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AGRICULTURAL TRADE REFORM: POLICY IMPLICATIONS FOR CARICOM[1] *

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I. INTRODUCTION

Prior to the Uruguay Round of trade negotiations, the developed countries successfully excluded agricultural products from multilateral trade discipline. Since the General Agreement on Tariffs and Trade (GATT) in 1947, the main objective of multilateral trade negotiations has been the liberalization of international trade. Despite the emphasis on free trade, protection of agriculture has been a primary objective of the developed countries. High rates of agricultural productivity in those countries coupled with low income elasticity of demand reduced farm incomes, thereby creating political pressure for the protection of domestic farmers. High levels of protection for agriculture in developed countries by means of domestic support, export subsidies and other non-tariff barriers resulted in serious distortions in agricultural trade.

Developing countries with fewer resources to support agriculture have been disadvantaged by unfair competition from subsidized products imported into their domestic markets as well as by inability to access export markets for competing agricultural products. In recent years, the prospects for agriculture in some developing countries have been further jeopardized by economic reforms that included unilateral trade liberalization and reduction of support to agriculture. Bringing agriculture under multilateral trade rules is therefore of major importance to developing countries.

The Uruguay Round Agreement on Agriculture (AOA) represents a step towards correcting the distortions in agricultural trade. The AOA brings agriculture under multilateral trade rules and provides for partial liberalization of agricultural trade through tariffication, tariff reduction, reductions in domestic support and reductions in export subsidies.[2] The AOA required developed countries to reduce tariffs on agricultural products by an average 36 percent over six years and to reduce export

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subsidies by 36 percent over the same period. Domestic support to agriculture by developed countries was to be reduced by a relatively small amount of 20 percent over six years. Developing countries were required to reduce tariffs, domestic support and export subsidies by (24 percent), two-thirds of the amount required for developed countries.

Liberalization of agricultural trade potentially offers opportunities for those developing countries that have the capacity to compete in world agricultural markets. However, the evidence suggests that implementation of the AOA has failed to produce significant improvement in market access for the agricultural exports of developing countries. In particular, UNCTAD (1999a:134) has pointed out that tariffication resulted in frequent "tariff peaks" for agricultural products and many of the products with very high tariff rates (above 70 percent) are products that developing countries could possibly export.

In addition, the ability of developing countries to diversify into higher value processed agricultural products is still being impeded by tariff escalation.[3] While tariffication and tariff reduction have produced limited benefits in terms of market access, developing countries face the possibility of the imposition of new trade barriers under the special safeguard provisions of the AOA which allow developed countries to increase import duties to protect their domestic markets from import surges. Furthermore, the commitment to reduce export subsidies by only 36 percent means that the ability of developing countries to compete in world agricultural markets continues to be undermined by relatively high levels of export subsidies.

Thus, bringing agriculture under multilateral trade rules has increased the transparency of agricultural trade but has achieved little in terms of liberalization of agricultural markets. Much remains to be done to reduce protection of agriculture and improve market access for developing countries. It is important to note, however, that bringing agriculture under multilateral trade rules poses special problems for those developing countries that rely on preferential treatment for their agricultural exports. The erosion of preferential margins associated with multilateral tariff reduction is of major concern to the Caribbean Community (CARICOM), given the region's heavy dependence on preferential markets for its main agricultural exports.

The ongoing negotiations on agriculture open up the possibility of further liberalization of agricultural trade.[4] This will mean increased competition for agricultural producers in (CARICOM). The member countries of CARICOM are inefficient agricultural producers that rely heavily on preferential market access for their agricultural exports. For these countries, multilateral tariff reduction erodes preferential margins

thereby exposing their agricultural exports to greater competition. In addition to multilateral liberalization, CARICOM agriculture also faces the prospect of increased competition from other liberalization initiatives. There is a free trade agreement between CARICOM and the Dominican Republic. CARICOM is being transformed into a single market and economy. In addition, CARICOM is involved in negotiations for the establishment of a Free Trade Area of the Americas (FTAA), while negotiations for reciprocal free trade with the European Union (EU) are scheduled to begin in September 2002.

This paper examines the policy implications of the liberalization of agricultural trade for CARICOM. The paper begins with an examination of agricultural development in CARICOM. Section III examines CARICOM's trade in agriculture. The policy implications of agricultural trade liberalization are discussed in section IV. Finally, conclusions are presented in section V.

II. AGRICULTURAL DEVELOPMENT IN CARICOM

Overview

Traditionally, agriculture was the dominant economic activity in the CARICOM countries. However, the relative importance of agriculture in these economies has declined in the post independence period as development strategies have attempted to achieve diversification into manufacturing and tourism. Agriculture now accounts for less than 5 percent of GDP in oil rich Trinidad and Tobago and the tourism economies of Antigua and Barbuda, Bahamas, Barbados and St. Kitts- Nevis (Table 1). In the cases of Suriname, Jamaica, St. Lucia and Grenada, agriculture's contribution to GDP was between 6 and 8 percent in 2000. For the other member states, however, agriculture's contribution to GDP was higher, ranging from 10.7 percent in St. Vincent and the Grenadines to 29.9 percent in Guyana. Despite its declining contribution to GDP and to foreign exchange earnings, agriculture remains an important source of employment in some CARICOM countries. Haiti is most dependent on agriculture for employment with 62.9 percent of the labor force employed in agriculture in 2000. In Grenada, Guyana, Suriname, St. Lucia Jamaica Dominica and Belize the amount of the labor force employed in agriculture ranged from 15.55 to 30.85 percent.

Constraints on Agricultural Production

Agricultural production in CARICOM is circumscribed by structural and institutional problems that must be addressed in order to take

advantage of any opportunity being created by trade liberalization. A major problem is the scarcity of arable land because of the region's geography. Except for Belize and Guyana, the CARICOM states are small islands with limited land suitable for agriculture. The problem of inadequate supply of land is compounded by inequitable land distribution. The ownership of available land is concentrated in the hands of a few large landowners while peasant farmers are confined to small uneconomic plots. In Jamaica for example, small plots of less than two hectares account for 77 percent of all farms but control only 20 percent of agricultural land.[5] Furthermore, increasing demand for land from tourism and housing development sectors has reduced land availability for agriculture.

Governments in the region have been criticized for failing to implement meaningful land reform programs.[6] However, the small sizes of Caribbean island states limit the scope for effective land reform. Fragmentation of the dwindling supply of agricultural land precludes the achievement of economies of scale in production and is unlikely to have a significant impact on agricultural efficiency.

Another significant factor that has hampered Caribbean agriculture is inadequate technological progress. The technology currently utilized in the region has been characterized as outdated and inefficient.[7] The application of modern technology has the potential to overcome structural constraints and enhance the competitiveness of agriculture. New production technologies, for example, biotechnology can increase production efficiency. In addition, information technology can facilitate successful penetration of export markets by improving the efficiency of market research and distribution systems. The lack of technological progress in agriculture is due to two main factors. First, there is the shortage of human resources with the technical skills required to develop new technologies or to adapt technologies developed outside CARICOM. Low output of agricultural scientists in the region is compounded by the brain drain to the developed countries. Second, agricultural research within CARICOM has traditionally been undertaken by state funded research institutes. However, the fiscal constraints experienced over the last two decades have limited the ability of governments to finance the research required for development of new technologies.

Low levels of investment have also helped to stymie agricultural production. Agriculture is normally a high-risk activity. However, the degree of risk is magnified in CARICOM by the region's vulnerability to natural disasters such as floods, drought and hurricanes. One consequence of this high level of risk is the unwillingness of financial institutions to finance agricultural projects. This coupled with the preference of risk

Table 1 – CARICOM Agriculture Indicators

Country	Agriculture as % of GDP			% of labor force employed in agriculture			Agricultural exports as % of merchandise exports			Agricultural exports as % of total exports of goods & services		
	1975	**1990**	**2000**	**1975**	**1990**	**2000**	**1975**	**1990**	**2000**	**1975**	**1990**	**2000**
Antigua & Barbuda	8.0	4.2	4.0	–	–	4.0	13.6	5.4	–	2.9	0.5	–
The Bahamas	–	2.9	–	–	5.2	3.7	–	8.3	3.4	–	3.5	–
Barbados	10.7	5.4	3.7	18.1	6.7	4.5	69.0	28.0	25.8	58.7	7.0	5.5
Belize	24.3	21.7	19.0	31.1	33.6	30.8	75.0	79.0	36.0	–	50.7	30.2
Dominica	37.6	25.0	18.0	–	–	23.7	54.1	65.1	34.6	44.1	40.7	–
Grenada	–	13.4	7.7	–	–	15.5	76.8	66.6	49.0	38.2	20.0	12.5
Guyana	20.7	40.1	29.9	24.8	21.8	18.2	62.5	40.4	–	59.0	38.1	–
Haiti	40.9	35.1	29.0	70.5	67.8	62.9	46.4	20.4	–	–	15.9	–
Jamaica	7.4	6.5	7.0	24.8	24.6	21.0	28.5	19.7	20.0	24.0	10.8	11.4
Montserrat	–	2.6	1.3	–	–	–	55.1	–	–	–	–	–
St.Kitts-Nevis	18.9	6.5	2.8	–	–	13.8	72.5	39.6	27.8	–	13.5	5.5
St.Lucia	15.4	14.6	7.7	–	–	20.5	69.1	67.4	59.4	40.0	31.0	8.5
St.Vincent & the Grenadines	17.9	21.2	10.7	–	–	22.8	83.4	88.7	71.8	–	59.2	19.8
Trinidad & Tobago	3.3	2.5	2.0	17.2	11.1	8.0	6.4	5.5	4.0	5.7	4.8	–
CARICOM Average		14.2				19.2 [1]	51.5[2]	38.9[1]			21.7[1]	

Sources: Author's calculations based on ECLAC, FAO and World Bank.

– not available [1] Excluding Montserrat [2] Excluding Bahamas

averse Caribbean entrepreneurs for low-risk trading activities has meant low levels of private investment in agriculture. Reversal of the traditional pattern of low investment in agriculture will therefore depend on the region's ability to attract foreign investment.

The infrastructure required to support agricultural production and marketing is not well developed in CARICOM states. Moreover, the existing infrastructure has deteriorated in recent years as governments facing financial difficulties have been forced to reduce public expenditure. Agricultural development will require increased expenditure on basic infrastructure such as roads, irrigation systems, flood control mechanisms and facilities for the storage of agricultural produce. The dilemma is that the public sector that has traditionally undertaken most of the investment in infrastructure is now subject to binding fiscal constraints.

Attempts at restructuring agriculture undertaken since the mid-1980s in the context of structural adjustment programs have failed to improve agricultural performance. This failure is attributable to the emphasis on market reforms including trade liberalization, privatization, dismantling of agricultural marketing boards and removal of subsidies.

While Caribbean agricultural markets are imperfect, correction of distortions in market incentives is not sufficient to enhance agricultural productivity. It is also necessary to address the structural constraints that inhibit the capacity to respond to changes in the incentive structure.

Some of the constraints on CARICOM agriculture cannot be readily relaxed. Little can be done with regard to the land constraint, except attempt to maximize output from the limited supply of land. This could be achieved through introduction of new production techniques that can increase crop yields while minimizing land degradation. Foreign investment offers an option for overcoming the financial and technological constraints. Improvement of infrastructure, however, requires some government intervention. Given the fiscal constraints, governments would need to resort to borrowing to facilitate upgrading of infrastructure.

III. CARICOM TRADE IN AGRICULTURE

Overview

Over the period 1990-2000 agricultural exports declined or stagnated in most CARICOM states (Table 2). Poor export performance coupled with dependence on imports resulted in persistent agricultural trade deficits in the majority of CARICOM countries. Belize and Guyana are the two CARICOM states that are net agricultural exporters. An important factor underlying the poor export performance is the reliance on traditional

commodities such as sugar and bananas that have low income elasticity of demand (Table 3).

Table 2: CARICOM Agricultural Trade by Country 1990-2000 (USD millions)

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Antigua											
Agri. exports	1.8	1.7	1.7	1.4	1.4	1.3	1.4	1.4	1.4	1.0	–
Agri. imports	46.7	40.2	41.2	32.6	32.6	32.7	34.0	36.7	35.0	61.5	–
Agri. trade balance	-44.9	-38.5	-39.5	-31.2	-31.2	-31.4	-32.6	-35.3	-33.6	-60.5	–
The Bahamas											
Agri. exports	87.7	90.0	88.5	35.4	32.2	31.9	49.9	62.9	80.5	87.3	–
Agri. imports	248.0	251.5	241.3	207.5	208.8	205.1	218.6	209.5	224.3	261.8	–
Agri. trade balance	-160.3	-161.5	-152.8	-172.1	-176.6	-173.2	-168.7	-146.6	-143.8	-174.5	–
Barbados											
Agri. exports	58.3	51.5	61.4	52.2	50.7	69.0	103.3	96.4	77.5	72.7	70.3
Agri. imports	137.4	158.8	124.6	109.4	121.4	134.1	144.4	168.0	85.5	163.7	169.9
Agri. trade balance	-79.1	-107.3	-63.2	-57.2	-70.7	-65.1	-41.1	-71.6	-8.0	-91.0	-97.6
Belize											
Agri. exports	96.8	84.6	102.3	84.1	87.7	113.2	124.7	114.3	105.3	104.6	128.7
Agri. imports	54.5	31.9	61.6	49.4	47.6	48.9	51.4	55.8	57.6	52.7	53.1
Agri. trade balance	42.3	52.7	40.7	34.7	40.1	64.3	73.3	58.5	47.7	51.9	75.6
Dominica											
Agri. exports	35.8	36.9	35.2	31.9	26.7	23.9	23.6	24.7	23.4	22.9	20.5
Agri. imports	29.4	31.7	29.3	24.2	25.1	32.5	35.2	31.8	30.5	31.3	31.5
Agri. trade balance	6.4	5.2	5.9	7.7	1.6	-8.6	-11.6	-7.1	-7.1	-7.6	-11.0
Grenada											
Agri. exports	18.0	15.6	12.2	11.5	10.4	13.6	13.2	13.8	15.8	23.6	22.4
Agri. imports	30.5	30.6	29.2	32.9	32.3	36.8	43.7	35.3	35.6	38.3	41.6
Agri. trade balance	-12.5	-15.0	-17.0	-21.4	-21.9	-23.2	-30.5	-21.5	-19.8	-14.7	-19.2
Guyana											
Agri. exports	129.3	151.3	193.2	162.8	185.1	207.2	250.2	226.4	234.4	–	–
Agri. imports	39.6	38.2	45.2	54.2	44.2	59.5	60.7	64.3	56.6	–	–
Agri. trade balance	89.7	113.1	148.0	108.6	140.9	147.7	189.5	162.1	177.8	–	–
Haiti											
Agri. exports	32.3	35.8	18.5	19.1	20.2	33.0	26.9	25.8	25.3	–	–
Agri. imports	231.0	220.4	240.0	201.8	210.2	365.8	301.2	301.1	273.9	–	–
Agri. trade balance	-198.7	-184.6	-221.5	-182.7	-190.0	-332.8	-274.3	-275.3	-248.6	–	–
Jamaica											
Agri. exports	228.9	252.9	247.8	252.0	243.7	290.2	302.4	308.5	294.3	278.9	279.4
Agri. imports	336.1	342.2	347.7	277.4	259.9	353.3	362.3	396.4	443.3	434.5	426.0
Agri. trade balance	-107.2	-89.3	-99.9	-25.4	-16.2	-63.1	-59.9	-87.9	-149.0	-155.6	-146.6

Table 2: CARICOM Agricultural Trade by Country 1990-2000 (USD millions) …contd.

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Montserrat											
Agri. exports	–	–	–	–	–	–	–	–	–	–	–
Agri. imports	6.7	7.7	7.0	8.0	7.1	6.7	6.6	6.4	7.0	–	–
Agri. trade balance	–	–	–	–	–	–	–	–	–	–	–
St. Kitts-Nevis											
Agric. Exports	11.1	11.8	15.4	12.4	11.2	15.2	13.0	10.1	12.2	7.3	7.8
Agric. Imports	20.8	20.2	19.1	18.6	19.8	24.0	27.7	24.3	24.2	22.2	34.7
Agric trade balance	-9.7	-8.4	-3.7	-6.2	-8.6	-8.8	-14.7	-14.2	-12.0	-14.9	-26.9
St. Lucia											
Agric. Exports	85.7	70.9	80.3	67.0	55.7	64.1	58.8	40.5	38.7	42.1	33.1
Agric. Imports	57.8	68.1	72.4	68.8	72.0	77.2	75.8	78.1	75.0	77.5	78.1
Agric. Trade balance	27.9	2.8	7.9	-1.8	-16.3	-13.1	-17.0	-37.6	-36.3	-35.4	-45.0
St.Vincent & Grenadines											
Agric. Exports	73.4	65.6	62.0	45.0	34.9	44.6	36.9	39.0	42.2	37.9	35.5
Agric imports	24.1	26.2	24.7	31.4	30.2	31.9	32.0	36.6	31.0	43.6	42.0
Agric. Trade balance	49.3	39.4	37.3	13.6	4.7	12.7	4.9	2.4	11.2	-5.7	-6.5
Suriname											
Agric. exports	41.4	36.9	45.2	40.1	44.6	45.0	45.1	116.7	28.6	–	–
Agric. Imports	62.3	59.5	68.1	53.4	56.6	56.4	65.1	154.8	130.5	–	–
Agric. trade balance	-20.9	-22.6	-22.9	-13.3	-12.0	-11.4	-20.0	-38.1	-101.9	–	–
Trinidad and Tobago											
Agric. Exports	115.2	117.9	117.3	124.4	144.4	189.4	188.2	228.7	227.4	211.7	213.9
Agric imports	299.6	314.4	300.1	214.5	215.6	367.7	287.2	304.9	324.9	279.2	251.3
Agric. Trade balance	-184.9	-196.5	-182.8	-90.1	-71.2	-78.3	-99.0	-76.2	-97.2	-67.5	-37.4
CARICOM* total											
Agric. exports	717.3	743.1	779.7	722.8	739.8	888.7	921.5	995.7	903.1	–	–
Agric imports	1071.3	1089.2	1117.3	920.1	908.5	1235.3	1212.0	1522.6	1359.4	–	–
Agric trade balance	-354.0	-346.1	-337.6	-197.3	-168.7	-346.6	-290.5	-526.9	-456.3	–	–

Sources: Based on FAO and data provided by CARICOM Secretariat.

*Excluding Montserrat

Table 3 – CARICOM Principal Agricultural Exports by Country

Country	Exports
Antigua and Barbuda	Vegetables
Bahamas	Fish, fruits, vegetables
Barbados	Sugar
Belize	Sugar, bananas, fish, citrus concentrate
Dominica	Bananas
Grenada	Nutmeg, mace, cocoa, bananas
Guyana	Sugar, rice, shrimps, fish
Haiti	Sugar, cocoa, coffee
Jamaica	Sugar, bananas, citrus, coffee, cocoa, pimento
Montserrat	--
St. Kitts-Nevis	Sugar
St. Lucia	Bananas
St. Vincent	Bananas
Suriname	Rice, shrimps, bananas
Trinidad and Tobago	Sugar, citrus, cocoa

Sources: compiled by author

Asian Caribbean Pacific (ACP) partnership agreement, The Caribbean – Canada (CARIBCAN) agreement and the Caribbean Basin Initiative (CBI).

Agricultural Exports

CARICOM's traditional agricultural exports are internationally non-competitive and dependent on preferential arrangements that guarantee access to the markets of developed countries. As developing countries, CARICOM states benefit from the Generalized Scheme of Preferences (GSP) extended by developed countries under the provisions of the General Agreement on Tariffs and Trade (GATT) that allow special and differential treatment for developing countries. In addition, CARICOM benefits from other preferential schemes. These arrangements include the European Union (EU)- Africa.

The commodity protocols established under the Lomé Convention and maintained under the EU-ACP partnership agreement provide non-reciprocal duty free access to the EU market for given quotas of sugar, bananas, rum, beef and veal. In the case of sugar, CARICOM countries also benefit from preferential prices that exceed world market prices as the price paid for ACP sugar is tied to the price paid for protected European beet sugar. CARICOM countries will lose the preferential tariff on bananas as of 2006 due to modification of the EU banana regime to provide for a

single tariff for all exporters to the EU market as of that date. This modification resulted from a World Trade Organization (WTO) ruling that the EU banana regime violated multilateral trade rules. However, the EU has provided a financial aid package intended to assist with restructuring of the banana industry. The CARIBCAN agreement provides duty free entry to the Canadian market. Unlike the EU-ACP partnership agreement, there are no quotas on agricultural exports to Canada. The Caribbean Basin Initiative (CBI) allows duty treatment for Caribbean exports excluded from the United States' GSP. These include beef, veal, rum and tobacco. CARICOM sugar exports to the United States (US) are subject to the US tariff- rate quota designed to protect US producers, but are exempted from the import duty payable on sugar in the case of the US GSP.

While allowing the region to generate export earnings from agriculture, trade preferences for traditional agricultural exports have militated against export expansion and diversification by perpetuating the production of uncompetitive products. Examination of the relative costs of production of the chief agricultural exports – sugar and bananas – is instructive. The cost of sugar production in the region averages USD 0.31 per pound which is significantly higher than the world price (Northover & Thomas, 1999). The guaranteed sugar prices under the sugar protocol of the Lomé Convention that have traditionally tended to exceed world market prices, have therefore made it possible for the region to continue to produce a product in which it has no comparative advantage. This explains why even in the face of structural changes in demand, the region has been slow to diversify out of sugar production.

In the case of bananas, average production costs in Jamaica are twice the average cost of production in Latin America (Campbell, 2000). A similar situation exists in the Windward Islands where production costs range from USD 461.0 per ton in St. Vincent to USD 515 per ton in Dominica, compared to USD 200 per ton in Columbia and USD 162 per ton in Ecuador.[8] Rice exported by Guyana and Suriname is also relatively uncompetitive. Yields per hectare average 4138 kilograms in Guyana and 3608 kilograms in Suriname, compared to 6383 kilograms in Uruguay and 6622 kilograms in the United States (FAO, 1999).

Provision for granting trade preferences to developing countries was incorporated into the GATT on the assumption that preferences would promote export growth and development. The response of CARICOM agriculture suggests that preferences by themselves are not sufficient to stimulate exports. In the absence of a dynamic class of agricultural entrepreneurs willing to undertake the investment in research and development, technology, and modern marketing systems needed to

strengthen the supply capability and improve competitiveness, the CARICOM has been unable to optimize the benefits of preferences. Thus, CARICOM agriculture has remained tied to uncompetitive products while opportunities for increasing exports of non-traditional products have not been fully exploited.

The erosion of the preferential arrangements on which the region has traditionally relied threatens the survival of CARICOM's export agriculture. The modification of the EU banana regime means that CARICOM bananas will face increased competition from cheaper Latin American bananas. In the case of sugar, concessions supporting beet sugar producers in Europe as a result of the AOA are likely to result in a reduction in the regions export earnings from sugar. There is also the possibility that further liberalization of agricultural trade in the current round of WTO agricultural negotiations could further erode the benefits of the Lomé commodity protocols and reduce the preferential margins under that trade arrangement. Furthermore, the EU-ACP partnership agreement extends the preferential arrangements until 2008, but clearly signal the intention of the EU to terminate the non-reciprocal trade preferences and replace them with reciprocal free trade.

The erosion of preferential margins has serious implications for CARICOM economies. In the short-term, export earnings are likely to decline, as CARICOM agriculture is too inefficient to meet the increased competition that will arise from lower preferential margins. A decline in export agriculture means that those CARICOM states that rely on agriculture to employ a significant share of labor are likely to experience increased rural unemployment and poverty, in a situation where rates of rural poverty are already high. One World Bank study found that the percentage of the total poor living in rural areas exceeded 60 percent in Guyana and Jamaica and was as high as 78 percent in St. Lucia (Baker, 1997:164).

Agricultural Imports

Liberalization of agricultural trade is expected to expose domestic producers to increased competition from imports. Given the relative inefficiency of CARICOM agriculture, increased exposure to competition from imported agricultural products is likely to adversely affect the viability of domestic producers. With limited access to credit and modern technology, the small-scale producers operating on marginal lands and are the most vulnerable. On the other hand, there is the possibility of some benefits accruing to domestic producers as a result of liberalization of agricultural trade. In particular, reduction in food subsidies under the AOA

could result in higher prices for highly subsidized foods such as dairy products, at least in the short-term. It can be argued that the higher prices could provide an incentive for increased food production in those CARICOM countries where existing constraints on production can be overcome.

Losses to domestic producers must be weighed against benefits to consumers. Most CARICOM countries are characterized by dependence on imported food. This derives from the underdevelopment of agriculture as well as from foreign taste patterns. It is estimated that food imports account for approximately 40 percent of total food consumption in CARICOM.[9] The dependence on imported food means that CARICOM consumers could benefit from lower prices and access to a wider variety of agricultural products.

The impact of increased imports on the agricultural trade balance will vary. Those countries that are net importers of agricultural products are likely to experience widening agricultural trade deficits. For the few countries that are net exporters of agricultural goods, the potential decline in exports due to erosion of preferences means that increased imports could result in these countries recording agricultural trade deficits.

Increased inflows of agricultural imports are likely to have positive effects on government revenue given the fairly high tariff rates. The agricultural tariff applied under CARICOM's common external tariff (CET) is 40 percent. However, during the Uruguay Round of trade negotiations, CARICOM countries bound their tariffs on agricultural imports at 100 percent. Consequently, CARICOM governments therefore have the option of increasing tariff rates above the 40 percent applied under the CET.

Summary

Liberalization of agricultural trade has potential costs and benefits for CARICOM states. The potential costs are the decline in export earnings that may result from erosion of preferential margins and the contraction of domestic agriculture in the face of increased competition from imports. Potential benefits include improved consumer welfare, higher levels of government revenue and opportunities for domestic producers to increase production of some foods that are currently subsidized. Whether the costs will outweigh the benefits depends on two main factors. First, how quickly CARICOM states will be required to implement full liberalization of agricultural trade. The shorter the timeline for implementation, the more costly liberalization will be for CARICOM countries as less time would be available for improving efficiency. Second, the scope of liberalization –

for example, failure to achieve significant reductions in the export subsidies of the developed countries will preclude opportunities for CARICOM states to increase production of agricultural products that are now subsidized. Similarly, the extent to which developing countries are allowed differential treatment will be an important determinant of the cost of liberalization.

IV. POLICY IMPLICATIONS

Diversification

Given the lack of competitiveness of CARICOM's traditional agricultural exports, diversification is critical to the survival of the region's agriculture. Although some attempts have been made to diversify into production and export of exotic fruits (mangoes and papayas), cut flowers and fresh water fish, these account for a relatively small share of agricultural exports. The region remains heavily dependent on products that are unable to compete without preferential treatment. The erosion of preferential margins and the intensified competition that will accompany liberalization mean that CARICOM agriculture risks marginalization. It is therefore imperative that the process of diversification be accelerated.

The growing market for organic foods is creating new opportunities for diversification. The world market for organic foods is expected to continue to expand as consumers become more concerned about the health effects of pesticides and artificial fertilizers. Production of higher-valued products must also be an integral component of the diversification strategy. Some agricultural products such as ginger and pimento can be utilized to produce pharmaceutical and food additive products. Diversification into specialty products such as organic foods has the advantage of not requiring economies of scale but presents other challenges. Farmers will have to be trained in new techniques of production. Stringent quality standards will have to be satisfied. In addition, significant investment in market information systems, promotion, branding and distribution is required.

These challenges, while difficult, are not insurmountable. One option is contract farming. The establishment of global production networks in the food industry makes it possible for CARICOM producers to enter into contract farming arrangements under which specific products are produced for food corporations in developed countries. It is important to note that contract farming has been successfully implemented in the Dominican Republic that is similar in size to some CARICOM countries.[10] Contract farming has the potential to reduce the costs of diversification because the transnational food corporations provide the marketing, branding and

promotion of the products, while the farmers are responsible for production. Another possibility is attracting foreign investors to undertake food production within the region. Foreign investment in production would relieve the financial and technological constraints that impede diversification. CARICOM governments could also make prudent use of the overseas external assistance available to support the restructuring of agriculture. For example, the new EU banana regime is accompanied by a financial aid package intended to assist restructuring of the banana industry and diversification. Similarly, the EU-ACP partnership agreement includes provision for financial assistance to support restructuring of export sectors including agriculture.

Technological Innovation

Technological innovation is the key to overcoming the structural constraints facing Caribbean agriculture and enhancing productivity. The adoption of new technologies is also essential for the implementation of diversification programs. A major constraint on technological advancement of CARICOM agriculture is the weak institutional arrangements for agricultural research. It is well known that research and development are important prerequisites for technological innovation Nevertheless, despite the establishment of various national agricultural research institutes and the Caribbean Agricultural Research and Development Institute (CARDI), funding of these institutions has not been a priority for regional governments (Ahmed & Afroz, 1996). The problem is aggravated by low levels of private sector investment in agricultural research in the region.

Given the fiscal constraints, the probability that governments in the region will be able to significantly increase funding of agricultural research in the short term is relatively low. Technological innovation therefore largely depends on the ability to attract foreign investment.

Promotion of Linkages with Tourism

The tourism sector in CARICOM countries has the potential to reduce the region's agricultural trade deficit by increasing linkages with agriculture. However, the tourism industry in CARICOM does not have a history of strong linkages with domestic agricultural production. This has been attributed to various factors including the centralized purchasing arrangements of transnational hotel chains, the unreliability of domestic agricultural supplies, the poor quality of domestic agricultural products and the preferences of tourists.[11]

In recent years, developments in the tourism industry have created a more favorable environment for strengthening of linkages between

CARICOM agriculture and tourism. First, the development of new tourist market segments such as health tourism and heritage tourism is increasing the number of visitors who are disposed to consuming domestic agricultural products (Henshall-Momsen, 1998). Second, increased local ownership of hotels has resulted in greater willingness to establish supply relationships with local producers. Many of the locally owned hotels are small businesses that do not have the centralized purchasing arrangements typical of large hotel chains. Moreover, unlike the transnational hotel corporations that can pull out of the region, locally owned hotel corporations have a vested interest in promoting employment and social stability in the societies in which they operate.

Strengthening linkages with tourism will require improvement in product quality as well as improved storage and distribution systems. It will also be necessary to diversify into production of the crops required by the tourism industry. It has to be recognized, however, that the lack of access to credit and the low level of technical knowledge of the small farmers, who are the main producers of fruits and vegetables, are significant obstacles to the achievement of these changes. An innovative project underway in Jamaica demonstrates that linkages between agriculture and tourism can be strengthened through collaboration between hotels, government and farmers. The Jamaican owned Sandals Hotel chain has successfully cooperated with the Jamaica Ministry of Agriculture and small farmers to increase the quantity and quality of food supplied to the hotel. Under the terms of the arrangement, the hotel provides farmers with seeds for non-traditional fruits and vegetables, for example, cantaloupe, honeydew melons and zucchinis. The Ministry of Agriculture ensures the quality of the product by providing technical assistance to the farmers who undertake production for sale to the hotels. This is a model that could be replicated elsewhere within CARICOM.

Promoting Alternatives to Agriculture

The larger CARICOM states such as Belize and Guyana may be able to achieve internationally competitive agricultural production providing they are able to attract sufficient foreign investment to overcome technological and financial constraints. However, the possibility of some of the smaller CARICOM states such as Dominica, Grenada, St. Kitts and St Vincent and the Grenadines achieving the level of agricultural efficiency required to withstand the intensified competition that will accompany full liberalization of agricultural trade is limited. These countries face severe land constraints both in terms of quantity and topography. In addition, the infrastructure required to support agriculture is underdeveloped. Hence, the

probability of attracting foreign investors into agriculture is very low. For these countries consideration must be given to promoting alternatives to agriculture. Countries such as; Antigua and Barbuda, Barbados and The Bahamas, have successfully reduced dependence on agriculture through promotion of tourism. In the short-term, the expansion of tourism is one possible strategy for other small CARICOM countries.

It has to be noted, however, that tourism is a highly volatile industry, and hence over reliance on tourism is not a sustainable strategy. Countries diversifying into tourism also need to explore opportunities for development of other service exports. Opportunities for developing countries to export services are increasing due to advances in information and telecommunications technology that make it possible for services to be delivered across international borders. However, an adequate supply of skilled labor is necessary in order to develop a competitive advantage in the knowledge intensive services such as professional services, educational services and technology services. CARICOM countries suffer from a shortage of skilled labor. Consequently, in the short-term it will only be feasible to promote exports of low-skilled services such as data entry and telemarketing. Increased investment in the development of human capital will be necessary to facilitate promotion of more knowledge intensive services in the medium-long term.

Negotiating Further Multilateral Liberalization

Analysis of the wide range of issues under consideration in the current round of agricultural trade negotiations is beyond the scope of this paper. The issue here is what should be CARICOM's negotiating strategy regarding further multilateral liberalization of agricultural trade.

Given the lack of competitiveness of CARICOM agriculture, the increased competition that will accompany further liberalization of agricultural trade has the potential to increase rural unemployment and poverty in those CARICOM states where agriculture is still an important employer of labor. However, the traditional CARICOM strategy of seeking to maintain preferential access for uncompetitive products is no longer appropriate for three main reasons. First, there is a growing trend towards reciprocal free trade arrangements. Hence, demands for retention of preferential access are unlikely to be successful. Second, multilateral trade liberalization is eroding preferential margins. Finally, the failure of Caribbean agriculture to achieve competitiveness under the existing preferential schemes suggests that the emphasis on preferences is misplaced. Preferences are of limited benefit where structural and

institutional constraints militate against improvements in efficiency and expansion of output.

It is therefore in the interest of CARICOM to collaborate with other developing countries to negotiate for a transition period that would allow for the economic restructuring necessary to adjust to full liberalization of agricultural trade. For some CARICOM countries the transition period will provide an opportunity to improve the efficiency of agriculture whereas for others the transition period will have to be used to promote alternatives to agriculture.

V. CONCLUSIONS

The integration of agriculture into the multilateral trading system offers prospects for liberalization of agricultural trade. While most of the benefits of liberalization are likely to accrue to developed countries, developing countries with efficient agricultural sectors also stand to gain from improved access to markets that can facilitate expansion of exports and higher rates of economic growth. In the case of CARICOM countries, the erosion of preferential margins is a serious threat to the region's inefficient agricultural sector. The extent to which CARICOM countries will benefit from liberalization of agricultural trade depends on their ability to meet the challenge of increased competition. It is evident that inefficient production, weak supply capacity and concentration on products with low income elasticity of demand place CARICOM agriculture at a competitive disadvantage.

The future of CARICOM agriculture depends on restructuring of the sector to improve international competitiveness but this may not be possible in all of the member states. Preferential arrangements can no longer be relied on to bolster inefficient production. Diversification out of traditional uncompetitive products has to be a priority for the region. To be successful the diversification strategy will have to be underpinned by increased investment in new technologies that can relax some of the constraints on agriculture and improve productivity.

Notes

1 The member countries of CARICOM are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts-Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago. Haiti is a provisional member.

2 For further details, see GATT Secretariat (1994).

3 For further details, see UNCTAD (1999b).

4 In keeping with the provisions of article 20 of the Agreement on Agriculture, further negotiations on agriculture began in March 2000.

5 Statistical Institute of Jamaica Census of Agriculture (1996).

6 See for example, Beckford (1972), Ahmed & Afroz (1996).

7 Inter –American Institute for Cooperation on Agriculture (1998:26).

8 Orchard J. et al. (1997), "Potential for Fair Trade and Organic Bananas From the Caribbean" University of Greenwich 1997. Cited in Sandiford (1999:17).

9 Inter-American Institute for Cooperation on Agriculture (1998:4).

10 See Raynold (2000), for case study of contract farming in the Dominican Republic.

11 For Further details, see Henshall- Momsen (1998).

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