and the US Department of Education. The partnership initially launched a nation-wide food safety education campaign for the general public. The initiative calls for education outreach programmes targeted to everyone along the farm-to-table chain. One important element of this outreach is the "fight-back" campaign to improve safe-food handling by consumers. Future activities include the development of multi-lingual programmes that promote safe food handling and

preparation in the food service industry and initiatives which address the impact of high turnover of employees. The target audiences for these programmes include teenage workers, small businesses and entrepreneurs.

Part of the President's food safety initiative includes proposed new steps to ensure that our fruits and vegetables, both domestic and imported, meet the highest health and safety standards. This so-called "produce initiative" is forward looking. It not only thoroughly recognises the level of imports that come into the US today, but also builds on the current, scientifically based system in order to effectively deal with the mass volume of increased produce which will be arriving into the US in the future. As part of the produce initiative, the President directed the Secretary of Health and Human Services in partnership with the Secretary of Agriculture and in close cooperation with the agricultural community to issue guidelines on food and agricultural practices known as GAPs, and good manufacturing practices, called GMPs for fruits and vegetables. In response to these directives, the FDA and USDA issued a guide that addresses microbial food safety hazards and good agricultural practices common to the growing, harvesting, packing and transporting of most food and vegetables that are sold to consumers in unprocessed or minimally processed form. This guide is intended to assist growers and packers in continuing to improve the safety of domestic and imported produce. The guide is voluntary, it does not impose any new requirements for domestic or imported produce. The guide focuses on risk reduction, not elimination. It is intended to increase awareness of potential sources of microbial contamination in the field and packing house environments and to provide suggestions for practices that are likely to minimise these hazards.

Alternative approaches may also be applied if they minimize food safety hazards. Growers and packers should use the general recommendations in these guides to tailor food safety practices appropriate to their operations. We have solicited wide-spread input on the GAP and held a series of outreach meetings in the United States. They were well attended by industry and state officials and delegates from foreign industry and governments. The official comment period is over and responsible agencies are

reviewing them and plan to have the document finalised by October.

A common theme of all of the various administrations' initiatives is that the fact that they are based on the underlying principle that public health is our number one priority. Our food safety programmes must be designed in a manner that best protects our public from food borne illness. While it sounds like simple common sense, there remains much we need to know about the hazards of food and their relation to illness in humans. Under the President's initiative, we are rapidly building the scientific base and using it to guide food safety policy and initiatives.

How is this going to affect international trading partners? This is where the role and responsibilities of the Foreign Agricultural Service in Food Safety become important. Central to the mission of the Foreign Agricultural Service is our role in promoting world food security by helping provide the world with safe and nutritious food products. We do this both by helping US farmers export their food products and by cooperating with foreign farmers, key businesses and governments to improve local food production, processing and distribution. FAS also serves as an important liaison to facilitate linkages with other USDA agencies on key international issues including food safety.

The FAS International liaison role spans the spectrum of the USDA's international responsibility, including regulatory issues with agencies, such as the food safety and inspection service, the important research agenda, with agencies such as the agricultural research service and marketing with agencies such as the agricultural marketing service. We also work jointly with agencies outside the USDA, like the FDA and the Environmental Protection Agency. FAS has developed an effective partnership with the agricultural sectors throughout the world. For example since the mid-1980s, FAS has worked closely with the produce industries in the US, Latin America, the Caribbean and Asia to promote concepts of quality grades and standards, post-harvest treatment, improved packaging and distribution for traded fresh fruits and vegetables. That experience will be invaluable in working with those industries on food safety issues. FAS has a number of ongoing activities here and in the Caribbean.

USDA often partners with the USAID on the implementation of agricultural projects, such as the

USAID-CARICOM memorandum of understanding regarding cooperation for Caribbean economic diversification signed in September 1997. The programme is designed to support or assist a variety of activities aimed at economic diversification and preparation for participation in the FTAA. The two activities being implemented under the MoU with US\$1mn for fiscal year 1997 funding through an inter-agency agreement with USDA are understanding the WTO SPS Agreements and the Caribbean Agricultural Trade Policy Project. The activities are managed by the FAS working in collaboration with the CARICOM Secretariat and Regional partners to implement the project. The Caribbean Agricultural Trade Policy Project, under the auspices of which this workshop is implemented, is being implemented by NCFAP and USDA.

Through the first activity - "Understanding the WTO SPS Agreement" - a plan of action has been developed and implementation is underway. One of the activities under this project is specifically targeted at the Eastern Caribbean. Recent infestation of the Pink Hibiscus Mealy Bug (PMB), have had a significantly negative effect on trade in agricultural products among the OECS countries, and from these countries to other Caribbean markets. To address this, IICA is preparing a draft import-export protocol in consultation with regional partners and USDA-APHIS for specific commodities for those countries infested with the PMB. The protocols will be developed utilising the International Plant Protection Committee's (IPPC) international standards for pest risk assessments, phytosanitary measures, export certification system and the CARDI systems approach to achieve quarantine security.

In terms of our efforts in the region on food safety, the USDA and the FDA along with CARICOM Secretariat in collaboration with our regional partners, submitted a proposal to USAID for funding. The purpose of the proposal is to assist CARICOM in designing and implementing food safety systems which will include direct involvement with the agri-business community to meet international and US food standards. This will assist CARICOM members to ensure a safe and exportable food supply. This initiative was launched with a workshop in Jamaica the week of September 13th, 1998 on "Food Safety Initiatives Influencing Hemispheric Trade". This workshop was used as a stage setter for the Caribbean Food Safety Initiative.

FAS has many other international programmes and initiatives in relation to food safety. We provide

training opportunities and collaborative research programmes to our international partners throughout the world. A good example of our training in technical assistance is the Conference Fellowship programme which provides short-term training of between 3 - 6 weeks in the US for international agriculturalists. Training opportunities are for senior and mid-level specialists and administrators from the public and private sectors concerned with agricultural trade, agri-business development, management, policy, marketing and technology transfer. Over the past three years the conference programme has provided food safety and sanitary and phytosanitary training to over one hundred and twenty international participants from 35 countries.

Another area is data management where the FAS is working cooperatively with APHIS to develop a database aimed at tracking international visitors, particularly those visitors who are interested in sanitary and phytosanitary issues including food

safety. A series of SPS distance learning modes are currently being developed. Under the WTO-SPS project, USDA is working with IICA to ensure that Caribbean examples are being used in the modules. Some mention must be made of our work with international organisations, particularly in terms of our facilitatory role towards the harmonization of sanitary and phytosanitary standards. In this regard, we work closely with official multilateral standard-setting bodies, such as Codex Alimentarius and the IPPC of FAO. FAS also works closely with regional organisation, including IICA, in several technical areas related to food safety and agricultural health.

It is my hope that we will continue to open communication, collaboration and feedback from all interested parties. Our efforts will succeed in tackling the challenge before us - namely to ensure that consumers around the globe have access to healthy, safe and nutritious foods at all times.

The WTO Agreement on Sanitary and Phytosanitary Measures ~ Implications for the Eastern Caribbean States and Barbados

Dr. Sandra Vokaty

Coordinator, Agricultural Health, IICA Caribbean Regional Centre

All CARICOM countries are signatory to the World Trade Organisation, including the Agreement on Sanitary and Phytosanitary (SPS) Measures, with the exceptions of the Bahamas and Montserrat. The purpose of this presentation is to review the status of compliance with the SPS Agreement in the Eastern Caribbean States and Barbados.

The purpose of the WTO Agreement on Sanitary and Phytosanitary (SPS) measures is to ensure that SPS measures are used to protect animal, plant and human health and are not used arbitrarily as barriers to trade. As all the other barriers are being removed, we expect there will be more and more pressure for governments to try to use SPS measures in a protectionist manner to reduce trade. In this regard, the SPS Agreement is very clear in that any decisions to place an embargo or similar measure should be based on accurate scientific data and must pose either risk to animal, plant or human health in a country. There is a lot of emphasis placed on the fact that all these decisions must be based on sound and accurate scientific data.

This obviously has implications for legislation. It is imperative that all countries in the region, and

particularly those which are WTO members, seek to harmonize their standards with the international standards. This has implications for their animal quarantine acts, their plant quarantine acts, their pesticide acts, their food acts etc. Based on my experience in the Caribbean over seven years, passing an act in the Caribbean is not an easy process. It may take up to 20 years to get this act passed. But it is becoming an increasing priority and getting more attention than it used to.

One year ago, in September 1997, IICA ran a survey in all our Caribbean member states to assess the status of compliance with the SPS agreement. Table 1 summarises the status of legislation as responded to by the Ministries of Agriculture. Table 1 shows the year of current legislation for the Animal Quarantine, Plant Quarantine and Pesticide Control. For animal quarantine, keeping in mind that the SPS Agreement came into effect January 1, 1995, the only two countries that have up-to-date animal quarantine legislation are St. Lucia and St. Kitts & Nevis. A determination still needs to be made by a legal expert to assess these acts for compatibility with the WTO and international SPS standards put forward by the OIE and IPPC and the SPS

Agreement. That has not been done yet. However, under the new USAID/CARICOM SPS project, there is funding allocated for a legal consultant to examine animal quarantine acts in the Caribbean and propose model legislation so the countries can get on the fast track in developing their own national legislation. So there will be some assistance in the very near future from the USAID-funded project.

Table 1: ECS and Barbados: Updated Legislation

	Animal Quarantine	Plant Quarantine	Pesticides	In process of adaptation
Antigua & Barbuda	1986	1941	1973	Y
Barbados	1961	1995	1974	Y
Dominica	1991	1986	1987	N
Grenada	1991	1986	na	N
St.Kitts & Nevis	1997	1932	1973	Y (plant health)
St.Lucia	1995	1988	1975	N
St.Vincent & Grenadines	1994	1941	1973	Y

Source: IICA

Plant quarantine legislation is not in as good shape as animal quarantine. Among the Eastern Caribbean States and Barbados, the most recent Plant Quarantine Act was in Barbados, which passed their Plant Quarantine Act in 1995. Following a request from CARICOM Secretariat, the IPPC of the FAO is considering a TCP to evaluate the plant quarantine legislation in the Caribbean and determine in whether it is in harmony with the international standards under the WTO SPS Agreement. Nevertheless, although there is external assistance available to assist these countries, the responsibility lies with the individual countries in drafting their own national legislation.

Pesticides Acts are not current at all and pesticide overuse and abuse are very big problems in the Caribbean. It is important that countries have legislation to regulate pesticides being imported and used, both from the standpoint of domestic food safety and exported produce. Countries must regulate and monitor the pesticides being imported and have registration of these sorts of products. It is important to pass legislation banning the importation of very toxic or hazardous chemicals, or license them for use only under specific circumstances or on specific crops.

Implications:

Transparency is an important article in the SPS agreement and it requires that each country set up national enquiry points to notify the WTO of any SPS measures adopted after January 1, 1995. These

enquiry points are usually existing officer (s) in the Ministry of Agriculture who are given responsibility for notification to trading partners and the WTO. The SPS Enquiry Points are required to notify the WTO in advance of

- new proposed measures
- revision of existing measures
- no international standard exists
- proposed measure deviated from international standards.

They also should be a one-stop-shop for information on control, inspection procedures, quarantine treatment, pesticide additive and food additive approval procedures. So this person or office should gather up all this information or, at least, know where to access it. This is one of the easiest of the obligations for the countries to comply with. All they have to do is designate a person with a phone and a fax as their enquiry point, and proceed in notifying the WTO of any new SPS measures.

Many Caribbean Ministries of Agriculture seem to have a misconception that their enquiry point is in the Ministry of Trade. Well this enquiry point is actually specific to SPS measures and it really would be difficult for someone in the Ministry of Trade to deal with these sorts of enquiries. We do recommend that the enquiry point be someone in the Ministry of Agriculture, specifically for agriculture or food related SPS matters. As shown in Table 2, as of one year ago, only Barbados and St. Vincent & the Grenadines had established SPS enquiry points.

Table 2: Status of Commitment on Establishing Enquiry Points on SPS: Eastern Caribbean Countries and Barbados

September 1997	Established on Enquiry Point for WTO on SPS
Antigua & Barbuda	N
Barbados	Y
Dominica	Y
Grenada	N
St.Kitts & Nevis	N
St.Lucia	N
St.Vincent & the Grenadines	Y

Source: IICA

Risk Analysis is another obligation under transparency, i.e. decisions to accept or not accept agricultural importations must be based on scientific assessments of the risk involved. Traditionally in the Caribbean, because of the small size of plant protection and veterinary services, there was the view that countries could not afford to take risks at all, so they would just keep out products from any

country that had a serious pest and disease. This "zero risk" policy is no longer acceptable, under the SPS Agreement. The decision to reject an animal product must be based on risk analysis that is scientifically defensible. The particular product must pose a significant risk to national human, animal or plant health in the importing country.

This is something that is lacking in the Caribbean - understanding of scientific techniques to conduct risk analyses. We need to do more on a regional basis in the Caribbean with capacity building in this area. It is not really necessary for a unit to be established in each country to do risk analysis; a lot of it could be addressed on a regional basis. However, it is increasingly necessary for the national plant and animal quarantine services to have updated information on the international pest and disease status and more and more of this information is available on the Internet. It is therefore disappointing that, although most plant quarantine offices in the region have computer facilities, most do not have access to the Internet.

Risk management measures should be taken into consideration as much as possible when conducting a risk assessment. There are many things that a country can do to reduce the risk of food products that they are exporting. The importing countries really have to look scientifically at all the different risk management measures that the product or the animal may be treated with before entering their country. These risk management or risk mitigation measures include export testing, pre-export inspection, quarantine, vaccination, pasteurisation and processing. There can be good data to document the fact that although a country has this pest in a particular product, this particular shipment is risk free or that a quarantine officer certified it to be risk free. Examples of quarantine measures include hot water or methyl bromide treatments, post-entry quarantine, vaccination in the case of animals and people, and for things like dairy products, pasteurization or heat treatments can render a product safe. If the exporting country can prove that any of these treatments render a product safe, then the importing country has to accept that.

Table 3 presents information regarding the status of establishment of risk analysis units in the Caribbean. The Caribbean veterinary services are actually a little bit ahead of the plant quarantine services when it comes to regional integration for risk analysis purposes. For example, Panama has applied to export beef to CARICOM. The Chief Veterinary

Officers of CARICOM nominated two CVOs, from Dominica and Jamaica, to go to Panama to undertake risk assessment, report back to the CARICOM CVOs and then they will take a decision for the CARICOM region. No one country can make a unilateral decision, because they feel that if they are going to take the risk of foot and mouth disease or another particular disease originating from Panama, this importation would put the whole region at risk. The plant quarantine officers do not have such a unified approach at this point. This may be because the CPPC has not met since 1993, and is basically defunct, so there is no functional regional coordinating body for plant health matters. The Caribbean is the only region in the Americas with no regional plant protection organisation.

Table 3: Establishment of Risk Analysis Units in the Eastern Caribbean and Barbados

September, 1997	Animal Health	Plant Protection
Antigua & Barbuda	N	N
Barbados	N	N
Dominica	N	N
Grenada	N	N
St. Kitts & Nevis	N	N
St. Lucia	N	N
St. Vincent & Grenadines	N	Y

Source: IICA

Surveillance is very important because each exporting country is required to document national disease status with hard data. They must be very scientific in how they conduct their surveillance, i.e. sampling methods, field collection of data, lab testing, data analysis and summarization to prove to the importing countries that they are safe. It is also important from an importing country's standpoint because more of these products are coming into a country and putting agriculture at risk, therefore surveillance is necessary for early detection of new pests or diseases. So countries should be conducting surveillance on a continuous basis to ensure that they have not got new pests and diseases such as fruit flies, pink mealy bug, or Classical Swine Fever.

In the ECS and Barbados we asked the question, how many countries have surveillance systems for animal and plant health. The status as presented in Table 4, is actually not too bad since all countries report that they have animal health surveillance systems. This may partially be a result of the CARAPHIN project offering regional training in the early 1990s in epidemiology, and surveillance.

Table 4: Pest and Disease Surveillance- Central Surveillance System with Computer Equipment,

September, 1997	Animal Health	Plant Health
Antigua & Barbuda	Y	Y
Barbados	Y	N
Dominica	Y	Y
Grenada	Y	Y
St.Kitts & Nevis	Y	N/A
St.Lucia	Y	Y
St.Vincent & Grenadines	Y	Y

Source: IICA

Table 5: Pest and Disease Surveillance- Surveys to Detect New Pests & Diseases

September, 1997	Animal Health	Plant Health
Antigua & Barbuda	Sporadically	Regularly
Barbados	Regularly (TB, Brucellosis, Bont Tick)	Regularly (fruit fly & PMB)
Dominica	Sporadically	Sporadically
Grenada	Regularly	Regularly
St.Kitts & Nevis	Sporadically	N/A
St.Lucia	Sporadically	Sporadically
St.Vincent & Grenadines	Regularly	Regularly

Source: IICA

In terms of emergency preparedness, countries should develop national emergency plans and manuals to coordinate effective response to the introduction of foreign pests and diseases. And that is not enough, but just a first step. They should then conduct simulation exercises to test their true level of preparedness and make adjustments. In this sense, the Caribbean has a lot to learn from the veterinary service of Jamaica; they were the first in the Caribbean to privatise, to develop their emergency preparedness plan for exotic animal disease and they conduct regular animal health emergency simulation exercises, to test and improve their state of preparedness in the event of a new disease introduction. Table 6 reports on the status of National Emergency Preparedness Plan for Foreign Pests and Diseases.

Table 6: National Emergency Preparedness Plan for Foreign Pests and Diseases

September, 1997	Animal Health	Plant Health
Antigua & Barbuda	Y - in progress	Y - not officially approved
Barbados	N	N
Dominica	N	N
Grenada	N	N - in progress
St.Kitts & Nevis	N	N
St.Lucia	N	N
St.Vincent & Grenadines	in progress	Y

Source: IICA

Diagnostic Laboratory Services are necessary in order to conduct scientific surveys of pests and diseases. Thus countries must have access to quality diagnostic laboratories. These labs need not necessarily be located in each country because some of these analyses are very sophisticated and expensive and a small country would not have the volume to justify that sort of expenditure.

Here again is an opportunity for a regional facility and network for sharing of laboratory services. What is necessary in the smaller countries is some very basic laboratory capabilities (Table 7). At the very least the lab facilities should be capable of extracting the product for analysis elsewhere.

Table 7: Diagnostic Laboratory Capabilities

September, 1997	Animal Health	Plant Health	Pesticide Residue
Antigua & Barbuda	not functional	Y	Y
Barbados	Y	Y	animal products only
Dominica	not functional	Y	Y (limited)
Grenada	Y	Y	N
St.Kitts & Nevis	very limited	Y	N
St.Lucia			N
St.Vincent & Grenadines	Y	Y	-

Source: IICA

Pesticides are becoming a critical issue for trade in plant products, therefore countries should have access to pesticide residue analysis laboratories. Again, these need not be available in each country. For example, Dominica's is just a produce chemist lab that can extract the product to send to an external lab to have the residue analysis done. That may be appropriate for countries in this region.

Registration and control of agrochemical and veterinary products are very relevant to a country's ability to export livestock and agricultural products. The pesticide control boards in the ECS and Barbados have been relatively active recently and quite well organised, through the coordinating group of Pesticide Control Boards of the ECS and Barbados. There is interest in expanding this coordinating group to the wider Caribbean.

Table 8: Status of Registration and Control of Agrochemical and Veterinary Products

September 1997	Agrochemical products	Veterinary products	Government supervision of sales & distribution
Antigua & Barbuda	N	N	sporadically
Barbados	Y	N	regularly (agrochemical) never (veterinary)
Dominica	Y	N	y Agrochemical only
Grenada	Y	N	N
St.Kitts & Nevis	N	N	Y
St.Lucia	Y	N/A	sporadically
St.Vincent & Grenadines	Y	Y	sporadically

services of the Caribbean, particularly in the smaller countries, with limited resources. Therefore, the traditional approach of governments offering services at no charge to anybody is no longer feasible. National governmental animal and plant health services will not be able to offer all these services without cost recovery or financial participation by the producers and exporters. Tables 9, 10 and 11 present the status of the participation of the private sector in terms of user fees in support of agricultural health services.

Table 9: Participation by Private sector - User Fees Support Official Agricultural Health Services

September 1997	Animal Health	Plant Health
Antigua & Barbuda	N	N
Barbados	N	N
Dominica	N	N
Grenada	N	N
St.Kitts & Nevis	N	N
St.Lucia	N	N
St.Vincent & Grenadines	N	N

All these international standards are placing a lot of pressure on the national plant and animal quarantine

Table 10: Participation of Private Sector - User Fees, ECS and Barbados

September 1997	Import Inspection	Export Certification	Laboratory Test	Residue Analysis Tests	Registration of Agrochemical Veterinary Products
Antigua & Barbuda	Y	Y	N	Y	N
Barbados	N	N	Y-plants N-animals	N/A plants & farm animals	N
Dominica	N	Y	N	N	N
Grenada	N	N	N/A	N/A	N/A
St.Kitts & Nevis	N	N	N	N/A	N
St.Lucia	Y	Y	N	N	N
St.Vincent & Grenadines	N	Y	N	N/A	N

Table 11 shows whether the user fees are rolled back into the agricultural health service, to support operating costs. This is very important, because there is no advantage or incentive for these services to charge user fees if they do not recover the fees generated. As we see, these user fees are not used to

support the agricultural health services in any of the Eastern Caribbean States or Barbados. Indeed, we have learned that this problem exists even in the United States. Although USDA-APHIS generates considerable user fees, the Congress must decide if these revenues will be allocated back to APHIS.

Table 11: Participation of Private Sector: ECS & Barbados

September 1997	Accreditation of private veterinarians	Accreditation of private agronomists	Accreditation of private laboratories	Funding from producers' associations for pest & disease control
Antigua & Barbuda	N	N	N	N
Barbados	N	N	N (except UWT)	Y (animal health), N (plant health)
Dominica	N	N	N	N (animal health) Y (plant health)
Grenada	N	N	N	N
St.Kitts & Nevis	N	N	N	N
St.Lucia	N	N	N	N
St.Vincent & Grenadines	N	N	N/A	N

Summary and Conclusion:

Although the Caribbean countries are signatory to the WTO, they have a long way to go to comply with the WTO Agreement on Sanitary and

Phytosanitary Measures. Although international organisations can support this effort through training and information, most of the commitments remain national responsibilities.

Accessing the Tourist Market

Mr. Charles Hossle

Caribbean Culinary Federation

This presentation focuses on the requirements of the regional market in terms of serving the tourist market. In this regard, the role of the members of the Caribbean Hotel Association and the Caribbean Culinary Federation in assisting access the tourist market is highlighted.

Of importance is the need for very clear communication between all the parties involved, whether buyers or stakeholders. These parties include, but are not limited to the Ministries of Agriculture, national export, import or marketing associations, farmers' associations and all the stakeholders involved in the hotel and catering business and in food preparation and research. In addition there is need for the individual national marketing authorities to liaise very closely with the farmers and indeed all the major players and stakeholders. The Ministries of Agriculture must be able to communicate clearly with all the major stakeholders responsible for establishing and implementing the standards set by the WTO and the ISO series. Against this backdrop, necessary guidelines and controls must be put in place to ensure that these standards are adhered to.

The global market is large and its possibilities keep changing as new venues and food applications are discovered. Producers and exporters must meet the preset standards established by the WTO and the ISO if they are to compete with the many other players and food supply businesses in the industry. To facilitate the achievement of competitiveness, an important role of the Ministries of Agriculture and the various Bureaus of Standards, in conjunction with the suppliers and stakeholders in the region, is to publish precise specifications on all the quality requirements.

Today in many countries of the world, technology has reduced the seasonality aspect with regards to the production and availability of a wide range of fruits and vegetables. Countries utilising this technologies are able to market such high quality

products at very competitive prices. Typically, within the OECS, a product which fails to meet the export standards usually finds its way onto the local market, where consumers also include the tourists. This creates a problem in cases where the hotel's local purchasing is in direct competition with the global market. The hotels are also not being provided with the local indigenous produce which are being produced to meet international standards. Many of these items are very essential to the hotel's food and beverage services.

In terms of the tourists who visit the Caribbean, it is imperative that we ask ourselves, where do these clients come from? Tourism is a major player in the economy of CARICOM countries and the tourists who frequent the OECS normally have access to a wide variety of produce year round, indeed to the very markets that we export to. They expect, on their visits to the Caribbean countries, access to products of the same standards and quality that are supplied in their own markets. Failure to meet these expectations can result in a disappointed tourist, with possible negative impacts on the particular country in question and eventually lead to a decline in the tourist dollar. Although the foreign exchange derived from exports is an important contributor to total foreign exchange earnings, the foreign exchange generated from tourism has become even more equally important in most of our economies and in a few, more important that that generated from agricultural exports.

The choice of vacation destination decisions is usually made at the travel agency where the tourist is faced with a bewildering range and variety of brochures promoting countries from all over the world. In most instances, their choice is heavily influenced by the travel agents, who based upon their own experiences, will recommend their preferred destinations. Given this situation, it becomes increasingly important to put in place programmes aimed at providing and supplying the tourist industry with the same standard of goods as those that are

exported. This presently does not happen. Therefore our tourist boards and personnel must be made aware of these factors so they can encourage tourist to visit the Caribbean.

Cooperation and coordination between all the players and stakeholders are imperative to ensure that produce of high standard is provided. Earning a reputation of providing on a consistent basis, high quality produce, is essential if we are to compete in this highly competitive market. The hotels need to be assured that they can rely on our agricultural providers to supply them, on a daily basis, with produce of the same high standard. Failure to meet these requirements will result in dissatisfied clients. It is thus imperative that we recognise that the survival of our tourist sector depends on all the stakeholders pulling together, both with our CARICOM partners and with other international players so that we can compete. But how can this be achieved?

The Caribbean Culinary Federation (CCF) and its Farm-to-Table initiative is one answer to this question. The Culinary Federation was founded in 1954 is a wholly-owned subsidiary of the Caribbean Hotel Federation. The CCF represents the chefs from all its member states. The CCF has been instrumental in developing a regional identity of chefs throughout the Caribbean and for defining a Caribbean cuisine and integrating it into the collective market strategy. Through its various programmes, CCF is an important mechanism for promoting tourism and strengthening its linkages to the contemporary Caribbean cuisine industry. What is contemporary Caribbean cuisine? Contemporary Caribbean cuisine is trade marked by the CCF as a unique and evolving food style created by culinary professionals and stylishly presented for the promotion of its consumption. Its preparation reinterprets the diverse foods used traditionally in Caribbean cultures combining modern culinary techniques and indigenous methods, to demonstrate the nutritional values for the health of the consumer.

Tourism is the fastest growing sector in the region, contributing on average 30% of the region's GDP, providing half a million jobs and in many cases, has overtaken the traditional growth sector of agriculture. However, tourism-generated wealth does not flow deeply into the host communities, thus drowning its potential positive impact on standards of living. Jobs in agriculture are being replaced by more attractive job opportunities in tourism, yet much of the income produced by tourism is spent

overseas to purchase commodities, particularly food products, necessary to support tourism. A major opportunity to reverse this situation exists in large hotel operations which import large volumes of supplies from overseas. A recent OECS/ADCU study found that 20,000 tons of fresh produce are imported each year by the OECS countries. 10% of this business represents about EC\$2.5 million, most of which could be passed onto the hands of small individual producers.

What are the objectives of the Farm-to-Table initiative? The Farm-to-Table initiative aims to sustain Caribbean agriculture through tourism, by fostering a market driven by agricultural commodities and which is responsive to the food requirements of the tourist and temporary Caribbean visitor generated through the hotels and restaurants. How does the programme work? It creates a new productive partnership between existing resources of the CCF, international companies and agricultural suppliers and support agencies which are often handicapped in their efforts to produce change and adopt a common language on both sides of the operation. In the Farm-to-Table initiative, CCF both organises and mobilises buyers at the demand end of the hospitality industry, while other stakeholders set up systems to ensure sustainable supply from producers. The project's partners include CARDI, Caribbean Basin Agriculture Trade Office, CHA, CLAA, IICA, IDB, OAS, OECS and UWI etc.

The Farm-to-Table project involves initiatives in the three areas. A major activity is the refining of contemporary Caribbean cuisine, which includes the development of a definitive manual to serve as a "bible" of contemporary Caribbean cuisine. In addition, the project provides education and training programmes for Caribbean chefs and apprentices and administers a certification programme for Caribbean restaurants and providers of authentic Caribbean cuisine.

The CCF holds an annual Caribbean Culinary competition, the goals of which are to (1) continually raise the standards of Caribbean food and beverage and its professions; (2) promote the comradery and educational opportunities among those food and beverage professionals, (3) act as a staging area for the development of food and beverage concepts by encouraging new and innovative styles of service and bringing the traditional styles up-to-date, (4) foster the development of nutritionally and economically sound food presentations, and to (5) nurture the creativity of the individuals by

encouraging their participation and providing an example and inspiration for the young and beginning professionals.

One of the aims of the CCF Farm-to-Table initiative is to develop effective delivery mechanisms with a focus on providing specific standards and specifications to be met by suppliers to the hotel industry. This activity also involves working with agricultural producers, with emphasis on small to medium sized suppliers, in order to provide the technologies needed to supply fine foods on a consistent schedule and at competitive prices. The programme also promoted the utilisation of best practice technologies in order to organise a certification system and programme which will have access to whatever resources are available for utilising the state-of-the-art technologies which meet safety standards in food products. Certification, on a formal regular basis, will be undertaken of growers who are in compliance with preset standards of consumer and environmentally friendly production, post-harvest handling and processing food.

In conclusion, it must be reiterated that there are many areas in which all the players need to cooperate if success in what is an ever changing global market is to be achieved. More effective cooperation will allow improved capacity to serve the tourist market in the OECS and the wider Caribbean. The agricultural sector as an integrated food production, processing, preparation, distribution and consumption sector must seriously be examined in terms of areas for improved integration. In addition, all the stakeholders involved directly or indirectly in the agricultural sector, hotel and catering business need to pay greater attention to the production of indigenous products which meets the standards of the WTO food guidelines. Within this process, there must be an evaluation of the content of our imports, in order to inform decisions regarding capabilities for product substitution with indigenous (local) products of similar standards. Strict control of production needs to be enforced for produce for both local and export markets according to the WTO standards. In this regard, it remains important that the concerned authorities provide the regulatory framework to enable implementation of these standards.

Panel Discussion: Successful Export Marketing Strategies

Lead Panelist:

Alan Marsh

Caribbean Export Development Agency (CEDA)

UK & US Market Features and Trends

A study undertaken by the Caribbean Exports indicated that while retail sales in the overall US food market has been static, sales of specialty foods were increasing by 6.5%. The specialty food market segment tended to cater mainly to high income earners. Among the various factors identified as stimulating the increased demand for ethnic foods included the growing ethnic diversity and the increased travel by the US and UK population.

The US gourmet specialty food market exhibited an annual growth rate of 7%, with a retail value of US\$39 billion. In the UK, the retail ethnic foods market segment is forecast to grow to £750 million by 2000, representing an estimated 68% growth from current levels of £465million. There has also been some resurgence in West Indian ethnic markets stimulated, in part, by trade events dedicated to the ethnic food trade. Issues of convenience, environmental and health considerations continue to remain important in the food markets in general and in the specialty food market in particular.

Marketing Programmes and Promotional Support

An interesting fact which emerged from the study was that there was a growing number of domestic manufacturer's utilising the Caribbean name to promote products. This suggested that there was obviously a demand in the specialty markets for our food products. Thus, given that this demand existed, Caribbean Exports adopted a "push-pull strategy" to penetrate the market. Essentially this strategy entails "pushing" or promoting the product through trade by developing the distribution for exporters, getting interested importers, and thus creating a "pull" at the consumer end for the product. This strategy is more effective both in terms of human and financial resources, on a group, rather than on an individual basis.

Other marketing strategies and programmes included group and regional participation at major international trade fairs in target markets, consumer promotions, such as in-store promotions, and editorials in the Caribbean food and drinks

supplements in the various trade media. An important aspect of the media promotions was to obtain endorsements and through the supplements in the various trade media in order to promote specific products. This approach offered tremendous value in terms of creating awareness of Caribbean food products and in the marketing of particular product to prospective importers. CEDA has produced a supplement in the Fancy Foods magazine issue, the largest specialty trade publication in the US available largely through subscriptions to persons such as chefs, retailers, brokers etc. Caribbean Exports has been working with the Fancy Foods magazine over the last 3-4 years to put produce an annual supplement which basically offers a catalogue of Caribbean foods. This collaboration with an international partner has contributed to the increased demand from major retailers to carry Caribbean foods.

In addition to taking advantage of special events for trade, Caribbean Exports continues to actively promote networking along the entire chain of stakeholders involved in getting products to the target markets - distributors, importers, brokers, public sector institutions and shipping companies. Caribbean Exports provides additional support for promotional activities through:

- training programmes for regional companies on doing business in target markets,
- market orientation programmes,
- product-level market research to adopt products for the market place.

In implementing the various marketing and promotional programmes, CEDA continues to benefit from collaboration and tremendous support at the national and sub-regional level with agencies such as EDADU (Export Development and Agricultural Diversification Unit of the OECS), TIDCO (Tourism and Industrial Development Corporation of Trinidad & Tobago) and JAMPRO (Jamaica Promotions).

Successes in the US & UK Markets

The marketing and promotion programmes undertaken have, to some extent, sought to increase distribution and sales into the non-traditional areas of the UK and US markets. Traditionally, West Indian products went into the "mom's and pop's" stores found in certain parts of Queens and Brooklyn (USA). These small establishments usually tend to operate on the fringe of the mainstream distribution channel for most of the "incomed"

consumers. The issue remained one of how to penetrate stores within the mainstream distribution channels in areas such as Manhattan and in international stores.

This notwithstanding, the study started in 1992/93, indicated growth in the creation of the "fiery" foods segment within the specialty market, with projected retail sales of US\$1.8 billion by 2000 and a growth rate of 60% from 1994. The study also indicated that Caribbean food is the fastest growing segment of the UK ethnic food market, growing by over 100% between 1993-1996. While this implies a rapid growth rate, the initial figures, ie the share of Caribbean foods, were at a very low level. In addition to the concerns of low market share, there is need to also be concerned with the tendency to brand or classify products as "Caribbean", even when such products are of non-Caribbean origin.

Another important indication which emerged from a 1997 survey on trends in restaurants was that Caribbean foods experienced a growth in popularity at institutional levels and in restaurants. Caribbean foods were the most likely new offerings that restaurants were willing to introduce on their menu. This however, does not imply that there was growth in Caribbean restaurants, but rather growth in traditional restaurants offering a Caribbean menu. This distinction is very important because food at the retail level is driven by the restaurant trade, as occurred with the Chinese, Indian, Thai. This suggests that unless there exists a good, authentic restaurant in the market to support your product "push" at the retail level, it will be very difficult (but not impossible) to make any significant gains.

Over the past few years, CEDA in collaboration with other agencies, has made progress in terms of developing expertise in the organisation and conduct of trade shows. Initial efforts at market promotions in the US were costly, since CEDA absorbed the costs of participating companies. The investment required for a company to participate in a trade show was then approximately US\$4,000, including booth construction, travel and freight for product samples. The experience obtained over the years has enabled CEDA to become more efficient in organising conducting and facilitating clients' participation in trade shows and trade promotions events.

Challenges in the UK & US Markets

An issues which remains a significant challenge to successfully penetrating and maintaining a presence in the US and UK markets is the high marketing

costs and risks. Because of globalisation and the availability of numerous products, most supermarkets are reluctant to devote large sections of aisles to one particular product. Thus product selection becomes a critical aspect of marketing.

Another challenge to successful penetration, particularly in the mainstream market, is the limited understanding among the region's exporters, of how to create sales. The critical issues in creating sales is being able to answer the questions of "why should someone buy your product? what are your selling points, is it price, quality, packaging?" Since every producer advertises his products in a similar fashion, how can one create sales for one's product. In this regard, CEDA has been working to improve clients knowledge and skills in marketing and presentation of product.

The general lack of Caribbean restaurants and mainstream restaurants offering Caribbean cuisine is a major constraint to successful market penetration. While there are a few restaurants in mainstream metropolitan areas offering Caribbean cuisine (for example in New York), their numbers are insignificant compared to the number of Indian, Chinese, Thai, Italian, Mediterranean restaurants. This shortcoming is one of the factors explaining the low market share of Caribbean foods in mainstream markets.

The areas of legal and commercial requirements present some difficulties, particularly with regards to product liability insurance, which is usually non-negotiable and may require coverage of about US\$1 million. This is a requirement of the US government Department of Trade because based on consumer demand - the consumer wants to ensure that an exporter satisfies his demand.

The area of building distribution is very, very critical. Distribution does not happen overnight, it

takes time and effort and to ensure that your product enters the target market. While an exporter has to develop strong distribution channels for exports, domestic competition also presents formidable challenges since there are many products sold in the US and UK markets under the "Caribbean" label, which are not made in the Caribbean.

Strategy for Markets and Role of Caribbean Exports

In implementing a strategy for markets, we must keep mind of the fact that few Caribbean countries can go it alone. A more practical approach is an integrated market approach, which could be facilitated by an umbrella group. This group could be something similar to what IICA has initiated in the Caribbean Agri-Business Association (CABA), but operating at the marketing level. Just to illustrate the strength of marketing and the value of it - some 4-5 years ago the Windward Islands Banana industry sold one-third of their distribution operations in the UK for just over £20 million. That was more valuable than their entire institution. That is something we have to keep in mind.

This integrated marketing approach is not something that is novel for the Caribbean, it is being used by most of our competitors - Germany, Holland, UK, Spain Italy - because they know that the only way to be competitive is to work together.

Caribbean Export Development Agency offers services in the following areas to strengthen the export and marketing of Caribbean products:

- market research and trade information
- marketing assistance and promotional support
- financial assistance for approved marketing programmes and to facilitate production efficiency and quality control
- human resource training and trade policy advocacy.

Summaries of Presentations by Panelists

In addition to the broad overview presented by lead panelist, the following are summaries of the contributions presented by the panelists regarding Successful Export Marketing Strategies.

Mr. Fitzroy James

National Marketing and Importing Board, Grenada.

- noted that successful export strategies are based on the recognition of the super-competitive nature of the trading environment which forces

- companies to alter their business and marketing approaches;
- emphasised the need to attain high levels of professionalism in marketing and business strategies oriented to meet and adapt to the requirements of the international market;
 - recognised the importance of developing "business plans" to facilitate the development of strong sustainable export companies;
 - outlined the basis for the development of the NMIB's marketing strategies as:
 - recognition of the imperatives of quality and the need to fully satisfy consumers' expectations. The NMIB is strengthening its capabilities to improve the quality of its products, both in terms of human resources and requisite post harvest and transport infrastructure and maintains close collaboration with stakeholders in this regard;
 - the need to forge strong business relationships with importers and exporters in various markets. Importers of produce from NMIB must sign the Boards trade agreement defining the terms and conditions of trading. These measures minimize the risks associated with unscrupulous importers;
 - the maintenance of at least two buyers in each market so as to have some negotiating advantages, mindful of the need of not creating too much competition for the same product in any one market;
 - a shift in the focus on export crops towards short-term crops, such as hot peppers, herbs, spinach and special beans, and strong appeal and demand towards specific sectors;
 - strengthening the production capacity through the promotion of "contract farming";
 - encouragement of participation and collaboration among all stakeholders in production, marketing and fruit standards.
 - concluded by emphasising that there remained much room for improvement in the marketing of agricultural products, specifically in increasing the organisation of production, improving price competitiveness by reducing intermediary costs, adding value to reduce on wastes and maximise profits and the establishment and operation of an Export Market Insurance as added protection against bad debts.

Tarlie Francis

FINCOR - Grenada

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- noted the process of change in the roles and function of commodity boards and national marketing boards as:
 - responsible for fresh produce marketing by proving an outlet for local farm output; and
 - ensuring supply of food staples at stable prices through food imports.
 - recognised the importance of containing cost of production to enhance competitiveness in agricultural production. In this regard, consideration needs to be placed on both costs of domestic labour and cost of imported inputs and equipment used in production;
 - emphasised that given the above issues, the agricultural sector needs to devise strategies to enable participation in the global market as well as to achieve price stability on imported food supplies.

Summary of Main Issues

Trade Liberalisation & Negotiations:

- the need to specifically consider the impact of liberalisation and unmanaged market opening on the rural community and farmers and to prepare programmes to address the marginalisation of small farmers which will occur as a consequence of the increased access of multinational corporations to domestic markets was emphasised.
- countries need to explicitly recognise that opportunities will emerge for increased South-South trade arising out of the FTAA process.
- noted that the OECS sub-region and CARICOM region appeared to have little input in the upcoming WTO Agriculture Round in 1999. There was an urgent plea to address this lack of participation if the region is to influence the discussions and benefit from the outcome of these negotiations.
- stressed that in all cases, the WTO recommends that sanitary and phytosanitary conflicts can be resolved bi-laterally rather than at the level of the WTO. This region, should, however, seek to harmonise SPS regulations based on the rules-based system of the WTO.

Agricultural Production and Marketing

- the importance of adding value to agricultural exports in order to retain a greater share of trade in agricultural products was emphasised.
- the need to establish reliable and timely information systems to facilitate the marketing of nontraditional products was also emphasised as an important facilitator to agricultural development.
- the area of research and development was identified as critical to the development of the agricultural sector, noting that the region must place equal emphasis on documenting and disseminating research results.
- advocated the need to implement short-run measures to improve efficiency of agricultural production.
- suggested that the region examine the institutional arrangements that contributed to the development of the banana industry, with a view to improving the marketing strategies for non-traditional crops.
- noted the importance of consumption trends, particularly definitive changes in consumer tastes and the dominance of health concerns

which has led food safety issues to also become important at the political level. The scientifically-based HACCP principles (excellence, independence and transparency), was deemed to be one the main measures for effectively addressing issues of food safety.

- recognised the opportunities in the tourist food market, which in many instances provides us with better opportunities than some of the opportunities that we chase overseas. Noted that food has become a very important part of the tourist experience and efforts should be made to exploit the attraction for Caribbean cuisine as part of the tourism product. This depends greatly on the offering of food products of comparable high quality.

Domestic Regulatory Environment

- recommended reform of the regulatory framework and the development of appropriate mechanisms to monitor and regulate imports trade and assess the impact of imported commodities on domestic production.
- noted that approximately 65% of negative-listed goods are agricultural commodities and recommended as a matter of priority the removal of such trade-distorting measures as a prerequisite for achieving agri-food sector competitiveness.
- accepted the need to attain an increased share of the tourist market for food products, stressing on the need for coordination among all stakeholders in order to achieve this objective. Suggested the need to identify a prime mover, not necessarily the Government, capable of ensuring coordination and action, recognising the need for different prime movers at the various stages and the changing of the leadership role from time to time.
- advocated the need for coordination in setting a timetable to achieve critical objectives, such as reforming and enacting legislation, in order to improve the region's ability to meet WTO schedules. Greater coordination and action may be facilitated by getting Ministerial consensus and attention, support from the policy-makers as well as by developing strong private sector lobby groups.

An Action Agenda for Food and Agricultural Sectors in Small Economies

Defining an Action Agenda

Dr. John Stovall

Senior Fellow, National Centre for Food and Agriculture Policy

The focus of the working groups was to capture and synthesise the critical issues emerging from the presentations and discussion. The output of this working session was to arrive at a consensus and formulate recommendations to guide strategies for improving the performance of the food and agricultural sector nationally, regionally internationally.

Working groups were charged with the task of defining recommendations for an action agenda for policy makers in the region. Following is a presentation of the reports of the three working groups on what the group considered were the three most important actions that policy makers should take enhance the competitiveness of the agri-food sector in the global economy.

Working Group Reports

Group I

Moderator ~ David Jordan

Members: Tyronne Power – Barbados
Ceclile Quashie – Grenada
Glenroy Thomas – St. Vincent
Raphael Archibald – St. Kitts & Nevis
Euphemia Weekes – St. Kitts & Nevis
Margo Forde – Antigua
Elliot Paige – Antigua
Dale Francis-Ellis – Grenada
Michael Henry - Trinidad

The three areas identified as requiring urgent action by the region's policy makers were reform of the import regime, strengthening of food safety policy and development and operationalisation of an integrated information system to facilitate agri-business development. The specifics of these areas are as follows:

1. Import regime

- Noted that the protectionist and archaic nature of the current import regime contributed to trade distortions and inflicted social and economic costs on the agri-business sector.
- recognised the "Study to Inform changes in the CET for agricultural products" in progress by IICA/CARICOM and recommended that the study not exceed 12 months (1 year). Suggested that the results should also seek to guide a redefinition of the institutional arrangements aimed at:
 - a redirection of strategies to facilitate improved production
 - defining a more proactive role for EDADU, Caribbean Exports,

- undertaking a review of other compatible trade regulations
- harmonizing policy within the OECS sub-region.
- advocated that periodic reviews should also be conducted on specific product and firm competitiveness, with a view to guiding the development or the adoption of an appropriate WTO-compatible import regime which simultaneously stimulates sustainable production and trade of the agri-business sector.

2. Food Safety Policy

- recommended the development of appropriate policy and legislation, specifically the need to:
 - adopt an harmonized approach to food standards in the region.
 - broaden the scope and mandate of the Standards Councils to address manufactured as well as agricultural products.
- suggested the need to review current operations particularly of laboratory services in the region and proposed that:
 - special funds be assigned to assist with the development of proactive and appropriate institutions, laboratories and related centres
 - the private sector needs to reorientation/refocus its interests to facilitate achieving pre-set food safety standards

- a mechanism be developed whereby research resources in the OECS/Barbados can be shared to obtain maximum results
- HACCP and ISO 9000 and 14000 series be adopted as matter of course by agri-food producers and firms in the region
- institutional measures be implemented to facilitate improved operational efficiencies and collaboration among regional and international institutions operating the region.
- recommended the urgent establishment of national enquiry or WTO focal points
- proposed an extension of the provisions for the SPS requirements to link industry and agriculture within a one-year period
- advocated the need to undertake periodic reviews of compliance issues, growth and development in the region
- called for an increased role and collaboration for Caribbean Export Development Agency, EDADU and related regional institutions
- agreed on the need to promote:
 - the development of information units to coordinate the dissemination of information and networking on issues dealing with WTO, Lomé and FTAA, etc.
 - the free movement of human resources in the areas of research and development.
- a major regional trade fair of agricultural produce and agro-processing and successful innovations, research etc. in the sector.

3. Information Systems Development

- called for improvement in the efficiencies of data collection, retrieval and analysis of information and management of efficient information systems
- suggested that mechanisms should be developed to engender a more proactive role of regional institutions, such as EDADU and CEDA in the collection, generation, analysis and dissemination of relevant information
- advocated greater collaboration between the communication units of the MoAs and the Ministries of Trade as well as between institutions operating in the region.
- called for a rationalisation of current programmes and the promotion of information policies
- recommended the establishment of functional Inter-Ministerial and intra-regional networks to facilitate the more efficient dissemination of information.

Group 2 - Moderator
Ardon Iton - EDADU

Members: Arthur Flores - APHIS
Sandra Vokaty - IICA
Anthony Gonzales - IR/UWI
Antonio Maynard - St. Kitts
Francis Henry - Antigua
Kym Butler - Dominica
Francis Robertson - Grenada
Olive St. Ville - St. Lucia
Allan Marsh - CEA
Anthea Bullen - Grenada
Ellison Clarke - St. Vincent

The three areas identified as requiring urgent action by the region's policy makers were agricultural policy reform, greater emphasis on utilisation of Caribbean food products, and strengthening R&D

capabilities in the region. The specifics of these areas are as follows:

1. Policy Reform

- recommended policy reform to create an enabling environment capable of attracting private investment for the development of a sustainable food sector through reform in:
 - land legislation (including zoning)
 - agricultural health legislation
 - irrigation and drainage infrastructure
 - laboratory facilities
- advocated the need for:
 - effective consultations towards the formulation and implementation of a long-term agricultural trade policy

- formulation and implementation of policy towards the rationalisation of institutions that directly impact on the food and agriculture sector
 - formulation and implementation of policy to generate revenues for the development of the agri-food sector, including revenue generating instruments such as the introduction of user fees, taxes for services provided by the MoA
2. **Greater Effort to Promote utilisation of Caribbean Products**
 - recommended the implementation of an effective promotional campaign through public and private sector participation to increase consumption of regionally produced agricultural-based products
 3. **Strengthening of R&D Capabilities in the Region**
 - effective networking (at all levels) which allows for the sharing of research information and the prioritisation based on needs assessment.

Group 3: Moderator
Ethelbert Haynes

Members: Manley James - Dominica
 Gregory Simpson - Jamaica
 Gregory Devaux - St.Lucia
 Elvin Bailey - St.Kitts
 Godwin Daniel - IICA
 Junia Nibbs - Antigua

The three areas identified as requiring urgent action by the region's policy makers were improved product selection, information system and legislative reform. The specifics of these areas are as follows:

1. Product Selection

- there is need:
 - to focus on a few selected products which meet the criteria such as environmental sustainability, with known and adaptable production technology and which have potential for adding value.
 - for diversification to be viewed as more than a change of crops but as the identification of new and innovative ways of utilising existing production
 - for increased involvement/participation of the private sector, particularly investors, in the production process and to establish greater linkages between different sectors, such as tourism

2. Improving Scientifically-based Data Generation Capabilities

- emphasised the need to generate relevant data according to international requirements of ISO 9000 etc.
- noted that this required investment in human resource, science and technology, at all stages of the formal education system.
- proposed that the promotion and marketing of Caribbean products must move de-emphasise the traditional sales pitch based on "freshness" and emphasise the parameters which highlight issues of food safety and nutritional content. This is an area classified as having high priority (68%) and greater response among consumers
- proposed that the level of production technology should aim to generate products according to the standards defined by the data required to support the above
- noted that the issue of science and technology could be used as an argument in defense of the removal of trade barriers.

3. Legislation

- should be revised, strengthened and developed in the areas of intellectual property rights, pesticide use and safety, animal health and quarantine acts
- should be harmonised within the region, with the political will to introduce and enforce same.

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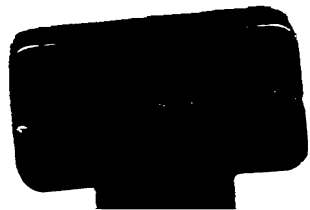
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