6

Effective special safeguard mechanisms

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Introduction

The focus of this chapter is on trade remedy measures in response to such external shocks as import surges and depressed import prices. The WTO Agreements include some general trade remedy measures such as safeguards, anti-dumping and countervailing against subsidies. For agriculture, the Uruguay Round agreement also provided a simpler trade remedy instrument in the form of a special agricultural safeguard (SSG) that can be used to respond to such shocks. In the Doha Round, an agreement was reached that there will be a similar safeguard in the form of a special safeguard mechanism (SSM) for use by developing countries.

6.1 External shocks

Agricultural markets are by nature cyclical and subject to wide fluctuations due in part to weather variability. Other sources of instability include subsidies on production and exports in the world markets and anti-competitive behaviour by trading firms (both state-owned and private). All these affect orderly development and the flow of trade. As countries reduce tariffs and bind them at lower levels, they become increasingly vulnerable to external agricultural market instability and to import surges that could wipe out viable agricultural production activities, whether well-established or nascent.[69] Vulnerability to such external shocks is of particular concern

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[69] The term "import surge" is often used in a general sense to indicate two different types of external shocks. One is the phenomenon of volume surges where imports rise suddenly and sharply over and above a base level or trend. The other is depressed import prices, mostly due to movements in world market prices, which undermine, or threaten to undermine, an otherwise viable domestic production.

TABLE 6.1

Recent trends in some food product imports in four CARICOM member countries (in metric tons)

| Importer	Product	1998	1999	2000	2001	2002	2003	2004
Barbados	Tomatoes	55	429	155	181	165	107	236
Jamaica	Skim milk powder	3 370	2 057	4 469	6 242	5 067	3 991	4 874
Haiti	Chicken meat	17 300	33 440	15 640	16 850	24 142	28 492	17 178
Trinidad and Tobago	Rice	37 327	39 215	25 031	38 424	43 215	31 873	67 971

Source: FAOSTAT

to developing countries that are endeavouring to develop their agricultural potential and diversify production in order to enhance their food security and alleviate poverty.

This review draws on various FAO studies and studies by national and international civil society organisations that document increasing numbers of import surges of various food products in developing countries (particularly low-income food-deficit countries (LIFDCs)) since the mid-1990s.[70] Often these reports associate the surge with negative effects on local production and economies. Examples include import surges of chicken in Jamaica, dairy products in Kenya, tomato paste in Senegal and rice in Haiti.

There is widespread concern that these problems will intensify in the coming years as tariffs are further lowered while economies lack alternative safeguards. In several of these cases, imports increased by as much as ten- to twenty-fold within a short period of four to five years, with marked negative impact on domestic production, industry and employment. The phenomenon is relatively frequent for some product groups, notably dairy products, poultry and some other meats, rice, sugar and vegetable oils. As an illustration of the phenomenon of import surges, **Table 6.1** shows recent statistics on the import of four products for four Members of CARICOM.

The other source of external shocks – depressed import prices – is also prevalent. It is common knowledge that the world market prices of agricultural commodities fluctuate markedly. More importantly in the context of safeguards, the problem is when prices remain depressed for a prolonged period before there is an upturn. Some studies have found that the typical length of price slumps for all primary commodities analysed (including non-agricultural products) was 39 months during the past three to four decades, with a range of between 25 months (coconut oil) to 70 months (bananas) (Cashin, McDermott and Scott, 1999; Cashin, Liang and McDermott, 1999). A special safeguard is meant to be an instrument for responding to such situations, and not to address longer-term declining trends in commodity prices. **Figure 6.1** illustrates the above phenomenon for two food products.

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[70] Sharma (2005) documents 30 such reports, all for the late 1990s and early 2000.

FIGURE 6.1

Two examples of persistently depressed world market prices (beef and rice)
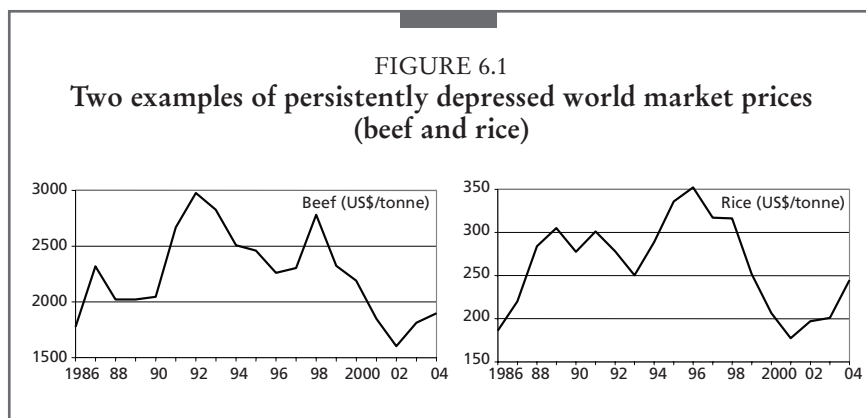
Such problems seem to have plagued developed and higher-income developing countries as well, as can be seen through the rapid growth after 1995 of anti-dumping and safeguards notifications and disputes.

6.2 Experience with the special safeguard of the Agreement on Agriculture

The problem of import surges was recognized during the Uruguay Round (UR) negotiations and an agreement was reached to create a special trade remedy instrument: the special agricultural safeguard or SSG. Article 5 of the UR Agreement on Agriculture provides the provisions of the SSG, notably how the safeguard is triggered in the face of the import surge or when import prices are depressed, as well as the level of the remedy (additional duties) in such events. It was also agreed that the recourse to the SSG would be limited to those countries that undertook tariffication of non-tariff barriers. As a result, only a total of 39 WTO Members reserved the right to use the SSG for a total of 6 156 tariff lines. Of the 39 Members, 22 were developing countries, with the right to 2 125 tariff lines. The SSG, however, was not used much by these countries. Of these 22, only 6 used SSG during 1995 to 2004, with a total number of triggers of 163.

Barbados is one of the six countries, and the only CARICOM Member, that reserved the right to use the SSG. **Box 6.1** summarizes the experience of Barbados with the application of the SSG.

The 163 triggers used so far by the six developing countries is a fairly small number relative to the potential use of the SSGs. A rough calculation shows that the overall SSG utilisation rate – the ratio of actual use to potential use – was about 1 percent when the potential use by all 22 countries is taken into account, and about 5 percent when the data for the six users only are considered. The utilization rate varied for individual countries: 0.8 percent

BOX 6.1
Experience of Barbados with the application of the SSG

Barbados is the only CARICOM Member (one of six developing countries) that reserved the right to use the SSG. The right was reserved for 37 products at various levels of the tariff line details. The SSG was applied during different periods in 2002 to a total of 22 products or product groups: 12 vegetables, 2 fruits and 8 meat products. The decision to resort to the SSG was taken only around April 2000 when Barbados started to feel the pressure of import surges following the institution of a tariff-only regime, after removing a restrictive import-licensing regime. But it took almost two years to put in place the necessary legislation as well as parameters like trigger prices.

Unlike the case in many other developing countries, at the time Barbados resorted to SSG, it was already applying the full extent of its (relatively high) bound tariffs to the potential SSG products, and thus there was no room left to raise applied tariffs. This experience belied the often-held assertion that a special safeguard is not needed when bound tariffs are high. The Barbados case also showed that the trigger prices for the SSG determined on the basis of 1986–1988 average import prices (as per the rule) turned out to be on the low side, and thus the extent of the remedy (additional tariffs) provided by the SSG was not adequate to check the surge in imports. In view of this, Barbados, as well as other CARICOM Members, has called for more effective triggers for negotiating the SSM, including higher levels of remedies provided by the SSG. It was due to inadequate remedy that Barbados decided to use the price safeguard of the SSG, and not the volume safeguard, in the first place.

Source: Marcus-Burnett (n.d.)

for Philippines, 1 percent for Costa Rica, 2.4 percent for Nicaragua, 7 percent for Republic of Korea and 45 percent for Chinese Taipei.[71]

Eighty-nine of the total 163 triggers (55 percent) were volume SSGs and the rest were price SSGs. Chinese Taipei alone accounted for 84 percent of the volume SSGs; when it is excluded, over 80 percent of the triggers were price SSGs. Four groups of products stand out: primary and processed fruits and vegetables (HS07 and HS08), amounting to 21 percent of the total SSGs; various meat products but dominated by poultry (HS02 and HS16), also

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[71] The full official name in WTO of Chinese Taipei is "Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu".

amounting to 21 percent of all SSGs triggered; and rice and beans and peanuts (HS 10 and HS12). The rice figures are dominated by the 24 triggers by Chinese Taipei, which include both rice in grain and various rice products like flour and pasta. There were also some cases where both price and volume SSGs were triggered for the same product, e.g. buckwheat, wheat starch and beans by the Republic of Korea, and preserved poultry meats by the Philippines.

It is not fully clear how a Member decides whether to apply the price trigger or the volume trigger, or indeed not to apply either trigger even when the relevant conditions for the SSG are met. For example, calculations based on import and consumption data for 1995–2002 show that both Costa Rica and Nicaragua could have triggered volume SSGs twice (i.e. the conditions were met), and yet while Costa Rica applied price SSG for rice in 1999 and 2002, Nicaragua did so only once, in 2002.

The SSG experience indicates that in the future (in the context of the SSM), it is unlikely that governments will apply SSGs every time the trigger conditions are met, because applying them is not without costs (especially administrative costs). Authorities might determine that the economy can sustain the shock of a fall in import prices and/or a surge in imports. If the levels of the bound tariffs are high enough, countries can raise applied rates to an extent that offsets the effects of an external shock. There is some evidence that many countries followed this approach, in particular during 1998–2000, when world market prices of several basic foods declined sharply.

However, there is no doubt that the developing countries require a simple and effective trade remedy instrument for responding to import surges, whether or not the instrument is used frequently. During the Doha Round negotiations there was consensus early on that such a special safeguard instrument will be accessible to all developing countries, in the form of the SSM. Once that was agreed, the instrument needed to be designed so that it was effective from the standpoint of the developing countries.

6.3 Designing an effective special safeguard mechanism (SSM)

The key elements for designing a SSM are country eligibility, product eligibility, triggers and remedy. Of these, an agreement has been reached on the first: the SSM will be accessible to all developing countries. Therefore, what follows will discuss the other three elements but mostly on triggers and remedy as these are critical for an effective SSM.

Practically all CARICOM Members (twelve of the thirteen WTO Members), and some additional countries in the Caribbean region, are Members of G33. During early years of the negotiations, the CARICOM Members submitted some proposals on the SSM as a separate country group, but now they negotiate as prominent and active G33 partners. In view of the importance of the G33 alliance for the SSM, its key positions are outlined in **Box 6.2**.

BOX 6.2
Key proposals on SSM by the G33 group

The G33 was initially formed on the eve of the Fifth WTO Ministerial meeting in Cancún (September 2004) by 23 developing countries that constituted an Alliance for Strategic Products and Special Safeguard Mechanisms. By 2006, the Group had 42 Members from all regions. In the WTO negotiations, G33 championed the cause of the SSM and made substantive technical proposals, which served as a starting point in discussions on SSM.

The G33 has always held that the new SSM should be simple, effective and easy to implement. The proposal for a new SSM has as its basic premises: that the general WTO trade remedy measures (such as emergency safeguard) are difficult to apply for most developing countries; that the SSG is not available to a majority of them; that the countries have been very vulnerable to shocks such as import surges and depressed prices; and that their economies are too vulnerable to liberalize without some safety net.

The G33 position has called for:

1) the SSM to be accessible to all developing countries without exception (accepted);
2) similar access for all agricultural products without exception (under negotiation);
3) both price and volume triggers (accepted);
4) a simpler trigger formula (compared with the Uruguay Round SSG), based on *only* three-year moving averages of actual imports; for a price safeguard, the proposal is a three-year moving average of prices as the trigger;
5) the level of the remedy for price surges (i.e. additional duty) to fully offset depressed price; a schedule of remedies for volume safeguards based on the extent of the import surge; and
6) adaptation of the provisions of Article 5.6 of the UR AoA for perishable and seasonal products (adapted).

Source: Based on the G33 proposals on SSM

Product eligibility

The 2004 August Framework Agreement did not specify whether the SSM would be limited to some products only or would apply to all tariff lines. During the negotiations, positions ranged from limited product eligibility based on certain criteria to no restriction whatsoever. The G33 supported no restrictions. The proposal by the United States and a joint proposal by

Argentina, Paraguay and Uruguay proposed some restrictions. The eligibility criteria proposed included only those products that have taken the full tariff cuts as per the standard tariff-cutting formula; those for which new, reduced bound tariffs fall below recent applied rates; and those that are produced domestically or are close substitutes of products produced domestically. Preliminary analysis of these proposal shows that they will severely limit the scope of the SSM for a majority of the developing countries, and thus the effectiveness of the instrument itself. Earlier during the negotiations, other criteria were also suggested such as the contribution of the product to food security, nutrition and rural gross domestic product (GDP) (e.g. CARICOM 2002). However, these ideas were not pursued.

Appropriate references for triggering price and volume safeguards
 a) *Appropriate reference for triggering price safeguard*
A price trigger mechanism involves three elements or parameters: current import price, reference price, and the trigger decision itself (i.e. the *de minimis* level for triggering the safeguard). Reference price plays the critical role because the frequency of the triggers and their remedy depends on it, in relation to current import prices. In order to encompass various proposals and ideas, the analysis of the effectiveness of a SSM price trigger below is based on an assessment of four types of references:

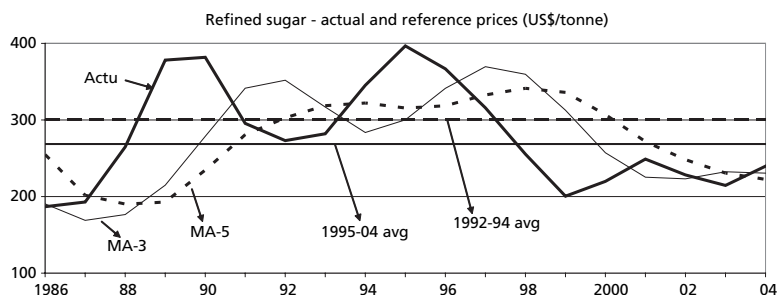| Fixed reference prices	Moving reference prices
1992–1994 average price	3-year average moving prices (MA-3)
1995–2004 average price	5-year average moving prices (MA-5)

Fixed, historical three-year averages are perhaps the most common base periods used in various pillars of the AoA, including the SSG. Such a reference has also been discussed for the SSM. The second reference, the 1995–2004 average, is meant to illustrate the pros and cons of a fixed, historical reference but is based on a longer period. Such a base is much less influenced by short-term fluctuations in commodity prices and is also being considered for some other pillars of the AoA, e.g. blue box and *de minimis* domestic support. The third reference, called Olympic average, is also a fixed base for the implementation period. It is an average of the historical prices after excluding too-high and too-low prices from the series. We base the Olympic averages on the second-lowest five-year prices observed during the 1986–2004 period.[72] The MA-3 and MA-5 references are average prices for the three and five years (respectively) preceding the year when a safeguard

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[72] For each product, there are 19 years of price data (1986 to 2004). The price data were first sorted from the lowest to highest. The Olympic average prices were computed based on sixth to tenth lowest prices, i.e. excluding the lowest five price data as well as the top nine.

FIGURE 6.2

Actual world market price of refined sugar along with four references prices

Refined sugar - actual and reference prices (US$/tonne)

Source: Author.

Note: Although not pinpointed in the figure, a SSM is triggered when actual current prices are below the reference prices (possibly with a *de minimis* provision, e.g. more than 5 percent below). For example, Table 2 shows that for refined sugar, the MA-3 reference triggered eight times. These would be during 1991–1994, 1997–2000, and possibly in 2003 also.

is triggered. Thus, the MA-3 reference price for analysing a trigger in 2003 would be the average of 2000–2002 prices. [73] All analyses commence in 1986.[74]

The ten products for which world market prices are analysed are chicken, beef, skim milk powder, whole milk powder, raw sugar, white sugar, palm oil, soy oil, rice and wheat. These are the products for which import surges are reported to be widespread in recent years. The import prices used are well-known world market prices for the two sugars, two oils, rice and wheat, while unit export values (export value divided by export volumes) of a dominant world exporter are used as a proxy for the world price in the case of chicken, beef and the two milk powders. Although it is anybody's guess how commodity prices will fluctuate in the future, the analysis covers a sufficiently long period of 19 years to capture typical cycles of high and low prices in world markets and thus, we hope, should be valid for the coming years. Lastly, the prices used in the analysis are world market prices while the prices that the SSM will use will be c.i.f. import prices. This could bias the results but most probably to an insignificant extent.

As an illustration for white sugar, **Figure 6.2** shows actual current world market prices and four reference prices. In each case, a safeguard is triggered in the year when the current import price falls below the reference price (subject

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[73] The MA-3 reference has been proposed by both G33 and the United States.
[74] Note that for the year 1986, the MA-3 requires statistics from 1983, the MA-5 from 1981.

TABLE 6.2
Number of triggers during 1986–2004 for various reference prices

	Fixed reference prices		Moving reference prices	
	1992–94	**1995–04**	**MA-3**	**MA-5**
Chicken meat	9	5	9	11
Beef	15	7	7	8
Dairy, SMP	9	11	6	6
Dairy, WMP	7	14	7	8
Sugar, raw	11	7	9	10
Sugar, refined	12	8	8	10
Palm oil	10	13	7	9
Soya oil	12	12	6	7
Rice	9	7	8	7
Wheat	8	9	7	7
All total	102	93	74	83
% triggers	*54*	*49*	*39*	*44*

Note: The last row, percent triggers, is the ratio (%) of the number of triggers to 190 (10 commodities times 19 years covered, 1986–2004). In all cases, a 5 percent de minimis level is assumed, i.e. a safeguard is triggered when current prices are below 95 percent of the reference price.
Source: Author

to a 5 percent *de minimis* level). **Table 6.2** shows the number of triggers for ten agricultural products, computed in the same way for 1986–2004.

In evaluating the references, some notion of the effectiveness of the triggers is needed. One criterion is the total number of triggers during the period covered (1986–2004). The other, and more important, criterion is the number of triggers when prices are really depressed, e.g. during 2000–2004 for most products covered in the analysis here. A third criterion could be that a safeguard not trigger too frequently.

With these criteria in mind, it is straightforward to see that a fixed reference price works well only when the base period chosen happened to be the right one relative to the current price trends. Take the case of beef. The 1992–1994 reference triggers safeguards in 15 of the 19 years, which are obviously too many triggers. This occurred because 1992–1994 happened to be the three-year period when beef prices were among the highest. The case of the two sugar prices and soy oil is similar. A reference like 1995–2004 based on several years of price data is less vulnerable to short-term fluctuations in the data and so should give more balanced results. The overall number of triggers with the 1995–2004 reference is fewer than with the 1992–1994 reference. However, even here, as the case of the whole milk powder shows, the reference gives too many (14) triggers because the reference price happened to lie rather high relative to current prices. The outcome is similar for skim milk powder, soy oil and palm oil.

In contrast, the MA references incorporate information on the recent movement of commodity prices and thus do not wander off too far from current prices. The longer the memory (e.g. MA-5) the less sensitive is the trend to sharp but short deviations in prices. The basic idea of using a MA for the purpose of a safeguard is thus sound. When current import prices are trending down, the MA prices also trend down but remain above the actual prices most of the time, thus triggering safeguards.[75] **Table 6.2** showed that the MA-3 triggers 39 percent of the time and MA-5 44 percent of the time, which can be taken as fairly reasonable outcomes.

Because of the longer period averaged, the MA-5 lies above MA-3 when prices are falling. As a result, the MA-5 triggers more frequently than MA-3. Two outcomes in particular make the MA-5 reference more attractive. First, it also triggers safeguards towards the end of a persistently depressed price phase when the MA-3 fails to trigger. For the same reason, the MA-5 also triggers a safeguard when the price begins to trend up, while still at a low level, whereas the MA-3 does not. Second, during the phase when prices decline, the MA-5 reference remains above MA-3; this not only increases the probability of a trigger, it also allows higher-level remedy because the gap between the current and MA-5 prices is higher. (See discussion below). The fact that MA-5 triggers more frequently is considered a disadvantage by some countries; and calculating it does require more statistics.

In order to stress this last point, **Figure 6.3** compares the effectiveness of the MA-3 and MA-5 references during a period when world prices for certain products were persistently depressed (2001–2004).[76] It is clear from the figure that the MA-3 triggers much less frequently than the MA-5. The difference is significant. Indeed, MA-3 does not trigger a single time in 2003 and 2004 for poultry, beef and rice, despite the fact that prices were still depressed. Moreover, for poultry meat and white sugar, MA-3 triggered only once in four years.

b) *Appropriate reference for triggering volume safeguard*

In the Uruguay Round SSG, the reference for price trigger was based on fixed 1986–1988 prices while that for the volume trigger was based on moving averages. This made sense because unlike world market prices, which are typically cyclical, import levels often trend up over time and therefore a reference based on a fixed, historical import level would not be appropriate for a trigger. The view that the reference should be variable has also dominated the thinking for the SSM in the Doha Round. According to

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[75] When current prices are rising, the MA prices also rise but remain below the rising actual prices. However, a safeguard is not needed for this phase.

[76] This analysis covers only five products (poultry meat, beef, raw sugar, white sugar and rice) because their prices fit this pattern very well.

FIGURE 6.3

**Percentage triggers and additional duties for 100% offset
during 2001–2004**
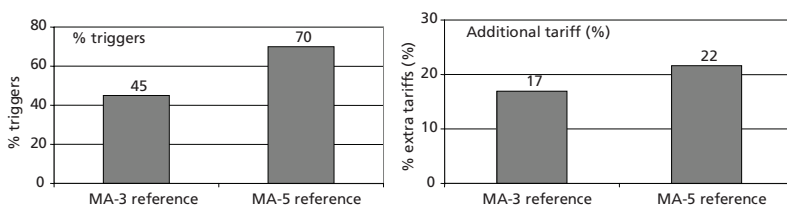
Note: The analysis in these figures is based on five products (poultry meat, beef, raw sugar, white sugar and rice) for which the world prices were clearly in one of their most depressed phases (2001–2004). The percentage triggers shown in the left panel are the number of triggers during that period for all five products taken together divided by the 20 total potential triggers (5 products over 4 years). The right panel shows average additional duties for periods when safeguards were triggered, again averaged for the five products covered.

Source: Author.

the G33 proposal, a safeguard is triggered when current import levels exceed the average level of imports in the preceding three years.

The following analysis evaluates the effectiveness of four import references encompassing the main proposals currently on the table, based on 10 cases of imports (see **Table 3**).[77]

Fixed reference import levels	Moving reference import levels
1992–1994 average	3-year average moving prices (MA-3)
1995–2004 average	5-year average moving prices (MA-5)

Of the two fixed references, the 1992–1994 average could be taken as a base period just prior to the implementation of a trade round (in this case, the UR). For the Doha Round, such a period could be 2002–2004. The 1995–2004 reference represents a broader base period than just three years. Such a base, covering the entire implementation period of the AoA, has been proposed for some other elements of the AoA being negotiated.

As an illustration, **Figure 6.4** shows rice imports in Cameroon using actual current imports and four reference import levels. In each case, a safeguard is triggered in the year when the current import level exceeds the reference level (subject to a 5 percent *de minimis* level). **Table 6.3** shows the number of triggers for ten cases thus computed for the period 1990–2004.

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[77] The countries and products covered here include the cases in an ongoing FAO study on import surge, based on country case studies.

FIGURE 6.4

**Current import levels and various reference imports: the case
of rice imports for Cameroon**
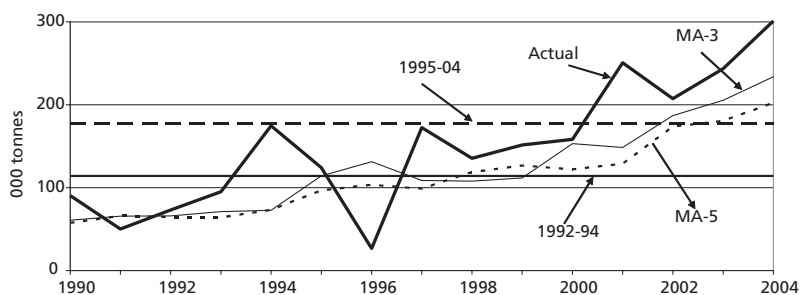
Note: Although not pinpointed in the figure, a SSM is triggered when current import level
is above the reference import level (possibly with a de minimis provision, e.g. by more than
5 percent). For example, **Table 3** shows that for rice in Cameroon, the MA-3 reference triggered
12 times. These would most probably be during 1990, 1993–1995, 1997–1999 and 2001–2004.

Source: Author, based on FAOSTAT trade data.

The effectiveness of various references depends on the behaviour over
time of actual imports. For most developing countries, the general trend
for the imports to fluctuate around strong rising trends. This explains why
the numbers of triggers are so different between the two fixed references
(about one-third of the time for the 1995–2004 reference versus two-thirds
of the time for the 1992–1994 reference). With very low imports initially, the
1992–1994 reference value is small in comparison with rapidly rising imports
in subsequent years, leading to frequent triggers. The debate on the choice of
a reference among alternative fixed references is easy to resolve: the reference
period cannot be the beginning of the series when imports are expected to
trend up strongly. This is in contrast to the case of price triggers because world
market prices tend to fluctuate rather than rise or fall steadily all the time.

Table 6.3 also shows that with the moving averages safeguards are triggered
about 60 percent of the time. The key issue here is the level of the safety
desired, i.e. whether a safeguard should cover the risk of a volume surge
60 percent of the time, or whether the level should be lower, for example
33 percent of the time. There is no easy and objective basis for determining
the optimal level of safety that is appropriate for all countries and products
because the injury inflicted by a surge depends on the vulnerability of the
import-competing sector.

This point is pursued further in Sharma (2006), which shows that the level
of safety can be adjusted by assuming alternative values of the *de minimis* level

TABLE 6.3
Total number of triggers during 1990–2004 for various import references

Importer	Product	Moving references		Fixed references	
		MA-3	MA-5	1992-94	1995-04
Cameroon	Chicken meat	8	8	10	3
Ghana	Chicken meat	11	11	13	3
Jamaica	Chicken meat	6	7	7	5
Senegal	Milk powder	6	5	4	6
Sri Lanka	Milk powder	8	10	13	5
Cameroon	Rice	12	13	10	4
Honduras	Rice	12	13	12	5
Nicaragua	Rice	8	7	9	5
Cameroon	Sugar refined	12	11	10	5
Tanzania	Sugar refined	9	8	13	4
	Total	**92**	**93**	**101**	**45**
	% triggers	*61*	*62*	*67*	*30*

Note: MA-3 and MA-5 are 3-year and 5-year moving averages. The last row, % triggers, is the ratio of total triggers during 1990–2004 over potential number of triggers (150: 10 products and 15 years).
Source: Author.

applied. The above results were based on a 5 percent *de minimis* threshold.[78] Higher values reduce the safety rate. For example, a *de minimis* threshold of 15 percent provides a safeguard 51 percent of the time, on average.

6.4 The level of remedy for price and volume safeguards

The word *remedy* refers to the type of measure taken – and to its scale, duration and other characteristics – once a safeguard has been triggered. Examples of measures that might be taken include additional tariffs and quantitative restriction. The important question is the scale of the remedy (for example, how much additional tariff). The three WTO general trade remedy measures apply to a volume surge only and not to import price depressions. The level of remedy in the case of anti-dumping and countervailing measures is grounded on an objective basis: the remedy should not exceed the margin of dumping and the level of subsidy, respectively. In contrast, in the case of the Safeguards Agreement the remedy is prescribed in a general manner. Article 5.1 specifies that a safeguard measure will be applied *only to the extent necessary* to prevent or remedy serious injury and to facilitate adjustment [emphasis added]. In the case of the SSG, the level of the remedy involves variable additional duties linked to the degree of price depression (in the case of the price trigger); and additional duties *up to* a maximum of one-third of current duty (in the case of the volume trigger).

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[78] That is, a safeguard is triggered when current imports exceed the MA-3 or MA-5 imports by 5 percent.

TABLE 6.4

Maximum percentage of price depression during 1986–2004 and additional tariff required to offset the price depressions fully (100 percent)

Commodities	Maximum price depression (%)		Additional tariff (%) for 100% offset	
	MA-3	MA-5	MA-3	MA-5
Chicken meat	28	30	39	43
Beef	24	30	32	43
Dairy, SMP	29	26	41	35
Dairy, WMP	31	26	45	35
Sugar, raw	42	45	71	83
Sugar, refined	36	40	56	68
Palm oil	55	53	124	114
Soya oil	44	39	77	65
Rice	31	39	46	63
Wheat	31	31	46	45
Simple average	35	36	58	59

Note: The first two columns are maximum percent price depressions and the last two columns are additional duties required for offsetting these depressions fully (100 percent).
Source: Author

In the context of the SSM, the key question is the same: What level of remedy is appropriate to correct the problem of market disruption due to depressed import prices and import surges?

6.4.1 Remedy for price safeguard
All negotiators have agreed to the proposal that the level of the remedy should depend on the extent of the price depression. Thus, the first step in determining the remedy is to compute the price depression. **Table 6.4** shows the estimates for two references (MA-3 and MA-5) for the ten world-price series covered earlier. The first two columns show the level of maximum price depressions observed in any year during 1986–2004 for MA-3 and MA-5 references. (Note that these are maximum depressions in the entire period; for individual years, price depressions would be lower. The last two columns show computed additional tariffs for offsetting the price decline fully (100 percent). Most of the maximum depressions are in the 30–50 percent range and in no case are they over 60 percent, although that is allowed (for some products not covered here). The overall averages for the ten products are similar, around 35 percent. Both references provide fairly high levels of remedy (additional duties) in most cases, on average about 60 percent for the ten products. The variations for different products and references follow from the trends and fluctuations in the price series. The highest additional tariff (for palm oil) reaches as much as 124 percent for MA-3 and 114 percent for MA-5.

It is very difficult – indeed impossible – to determine in an objective way the most desirable offset rate without taking into account the context

TABLE 6.5

G33 proposal on additional duty for varying intensities of import surges

Band	Surge of:*	Maximum additional duty
1	< = 5%	No duty (*de minimis*)
2	>5% to = <10%	Higher of {50% of the bound rate or 40 percentage points} tariff}
3	>10% to = <30%	Higher of {75% of the bound rate or 50 percentage points tariff}
4	>30%	Higher of {100% of the bound rate or 60 percentage points tariff}

*The extent to which the current import level exceeds the MA-3 import level.
Source: Based on the G33 proposal.

(i.e. the vulnerability of the import-competing sector) in each country. The import-competing sectors in LDCs may be more vulnerable than in non-LDCs and so may require a higher level of the remedy. Given this, the most that could be done for the SSM would be to agree to a high-enough offset rate that applies to all products and countries. The G33 proposal is for up to 100 percent offset. There are no proposals on the table for an offset rate exceeding 100 percent, even if the bound tariffs are very low. It is possible that alternative proposals will be tabled in the negotiations, e.g. 75 percent instead of 100 percent. Additional tariffs for a 75 percent offset would be equal to the 75 percent of the maximum tariffs for a 100 percent offset as shown in the last two columns of **Table 6.4**.

As a final point, note that the SSG remedy provides much lower levels of remedy for the lower range of the price depression (e.g. up to 40–50 percent), after which the duties escalate.[79] For example, additional tariff is only 4 percent of the bound tariff for a price depression of 20 percent, 28 percent additional duty for a depression of 50 percent and 170 percent additional duty for a depression of 80 percent. In no case does the extra duty completely offset the fall in the import price. For a special safeguard mechanism, the SSG remedy is very much on the low side.

6.4.2 Remedy for volume safeguard

In the case of the SSG *volume* trigger, the maximum remedy was fixed at the level of one-third of the ordinary customs duty in effect at the time the safeguard is triggered.[80] (This is different from the remedy in the SSG *price* trigger, where a well-defined schedule was agreed for the remedy such that the additional duty varies with the depth of the price depression.) For the SSM, the G33 proposed an approach similar to the SSG price trigger. In this case the additional duty would vary with the intensity of the import surge (see **Table 6.5**).

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[79] The SSG remedy is analysed in depth in Sharma and Morrison (2004).
[80] The language in the text is not specific, but presumably this refers to the bound rate in effect at that time, and not the applied rate.

The rationale for the SSG one-third maximum is not clear. While the remedies proposed by the G33 also have a maximum of one third, the level of the remedy varies with the depth of the problem. Indeed, there is no simple basis for determining how much additional duty is required for a given level of an import surge. This is also a problem commonly faced by panels in the WTO disputes involving the Safeguards Agreement. The guidance the Agreement provides is rather subjective: the remedy should be *only to the extent necessary* to take care of the problem. This is hardly helpful for determining, objectively, the remedy levels.

In trade theory and analysis, however, there is a way of establishing a relationship between changes in domestic price (and tariff) and import levels. The relationship is determined by a behavioural parameter: the elasticity of import demand. The method is explained in detail and illustrated in Sharma (2006). In brief, it was noted that the overall discrepancy between the G33 remedy proposal and that derived from the theory-consistent approach is small for import surges of a magnitude larger than 30 percent, but the gaps are markedly wider for lower levels of the surge, unless import demand elasticities are assumed to be very low. The fact that there are no universally-agreed estimates of import demand elasticities, means that such parameters are very unlikely to be entertained in trade negotiations. Nevertheless, theory provides some guidance and it helps to consider these in determining additional duties, albeit approximately.

6.4.3 A final note on small economies

One consideration for an effective SSM for small economies in particular. Current SSG rules, as well as those being proposed for the SSM, exempt from a remedy response import shipments that are already planned or en route. This makes sense for traders who would be penalized for no fault of their own. However, one characteristic of small economies is that even relatively small shipments can destabilize domestic markets considerably. For them a trade remedy would be effective only when such shipments are also taken into account in the response decision. One way to do this could be to institute a regime of automatic licensing, at least for sensitive products. Such a regime, while not impending normal trade in any way, helps authorities prevent imports that are potentially disruptive. For example, when import licenses issued to traders reached a pre-determined level, e.g. 90 percent of the trigger volume, traders would be warned that further imports could face SSM duties.

6.5 Conclusions

As countries reduce tariffs and bind them at lower levels, they become increasingly vulnerable to external agricultural market instability and to

import surges that could wipe out viable (whether well-established or nascent) agricultural production activities. Vulnerability to such external shocks is of particular concern to developing countries that are endeavouring to develop their agricultural potential and diversify production in order to enhance their food security and alleviate poverty. That the developing countries will need a simple and effective trade remedy instrument for responding to such phenomena has been accepted in the Doha Round negotiations. The response has been the Special Safeguard Mechanism, or SSM.

This chapter has analysed alternative proposals on the table, with a view to identifying a simple and effective SSM. The main findings, summarized below, should serve the needs of the developing countries in general and the concerns of the G33 – including the CARICOM Members – in particular.

With regard to **product eligibility**, some of the recent proposals on the negotiating table that seek to restrict product eligibility could severely limit the effectiveness of the SSM for many developing countries. Many of these countries have a narrow range of production base, i.e. the range of products produced domestically is small. Many of these products are likely to be designated as special or sensitive, in which case they will not be eligible for SSM (according to some proposals still on the table). However, not all special products will have high bound tariffs and could therefore still require an effective trade remedy instrument. SVEs will be affected even more than others because of their narrower range of production.

Regarding **trigger** and **remedy for price safeguards**, fixed reference prices will not be appropriate for a safeguard like the SSM – unless the base period chosen happens by chance to be the right one relative to current price trends. (This was found to be rarely the case.) Both MA-3 and MA-5 were shown to be basically reasonable references, but the MA-5 reference has some additional advantages. It triggers safeguards even towards the end of a persistently depressed price phase when the MA-3 misses out in most cases. MA-5 also provides higher remedy (additional duties) because the gap between the current and MA-5 prices is higher than for the MA-3 prices. Given that commodity prices tend to remain depressed persistently when world prices are on the down side – and that is the period when a safeguard is most needed – the MA-5 reference is more effective.

Regarding **volume safeguards**, the analysis showed very clearly that fixed reference import levels are not appropriate as **triggers** for a safeguard, except by chance. This is because imports follow strong trends in most cases, unlike prices that tend to fluctuate. When using the MA-3 and MA-5 references, the results showed that both references triggered safeguards for the ten products analysed about 60 percent of the time during 1990–2004. Although views are sure to differ on whether this level of safety is on the high or low side, the references nevertheless pass the "effective" criterion. There is one potential problem with both the MA-3 or MA-5 references: safeguards were often

found to be triggered continuously for several (e.g. 6–8) years when imports trend upward steadily, which is a common pattern. This flaw can be rectified by using a higher *de minimis* level in the trigger formula, for example when current imports exceed the MA-3 or MA-5 imports by 15 or 20 (rather than by 0 or 5) percent.

It is very difficult to determine remedy levels (additional duties) in an objective way. Although trade theory provides guidance on appropriate levels of additional duties to remedy given levels of surges, the method requires a parameter such as import demand elasticity for the product in question. This is a behavioural parameter with no universally-agreed values for various products – which renders it somewhat impractical in a negotiating context. Nevertheless, the insights the model provides are useful and should be taken into account to the extent feasible.

Finally, because small economies are more vulnerable to shocks from even small individual shipments, the SSM rule should permit them to take into account *planned* and *en route* shipments when making decisions on responses – possibly through a licensing regime for sensitive products.

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Sugar trade in the Caribbean

Piero Conforti and J. R. Deep Ford

Introduction

Preferential trade is very important in the world sugar market. The Africa, Caribbean and Pacific Group of States (ACP) – especially the Caribbean group – have been the most important foreign suppliers of the European Union (EU). At the same time, the sugar industry is a core economic activity for a number of economies in the Caribbean, including Guyana, Jamaica, Belize, Barbados and Trinidad and Tobago.

The industry in the Caribbean and its linkages with Europe have deep historical roots. The perishability of the raw product, coupled with the uncertainty of the means of transport, called for strong regulation of the market. At the beginning of the nineteenth century France was already operating an import duty system, which regulated import flows in order to ensure timely supplies of raw cane to the local processors. Processed sugar in excess of domestic consumption was exported with a subsidy corresponding to the duty paid on the import of the raw cane. Around the mid-nineteenth century, when technology permitted sugar production from beets, a quota system with guaranteed prices was already active in Germany, and a number of European nations – including France, Belgium, Netherlands and the United Kingdom – had already started discussions about the need to achieve a coordinated reduction of import duties.

About one century later, the Common Agricultural Policy (CAP) of the EU inherited this same approach. The Common Market Organization that had been active up to 2005 was based on quotas, guaranteed prices, a highly administered import flow and subsidized exports, with foreign trade supplementing local beet production to secure a timely supply of raw products for domestic processors. In the late 1970s, the attempt to launch an international commodity agreement on sugar resulted in failure. This was due to, among other reasons, the unwillingness of the European countries – heavily influenced by the local industry – to constrain the EU domestic

support regime, whose corollary are administered trade flows. Largely as a reaction to the collapse of the agreement the United States introduced a tariff rate quota system for sugar.

Thus, access into the two major sugar markets became tightly administered. Imports into the European market could take place virtually through preferential arrangements only, while exports were subsidized. This situation persisted until very recently; reform of the EU domestic regime and the prospective implementation of the Everything But Arms (EBA) initiative in the sugar sector are now forcing a change in trade flows. Sugar market reform was promoted in 2005, and the implementation of the provisions of the EBA initiative for sugar is due to be completed in 2009, which will extend full access to the least-developed countries (LDCs) in the EU. These changes will deeply affect the position of the current exporters to the European market.

This chapter reviews the perspectives of the sugar sector in the Caribbean in relation to these two policy changes, the implementation of the EBA initiative and the reform of the Common Market Organization in the EU. Section 7.1 will briefly review the present organization of sugar trade between the Caribbean countries and the EU. Section 7.2 will discuss the expected outcomes of these policy changes, with references to the activities underway in a number of major sugar producers in the region. Concluding remarks and an overall perspective are presented in the final section of the chapter.

7.1 Sugar production and exports to the EU from the Caribbean

Over the last 30 years, world sugar production has been dominated by the EU, Brazil and India, while on the sugar consumption side the major players include the EU, the United States, India, the Russian Federation and China. The total size of the market is around 100 million tonnes per year. Brazil is by far the dominant player in world sugar trade; its exports have increased fourfold from the 1970s, and its current costs of production are among the lowest worldwide. Australia, Thailand, Cuba and India are other major and competitive exporters, while the EU is both an important exporter and importer. The Russian Federation, China, the United States, Japan, the Republic of Korea and Canada are among the other major importers (FAO, 2003).

Sugar is an important income source for developing countries, and trade takes place for a significant share on the basis of agreements and/or preferential schemes. Tariffs on sugar are generally high in developed countries, and particularly in the EU, while they are usually lower in developing countries.

In the Caribbean, the main sugar producers are Barbados, Belize, Guyana, Jamaica, Trinidad and Tobago and Saint Kitts and Nevis. Output amounts to about 8 million metric tons (tonnes) of cane (**Table 7.1**), and shows a decrease over the last decade in the three smaller producers, while it appears altogether stable in Belize, increasing in Guyana and decreasing in Jamaica.

TABLE 7.1
Sugar cane output in the main Caribbean producers (000 tonnes)

	1990-92	1996-98	2002-04
Barbados	574	518	381
Belize	1 114	1 194	1 124
Guyana	2 905	2 965	3 000
Jamaica	2 583	2 432	1 947
Saint Kitts and Nevis	217	254	193
Trinidad and Tobago	1 357	1 293	931

Source: FAOSTAT

TABLE 7.2
Export of sugar (000 tonnes raw equivalent)

				Average shares by destination (2002-04)				ACP sugar protocol quotas
	1990-92	1996-98	2002-04	EU	N. America	Regional	Others	
Barbados	50.7	51.5	35.4	0.9	0.1	0.0	0.0	31.5
Belize	92.9	104.3	93.5	0.6	0.3	0.1	0.0	40.6
Guyana	169.7	246.7	321.1	0.6	0.0	0.4	0.0	160.0
Jamaica	146.6	173.4	138.6	0.7	0.3	0.0	0.0	119.3
Saint Kitts and Nevis	20.4	23.9	9.9	0.7	0.1	0.3	0.0	15.7
Trinidad and Tobago	59.4	70.1	34.9	0.6	0.1	0.3	0.0	47.2

Source: FAOSTAT

Exports amount to about 600 000 tonnes (**Table 7.2**), the vast majority of which comes from Belize, Guyana and Jamaica (88 percent in the last period). It should be noted that while Guyana is increasing its sales abroad and Belize and Jamaica look fairly stable, the smaller producers show a significant decline of their trade in the last period.

For all Caribbean producers the EU is the most significant export market. This is still particularly the case of Barbados and Jamaica, and was even more the case for all Caribbean countries in the past. Within the EU, the United Kingdom is by far the main destination, so that the processing industry of that country is today rather dependent upon raw sugar sourced in the Caribbean.

Belize and Guyana are deemed to be the two most potentially competitive sugar producers in the region, and could survive in an open world market. Currently, the average level of production cost in the two countries is slightly below the protected price paid in the EU. Trinidad and Tobago and Jamaica could also improve their level of competitiveness through diversification and considerable capital investment, while the probability of success appears lower in the case of Saint Kitts and Nevis, where production was in fact ceased as of 2004705.

As mentioned, the main original aim of preferential imports into the EU from the ACPs was that of supplementing local beet production to secure supplies for domestic processors, while part of the surpluses resulting from domestic consumption were re-exported with a subsidy. Most-favoured nation (MFN) importers face a high duty of €419/tonne for white sugar, plus an additional duty that is variable depending on a world-price reference level. After 1994, the additional duty was of €115/tonne, so that the overall tariff faced by MNF importers was around €513/tonne. The Uruguay Round Agreement on Agriculture succeeded in preventing this level being exceeded.

As for preferential schemes, the ACP Sugar Protocol constitutes to date the primary channel through which sugar enters the EU. Signatories are 19 ACP countries plus India; each of them is entitled to a fixed quota within which it can export duty-free at a guaranteed minimum price corresponding to the EU domestic price minus the aid granted to European processors. Among the signatories, the largest share is that of Mauritius, followed at a lower level by Fiji, Guyana and Jamaica (**Table 7.3**). Some countries have not exported under the protocol recently, despite being signatories; this is the case of Suriname and Uganda.

The Sugar Protocol was first signed in 1975 with the Lomé Convention, and was increased progressively with the enlargements of the EU. Recently, the protocol has been renewed with the Cotonou Agreement, signed in 2000 and applied from 2003. Its future prospects are linked to negotiations on the Economic Partnership Agreements, and are not yet known.

Among the Caribbean countries, in 2002–2004 total exports from Barbados came very close to the upper limit set by the Sugar Protocol. Both Saint Kitts and Trinidad, however, did not fill their quota (**Table 7.2**).in the last few years, even though the high pre-reform EU price was still applied.

The second most important scheme for importing sugar into the EU was the Special Preferential Sugar, which covers a quota of about 200 000 tonnes and was introduced with the accession of Portugal into the EU in the 1980s. Imports under this quota are duty-free, and are activated when the EU domestic supply plus the ACP Sugar Protocol imports are not sufficient to cover the maximum supply need defined by the European domestic processors.

TABLE 7.3
The ACP Sugar Protocol

	Quota %
Barbados	2.4
Belize	3.1
Congo	0.8
Côte d'Ivoire	0.8
Fiji	12.6
Guyana	12.2
India	0.8
Jamaica	9.1
Kenya	0.4
Madagascar	1.0
Malawi	1.6
Mauritius	37.4
Mozambique	0.5
St Kitts/Nevis	1.2
Suriname	0.0
Swaziland	9.0
Tanzania	0.8
Trinidad/Tobago	3.6
Uganda	0.0
Zambia	0.6
Zimbabwe	2.3
TOTAL (tonnes)	1 311 231

During recent years, Caribbean country access to this channel has been reduced due to the increase use that African exporters have made of it.

Smaller tariff rate quotas (TRQs) have been granted by the EU to other countries. Brazil and Cuba hold a duty-free import quota of 80 000 tonnes per year, while under the Balkans initiative Albania, Bosnia, Croatia, the Former Yugoslav Republic of Macedonia, Serbia and Montenegro have a quota of about 300 000 tonnes.

The EBA involves duty-free access on all products exported by the LDCs into the EU, with the exception of arms. The initiative is part of a number of extensions of the Generalized System of Preferences (GSP) regime undertaken by the EU, together with the "GSP Plus".[81] For sugar, duty-free and quota-free access is granted from 2009; the implementation schedule up to that year implies: (i) a progressive increase of the duty-free quota between 2001 and 2006, with the quota going from 75 000 to 200 000 tonnes; and (ii) a progressive reduction of the out-of-quota tariff between 2006 and 2009, so that in fact the quota becomes redundant at the end of the period.

A number of factors led to the widely held conclusion that the existing Common Market Organization was no longer sustainable, either domestically or internationally. Domestically, after the Agenda 2000 Reform of the CAP and the 2003 Fishler reform which de-coupled most supports from production, the sugar sector had remained one of the few that was still organized according to the pre-reform logic, implying a high degree of price guarantees coupled with border protection. Internationally, the WTO negotiations (before collapsing in July 2006) raised expectations of a substantial cut in the MFN tariff maintained by the EU. Together with the implementation of the EBA, this could potentially displace a significant component of the domestic supply. Moreover, a WTO panel requested by Australia, Brazil and Thailand established in 2005 that export of the EU sugar produced domestically in excess of the quotas – the so-called C-sugar – was implicitly cross-subsidized by the explicit subsidies granted on the exports of sugar produced within the quotas. Complying with this provision implies in fact a substantial cut in the amount of sugar that the EU can export with subsidies.

These pressures led the EU Council of Ministers to adopt, in November 2005, a reform of the EU Common Market Organization for sugar, which implies the following changes:

- Intervention is abolished and substituted with a private storage scheme that triggers at a level 36 percent lower than the previous intervention price.
- There is a switch to a single quota, and an increase of the quota in the countries that used to produce in excess of the quotas; additional

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[81] The GSP Plus provides duty-free access for all products from "countries with special development needs" that implement international conventions on the environment, as well as on human and labour rights.

quotas can be purchases, and the proceedings are employed to finance a restructuring scheme for those processors that leave the industry. (A significant number of processing plants ceased production after the approval of the reform.)
• National-level funds (*envelopes*) were established to grant direct payments to farmers.

This reform of the domestic regime paves the way for a reduction in the applied MNF duties, since it is necessary to defend only a (lower) excess of the domestic price above the world price. Moreover, the reform promotes a reduction in the domestic supply, together with a selection of the more cost-efficient producers in Europe, through the additional production quotas that can be purchased. This eases both the application of the EBA initiative, which is expected to increase imports into the EU, and the limitation of subsidized exports required by the WTO panel.

However, the reform also affects the position of the present exporters into the EU market, and particularly of the Caribbean countries, which are going to be affected in two ways. First, even if the present ACP sugar protocol quotas are maintained, so that each ACP country maintains the right to export an unchanged physical amount, the possibility will increase for other exporters to compete in the EU market for that amount, due to the increased presence of other (potentially more competitive) producers from the LDC group. In other words, any quota assumes the character of an opportunity, rather than of a quasi-guaranteed export, as was the case in the past.

Second, the change in the price conditions brought about by EU domestic reform makes the EU market less attractive in terms of the rent that can be extracted from the preferential exports, while the degree of competition from relatively low-cost producers in the group increases. For a Caribbean ACP it may become more difficult to utilize even the Sugar Protocol quota – assuming these are maintained – because part of the EU market may be supplied by lower-cost ACP and/or LDC competitors.

Therefore, the combined effect of the implementation of the EBA and EU domestic reform tends to erode the existing ACP preferences, both because competition among the ACP countries is likely to increase due to the reduced prices in the EU, and because thanks to the EBA more exporters will access the EU market duty-free for potentially unlimited amounts.

7.2 Quantifying the effects of the prospective policy changes

This section is aimed at shedding light on the likely impact of the changes to be expected from such preference erosion, and at understanding which countries are going to be more affected. A relatively larger number of exercises have focussed on the effect of the EBA initiative, while few studies have focussed on the combined effect of the EBA and EU domestic reform.

Everything But Arms (EBA)
Concerning the potential impact of EBA, UNCTAD (2005) indicates that potential increases in sugar exports to the EU are likely to be limited due to the constraints arising from natural resource endowments and transport infrastructure, which are analysed in detail through country case studies. Among the sugar producers, Ethiopia, Tanzania, Nepal and Burkina Faso (for whom the EBA quota already accounts for a large share of sugar exports) may benefit significantly from the initiative. A similar conclusion is reached by Stevens and Kennan (2001), who suggest that total LDC sugar exports may reach some 300 00 to 500 000 tonnes on top of the EBA quota, once unlimited duty-free access is granted. The results of van Berkum, Roza and van Tongeren (2005) are comparable to the above studies, as they suggest that LDC exports to the EU under the EBA initiative may reach 450 000 tonnes. However, a less conservative perspective is offered by Witzke and Kuhn (2003), who calculate that LDC sugar exports to the EU market may reach 2 million tonnes in 2011. Many studies do not adequately cover important issues relating to international trade in general, and specifically the trade costs countries face, some of which may be prohibitive for LDCs.

EU domestic reform
Among the few studies focusing on the impact of EU domestic policy reform, Witzke and Kuhn (2003) simulate a policy scenario including a 38 percent reduction in EU domestic support price, against a baseline that incorporates the effect of the EBA initiative and its impact on the ACP countries.[82] The baseline shows an increase in the world reference price following the application of the EBA initiative, together with a reduction in EU domestic production and a huge increase in imports from the LDCs, which would reach 2 million tonnes by the end of the baseline horizon. Against this background, the reduction of the EU domestic price leads to a further contraction of the over-quota domestic production, coupled with a small additional world price effect. The simulation suggests that major losses would arise for the EU sugar processing industry, especially in the countries producing within the A and B quotas.

Another study (Conforti and Rapsomanikis, 2006) analyses a scenario that includes both the reform of the EU domestic sugar policy and the EBA initiative, taking into consideration the types of trade costs that arise from

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[82] That exercise was based on the combined use of a set of models including a partial equilibrium global model – the WATSIM model – generating impacts on trade flows, whose detailed welfare effect in the EU was analysed with a model including individual member countries' models, the CAPSIM model. Further details on land allocation in individual areas were captured by the CAPRI model, while detailed responses of individual farmers were studied through farm management models (Witzke and Kuhn, 2003).

both tariff and natural trade barriers. The relationship between trade costs and trade flows is represented by the notion of gravity, which postulates that after controlling for size, trade between two countries depends on the magnitude of trade costs.

The results indicate the likely effect on trade flows between the ACPs, the LDCs and the EU and the rest of the world (**Table 7.4**). ACP countries that today export under the Sugar Protocol and the Special Preferential Sugar protocol are expected to be affected primarily in terms of the latter, since most of it is likely to be utilized by the more competitive LDCs. This has already happened in the recent past. In the coming years, the duty-free Special Preferential Sugar exports will be supplemented by the EBA provision. This imply that exports from the LDCs to the EU will become duty-free-quota-free from 2009. Increasing competition for the Special Preferential Sugar quotas – later to fall under theEBA –is evident from the projecteddisappearance (in 2011–2013) of exports under this title from the ACPs that are not also LDCs. There will be a corresponding increase in the exports, particularly from those LDCs in which production costs are low enough to be comparable to those of the major world producers.

Concerning the Sugar Protocol, the study assumes that it is likely to be maintained in the future, which would allow the relatively more cost-competitive ACPs to keep exporting this quota into the EU after implementation of the reform. However, in some countries this share would be reduced by competition both within and outside the ACPs. Among the Caribbean countries, Barbados is projected to experience a steep decline within this quota. Among the other countries, the LDCs that are not currently exporting under the Sugar Protocol and Special Preferential Sugar protocol are likely to gain significant market shares. This is the case for Ethiopia, Mozambique and Sudan, and the group of "other LDCs" comprising Mauritania, Chad, Sierra Leone and Somalia.

Altogether, net additional exports into the EU market following implementation of the EBA is projected to reach about 500 000 tonnes.

Reductions in the EU domestic price are likely bring about a reduction of the value of the exports into the European market (**Table 7.5**). This is a loss that will accrue to those agents that are today capturing the rent generated by the preferential regime. The major effect in these terms is exerted by the reform of the EU domestic market, rather than the implementation of EBA. Exports from Barbados will suffer the most losses among the Caribbean countries, but the value of trade flows will drop significantly for all the major producers. Depending on how such a decrease is reflected in unit production costs, this will generate changes in the internal composition of production. Smaller farmers, who are likely to have higher production costs, will probably be the first to be forced out of the market after the change in price conditions.

TABLE 7.4
Raw sugar exports of ACP and ACP-LDC countries (000 tonnes)

Destination	EU under Sugar Protocol			EU under SPS protocol, then EBA			Rest of the world		
	1995-97	2001-03	2011-13	1995-97	2001-03	2011-13	1995-97	2001-03	2011-13
Barbados	52.5	41.3	5.4	2.4	-	-	0.1	-	-
Belize	40.3	40.3	40.3	9.6	5.2	-	57.4	57.0	33.7
Cote d'Ivoire	10.6	10.6	10.6	12.0	9.1	-	26.5	42.0	30.7
Dominincan Rep.	-	-	-	-	-	-	314.8	173.5	121.8
Fiji	172.5	172.5	172.5	35.1	19.3	-	153.1	83.0	76.4
Guyana	166.3	166.3	166.3	37.3	17.8	-	39.8	114.9	63.7
Kenya	-	-	-	-	10.3	12.2	0.0	6.2	7.3
Jamaica	123.9	123.9	123.9	28.5	17.4	-	21.0	-	12.6
Trinidad/Tobago	45.7	45.7	45.7	10.4	5.5	-	3.4	0.6	-
Swaziland	123.0	123.0	123.0	56.8	32.4	-	215.4	364.6	434.7
Mauritius	512.4	512.4	499.7	39.2	27.0	-	76.0	22.2	-
Zimbabwe	31.5	31.5	31.5	32.4	23.4	-	48.5	48.6	56.4
Burkina Faso*	-	-	-	-	10.9	17.0	-	5.3	-
Ethiopia*	-	-	-	-	15.0	113.6	43.7	74.2	-
Madagascar*	11.2	11.2	11.2	12.2	12.0	27.0	0.0	1.0	0.9
Malawi*	21.7	21.7	21.7	13.9	9.3	83.0	23.4	58.8	-
Mozambique*	-	-	-	-	8.3	54.7		133.0	212.0
Tanzania*	10.6	10.6	10.6	14.9	11.6	39.6	-	-	-
Sudan*	-	-	-	-	18.4	93.6	81.5	223.3	154.4
Zambia*	-	-	-	12.0	9.8	38.3	11.6	130.2	142.8
Total ACPs	**1**	**1**	**1**	**316.7**	**262.7**	**479.0**	**1**	**1**	**1**
	322.3	**311.2**	**262.6**				**116.0**	**535.5**	**335.0**
Bangladesh	-	-	-	-	8.9	12.3	-	6.1	2.7
Other LDCs	-	-	-	-	20.0	49.8	-	-	-
Total LDCs	**43.6**	**43.6**	**43.6**	**52.9**	**124.1**	**490.6**	**160.1**	**628.9**	**500.8**

* ACP sugar exporters classified also as LDCs
Source: Conforti & Rapsomanikis, 2006

The importance of the specific organization of production and trade in determining the outcome of the policy changes suggest the necessity to consider in more details the individual Caribbean countries, going beyond the aggregated results of the projections. According to Garside *et al.* (2006), most of the benefit from the trade preferences in the Caribbean has accrued, to date, to the local producers. Moreover, mills in the region are largely locally owned. This implies that the burden of the erosion of preferences will fall on local producers.

Garside *et al.* (2006) also consider the countries' position in terms of their dependency upon the sugar quota and their competitiveness. In the Caribbean there are three countries in which the share of sugar in the gross domestic product (GDP) is relatively high: Belize, Guyana and Jamaica. The former two have devised plans to reduce production costs and to diversify production, in

TABLE 7.5
Changes in the value of exports (100 = 2001-03)

	2011-13b#	2011-13s#		2011-13b#	2011-13s#
Belize	92	59	Ethiopia*	787	504
Trinidad and Tobago	92	60	Burkina Faso*	245	157
Swaziland	82	53	Tanzania*	409	262
Mauritius	95	62	Sudan*	553	339
Jamaica	91	58	Malawi*	370	225
Guyana	94	60	Zambia*	343	242
Fiji	94	60	Madagascar*	102	85
Côte d'Ivoire	56	36	Total ACPs	115	74
Barbados	15	9	Bangladesh *	100	64
Zimbabwe	60	38	Other LDCs	265	170
Mozambique*	6 959	4 542	Total LDCs	452	290

* ACP sugar exporters classified also as LDCs
#=2011-13b = baseline; 2011-13s = EU domestic reform
Source: Conforti & Rapsomanikis, 2006

order to be able to compete in a more open environment. In Jamaica, plans have been made recently to diversify toward ethanol production, but until now the industry has suffered from high inefficiencies.

On the contrary, quota dependency is lower in Barbados, Jamaica and Trinidad. These are the countries in which production is more likely to be reduced; Saint Kitts, whose level of dependency upon the sugar quota is intermediate, has already ceased exports as of marketing year 2004/05, due to the significantly high level of the production costs.

There is need for more research in this field. The ACP Sugar Group has estimated that the population that would be affected by the sugar policy change in the Caribbean, based on employment figures in the sector, is more than 60 000 people.

7.3 Conclusions

Substantive changes are taking place in the world sugar market that will affect the Caribbean countries. The most likely outcome appears to be increasing competition in the EU market after the implementation of the EBA initiative, among the ACP as a whole and between Caribbean countries, and from LDCs. This will inevitably displace production from countries where production costs are higher. Assessments of the consequences of the implementation of the EBA in the context of the EU domestic market reform show variable figures on how dramatic the displacement will be, ranging from about half a million to about two million tonnes of additional exports into the European market.

The prospective policy changes can be framed as movement towards a more market-oriented regime, originating from the EU reform. For a number of reasons, policy control over the European sugar market is being gradually reduced, and this inevitably leads to changes in the channels through which raw and semi-raw materials are sourced in Europe. The consequence for the Caribbean is that sugar production should no longer be considered a protected domain operating on the basis of a number of pre-determined preferential markets, but rather as an industry that must survive in a wider and more competitive environment. Caribbean sugar is called upon to perform as an independent actor, and to devise its own strategies to survive in the global market.

At the same time, it is fair to argue that since the industry in the Caribbean has been so strongly tied to the EU sugar sector through deep policies such as preferential trade quotas and a guaranteed price, the switch toward being more independent should be facilitated through the provision of resources, on a temporary basis, aimed at promoting changes that make it sustainable. The Economic Partnership Agreements are one forum in which such resources should be negotiated. It is clear, however, that the effort and the commitment of the local institutions in the individual countries are by far the most important ingredient of any successful strategy. In this respect, the distinction made by Garside *et al* (2006) between high- and low-quota dependent countries is interesting. On the basis of qualitative analysis, they indicate that the latter show a higher level of interest and commitment than the former towards making the required adjustments.

The future for the Caribbean of the sugar market appears bleak for at least three reasons.

1) Sugar *exports into the EU* will most probably be displaced as a consequence of EU domestic market reform.

2) Growth in the *demand for sugar* is stagnant in developed countries and could decrease as sugar is targeted as a cause of obesity. The trend arises from saturation and there are no foreseeable reasons for it to reverse. In middle-income countries, moreover, the growth of sugar consumption is likely to slow progressively in coming years for the same reasons.

3) *Product differentiation* – in theory an option to be taken into consideration – is not straightforward for sugar. Sugar is in essence a bulk product, and there are relatively limited possibilities for differentiation. There is some (albeit only patchy) evidence available to suggest that specialty markets – including fair trade, organic, environmental-friendly and other peculiar type of products, are a possibility – although competition is significant. It appears unlikely that any of these markets can greatly expand in the future. Alternative end uses for sugar, mainly in the area of bio-fuel, have recently gained momentum, and many of these appear promising from both the environmental and the energy-efficiency perspectives, because

self-sufficient production plants are available. Jamaica has already planned the development of this industry. However, technology in this area is evolving rapidly and so any project would require a serious assessment of the economic viability of the specific processing plant that is installed, in relation to the scale of primary production; and of the extent to which the switch to this technology implies additional conversion costs in order to utilize the bio-energy produced.

Given this environment, opportunities should be pursued to minimize social consequences while building a long-term strategy for the sugar industry in the Caribbean. The strategy should look at the following four areas:

1) *The regional market.* The common external tariff should be maintained, even if it cannot continue to provide full protection for the regional market. This can be achieved only through a political decision that recognizes the social cost of adjustment in the sector. CARICOM could also select sugar as a sensitive product.

2) The *EU–ACP relations and the Economic Partnership Agreements.* Within this framework, an adequate compensation should be negotiated for damages arising from the reduction in the price paid for the ACP quota up to now.

3) *The GSP framework.* This still offers grounds for maintaining a certain degree of preference compared to some of the major sugar producers, despite reduced benefits arising from lower tariffs. GSP should provide additional room for manoeuvre in terms of time and resources to be invested in improving the production performance and reducing production costs.

4) *Other forms of assistance aimed at supporting investment in product differentiation.* Within the limits highlighted above, new products should be developed, and efforts should be made to make productive conversion toward other agricultural activities.

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8

Banana trade in the Caribbean

Claudius Preville

Introduction

The banana sector has long been a source of income and livelihood security for communities in several Caribbean countries. Ever since the demise of sugar as a major export crop from the Windward Islands to the United Kingdom in the 1950s, bananas have assumed prominence as one of the few viable export alternatives. The commodity was responsible for generating a significant part of the region's foreign exchange and provided much-needed income to ordinary farmers as a means of addressing their food security needs. Yet, the banana production and exporting systems have not generally been globally competitive and remain dependent on the preferential market access that they enjoy, that is, tariff- and quota-free market access into the European Community (EC) market. This preferential market access has been steadily eroded over time and the region now finds itself in the precarious position of not being able to meet the employment and food security needs of its rural population.

This chapter reviews the role of the banana sector and particularly its contribution to rural development and food security. It addresses banana trade policy issues from a Caribbean regional perspective and draws mainly on production and trade experience within the Organisation of Eastern Caribbean States (OECS) countries where the banana industry has predominated in the economies. The chapter draws on a range of existing analytical studies on the impact of current banana sector policies on world market conditions and specifically how these have and might impact Caribbean banana-dependent economies. As a way forward, it highlights several interventions and measures that need to be implemented to ensure a meaningful interface between imminent changes in the current policy framework and food security objectives of the banana-producing countries.

8.1 Background to banana trade policy issues

In this section we provide an integration and assessment of the past and current production, processing, market structure, institutions and trade and competitiveness dimensions of the banana sector in the important banana-producing countries of the region.

At the signing of the Treaty of Rome in 1957, EC Member States agreed that a tariff, and optionally a quota, would apply with respect to banana imports from non-ACP countries. In practice, these sources of other banana imports were largely a few countries in Central and South America, where a number of United States-based transnational corporations (TNCs) operated – the "dollar zone" countries. A notable exception to the generally agreed scheme of granting preferential market access was found in Germany, where, under a special protocol annexed to the Treaty of Rome, Germany had secured the right to import nearly all its bananas from dollar zone sources free of duty and taxes. Germany had won the right to this special protocol given that it was the largest single consumer of bananas in Europe at the time, and that it had traditionally sourced all its imports from the dollar zone.

EC Members found themselves implementing two banana import policies that were in fact diametrically opposed to each other, and this would become a major point of contention when the Single European Market (SEM) was implemented in 1993. The basis for granting preferential market access to ACP countries was threefold. First, they were all colonies or ex-colonies of an EC Member at the time, and it was viewed as a mechanism through which the EC countries could facilitate their economic development. Second, there existed little diversity in their exports, making them extremely vulnerable as economies depending on single commodities. Third, the traditional production, marketing and distribution processes they utilized did not allow them to enjoy economies of scale, causing their costs to be relatively high.

However, in the dollar zone countries the converse obtained. All of these countries had attained independence several centuries prior, and their production systems were characterized by mainly foreign-owned, large-scale, capital-intensive plantation technology. Coupled with vertically integrated systems of shipping, marketing and distribution, bananas from dollar zone countries are relatively cheap to produce, market and distribute in the EC.

The EU banana regime that was introduced in 1993 was challenged on several fronts. First, it was challenged in the European Court of Justice (ECJ) by Germany, Denmark and the Benelux countries on the grounds that it would not fulfil the objectives of the single market. Second, some Latin American countries initiated a General Agreement on Tariffs and Trade (GATT) panel to investigate the legality of the banana import policies of several EU Members before the SEM, and another to investigate the legality of the new banana import policy under the SEM. Both these GATT panels ruled

that the banana import policies did not conform to GATT law, particularly Article I that requires most-favoured nation (MFN) treatment for all GATT Members. Third, under the influence of the world's largest banana TNC, the United States initiated an investigation of the EU banana import policy under Section 301 of its 1974 Trade Act. Fourth, the United States, along with several countries in Latin America, initiated a WTO panel to investigate the EU banana import policy, which ultimately led to its defeat. In this section we shall examine only the WTO panel investigation and ruling in detail.[83]

Joint and individual requests for consultations with the European Communities on its banana import regime were made by the United States, Ecuador, Guatemala, Honduras and Mexico (Complaining Parties) on 5 February 1996. In addition to the import regime established under EEC Regulation 404/93, consultations were also meant to address subsequent legislation, regulations and administrative processes related to it. These consultations did not result in a mutually satisfactory outcome, hence on 11 April 1996 the Complaining Parties made a request for establishment of a Panel. The Panel's terms of reference included examining violations under the GATT, the Agreement on Import Licensing Procedures, the Agreement on Agriculture, the General Agreement on Trade in Services (GATS) and the Agreement on Trade-related Investment Measures (WTO, 1997a: 1).

In its defence, the EU deplored the manner in which the panel had been established, questioning the adequacy of consultations as well as the clarity of the issue under dispute. However, the Complaining Parties countered that their action was consistent with Article 4.7 of the Dispute Settlement Understanding (DSU), which provides for establishment of a Panel 60 days after the start of consultations (WTO, 1997a: 3–7). Additionally, the EU questioned the legitimacy of United States interests in the claim that was being pursued, since there was no banana trade between those countries. The United States argued in turn that it had a significant commercial interest since two of its firms, Chiquita and Dole, had played a major role in developing the EU's banana market in the past. Moreover, the United States argued that under Article XXIII of the GATT, dispute settlement action could be initiated by any Member if, in its view, one Member's action was inconsistent with another's interests (WTO, 1997a: 8–9).

Not surprisingly, the Panel ruled against the EU, concluding that certain aspects of its regime were inconsistent with its obligations.[84] Additionally, it recommended that the Dispute Settlement Body request the EU to modify its banana regime, to make it conform with its obligations under the GATT, the Licensing Agreement and the GATS (WTO, 1997a: para. 9.1– 9.2). The EU

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[83] See Preville, 2002 (pp. 137–42) for a thorough discussion of the first three of these.
[84] Under Articles I:1, III:4, X:3 and XIII:1 of the GATT, Article 1.2 of the Licensing Agreement and Articles II and XVII of the GATS.

appealed the Panel's ruling both on certain issues of law as well as some of the legal interpretations developed by the Panel. Specifically, the EU again took issue with the right of the United States to advance claims under the GATT and the manner in which the Panel had been established (WTO, 1997b: paras. 15–18). Additionally, where the legal interpretations of the Panel were concerned, the EU brought many issues into question, taking them in turn under the categories of measures affecting trade in goods and services.

The Appellate Body largely upheld the findings of the Panel. In particular, it upheld the Panel's conclusion that the United States had a right to bring a claim in the dispute and that the establishment of the Panel was consistent with requirements under Article 6.2 of the DSU (WTO, 1997b: para. 255a–b). Additionally, it upheld the conclusion of the Panel that the Agreement on Agriculture did not permit the EU to act in a manner inconsistent with its obligations under Article XIII of the GATT 1994; and that the allocation of shares of the tariff quota was not consistent with Article XIII:1 of the GATT 1994 (WTO, 1997b: para. 255d–e).

In its ruling against the EU banana regime, the second GATT Panel instigated by the Latin Americans (mentioned above) had found both the import regime and the procedure through which the EU extended preferential market access to the ACP countries (the Lomé Convention) to be in contravention of GATT law (GATT, 1994: para. 169–70), and mandated the EU to bring its import policy into compliance. With the support of ACP countries, the EU was able to prevent the GATT Council from adopting the panel report. Yet, realizing that if these Latin American countries initiated a WTO Panel to investigate the EU banana import policy it would most likely be defeated, the EU proposed to create its first Framework Agreement with the Latin Americans.

Under the proposed Framework Agreement, the complaining parties would be allocated certain shares of the import quota based on past performance, and the quota would be increased annually by an autonomous amount. In addition to guaranteeing market shares for these countries, the EU agreed to expand the tariff quota annually and reduce the in-quota tariff to ECU 75/tonne (European Council, 1998: Article 18). But the Latin American countries were divided on the matter, both in terms of the size of the quota and their individual shares, rendering the agreement unstable. Notably, Ecuador, Guatemala, Honduras and Panama objected to the agreement, while Costa Rica, Colombia, Nicaragua and Venezuela (Bolivarian Republic of) accepted it (European Commission, 1994: 11–12). Nevertheless, the EU had ensured that the Framework Agreement was agreed to by the United States as part of the completion of negotiations under the Uruguay Round. Additionally, the GATT Council agreed to grant the EU a waiver of Article I.1, thus allowing the EU to give preferential treatment to the goods originating from the ACP countries (European Commission, 1995: 16).
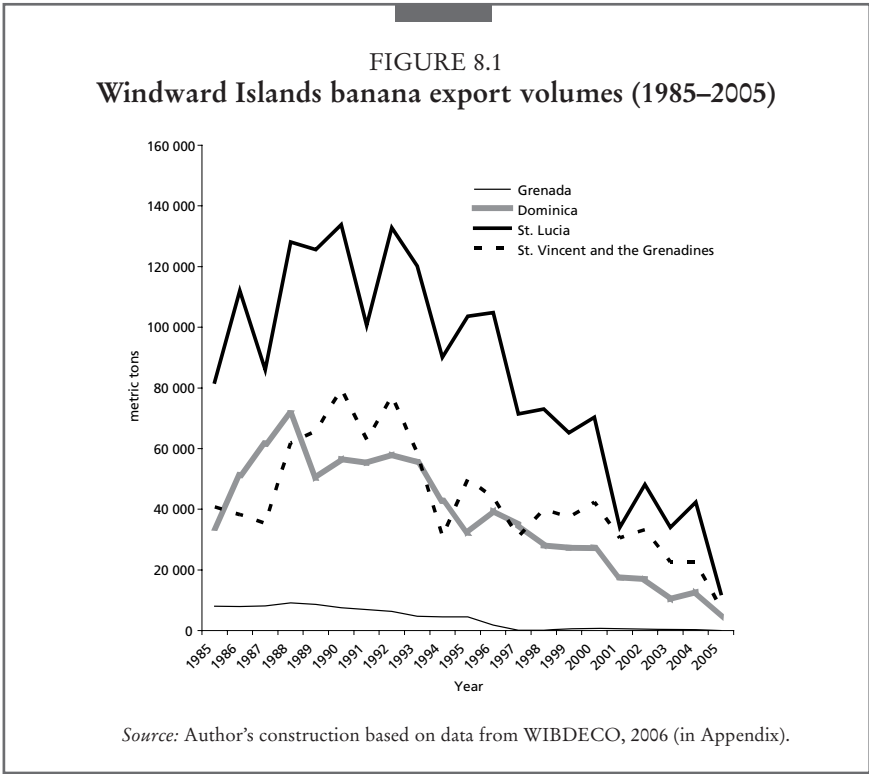
Since 1999, the EU has modified its banana regime several times and the evidence suggests that most of these modifications have taken into consideration the need for WTO compatibility. This is reflected in the sheer number of Commission Regulations that have been passed to modify the original regulation 404/93. In introducing Commission Regulation 2374 in the year 2000, while the EU stated that the regulation was being adopted with a view to ensure uninterrupted supplies and trade with the partner countries, it carefully stated that subsequent measures might be introduced with a view to "complying with the international commitments entered into by the Community within the World Trade Organization". Moreover, the regulations introduced in 2001 gave even greater recognition to the WTO rulings. Council Regulation 216 of 2001 clearly states that it takes due account "of the conclusions of the special group set up under the dispute settlement system of the World Trade Organization (WTO)". It further sets out the size of the tariff quotas, which is based on a projection of effective demand for bananas in the EU as of 2001, structured as follows:

   (a)   a tariff quota of 2 200 000 tonnes net weight, called "quota A";
   (b)   an additional tariff quota of 353 000 tonnes net weight, "quota B";
    (c)   an autonomous tariff quota of 850 000 tonnes net weight, "quota C".

In this revised regime imports under tariff quotas "A" and "B" are subjected to a customs duty of €75/tonne, while those under quota "C" are subjected to a customs duty of €300/tonne. Additionally, the EU grants ACP countries a tariff preference of €300/tonne, consistent with its obligations to the ACP countries.

The last significant changes that have been made to the tariff quotas since then were introduced in December 2001, under Commission Regulation 2587, and according to the EU, the changes introduced "shall apply to imports of fresh products falling within CN [combined nomenclature] code 08030019 until the entry into force, no later than 1 January 2006, of the rate of the common customs tariff for those products established under the procedure provided for in Article XXVIII of the General Agreement on Tariffs and Trade". In other words, these rules applied until 31 December, 2005. The notable change to the tariff quotas are: quota "B" has increased to 453 000 tonnes; while quota "C" has reduced to 750 000 tonnes. ACP countries continue to enjoy a tariff preference of €300/tonne and zero duty on imports.

Additionally, 'traditional importers' have been redefined to refer specifically to primary importers, and the share of licences awarded to non-traditional importers has increased from 3.5 percent to 11 percent. Subsequent regulations passed by the Commission with respect to bananas have not altered the sizes of the quotas, nor the applicable tariffs, but have modified rules for their allocation to specific countries within the set categories. Section 4 of this paper further develops and updates the trade policy challenges related to bananas facing Caribbean countries.

FIGURE 8.1
Windward Islands banana export volumes (1985–2005)

Source: Author's construction based on data from WIBDECO, 2006 (in Appendix).

8.2 Role of bananas and food security

In this section we undertake an integration and assessment of analysis completed on the role of the banana sector in the economies of the Caribbean countries and its multiplier effects, particularly as these relate to food security and rural development. Food security in the Caribbean can be affected by various and interrelated international and domestic factors such as: high cost of production, low productivity, loss of arable lands, limited availability of labour, changes in the international economic environment, particularly with respect to trade, and susceptibility to natural disasters.

The banana sector has played a major role in the economies of Belize, Jamaica and Suriname and an even more important role in Saint Lucia, Saint Vincent and the Grenadines, Dominica and Grenada. Such a role has been captured directly in terms of production, employment and income, with significant indirect effects through multipliers in these countries. In this section we begin with an overview of the banana industry in the region drawing upon data from the regional banana marketing entity, the Windward Islands Banana Growers Association (WIBDECO) that focuses on the

OECS banana producing countries. We then draw upon some of the work done by Allport (2005), Rawlins (2005), Laurent (2003), Thomas (2003) and Preville (2003) to provide an assessment of the role of the banana sector in the major Caribbean exporting countries.

8.2.1 Brief overview of the banana industry in the Windward Islands

The banana industry in the Windward Islands has gone through various cycles of growth and depression over the last several decades. **Figure 8.1** shows the trends in banana export volumes for these countries since 1985. It reveals that for all of the countries, while there have been fluctuations in volumes, there has been a marked decline since 1993.

All of these countries enjoyed their best-ever market performance prior to 1993[85]. Throughout that period Saint Lucia has been the largest single supplier followed by Saint Vincent and the Grenadines, while Grenada's export volumes have stagnated at less than 1 000 tonnes since 1997.

In value terms the banana industry has contributed significantly to the economies of the Windward Islands over the period 1985–2005 (see **Figure 8.2**). For these countries as a group, it is seen that their best-ever performance was in 1990 when together their gross export earnings was EC$387.3 million[86], coinciding with the best ever export performances of Saint Lucia and Saint Vincent and the Grenadines. However, for these islands gross export revenue fell below EC$200 million in 1996 and has declined persistently ever since.

8.2.2 Direct contribution to commercial activity and economic growth

An important role of the banana industry in the Caribbean has been its direct contribution to commercial activity and economic growth. In an attempt to explain how the regional banana trade contributed to an increase in commercial activity, it is important that data are examined at the industry or macro level as well as at the farm enterprise or micro level. At the industry level, we reviewed data related to aggregate production and exports, as these are the best indicators of commercial activity at that level. Particular emphasis was placed on reviewing trends in production and exports, number of active farmers, persons employed and revenues generated by the industry.

At the farm enterprise level, the objective was to obtain the perspective of the farmer and the company directly engaged in production and/or marketing of bananas on how the preference impacted on his/her farm enterprise or business and its performance, growth/expansion and development.

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[85] Both Saint Lucia and Saint Vincent and the Grenadines enjoyed their best-ever market performance in 1990 when they exported 133 777 and 79 561tonnes, respectively. Dominica's best-ever performance was in 1992, corresponding to an export volume of 58 024 tonnes; Grenada's best-ever performance was in 1988, corresponding to an export volume of 9 129 tonnes.

[86] EC$ (Eastern Caribbean dollars). US$1=EC$2.6882.

FIGURE 8.2
Windward Islands banana export values (1985–2005)
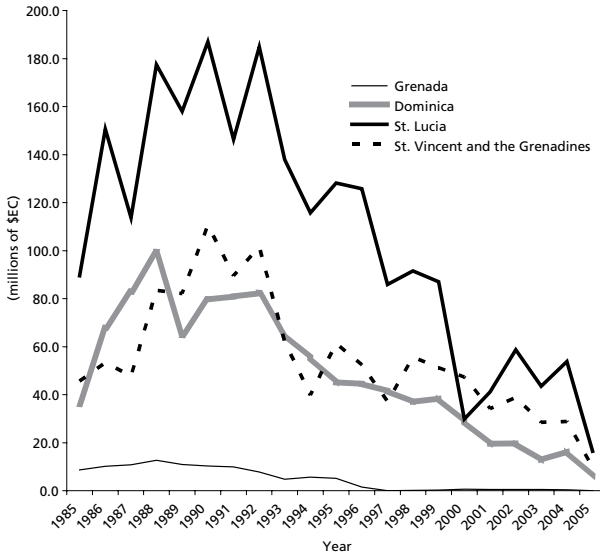
Source: Author's construction based on data from WIBDECO, 2006.

The banana sector has been the major foreign exchange earner for Dominica and Saint Vincent and the Grenadines and also commands an important foreign exchange position in the economy of Saint Lucia. In the case of Dominica, Allport (2005) has hinted at evidence of a correlation between the growth rate of the gross domestic product (GDP) and the performance of the banana sector. Dominica achieved its highest GDP growth rate over the last 18 years in 1988, which coincided with the peak year of banana production for that country. When production subsequently declined the following year the country experienced economic contraction (see **Figure 8.3**).[87] An estimation of the correlation coefficient between the growth of GDP and agriculture GDP was undertaken using data over the period 1986 to 2003. We confirm evidence that these growth rates are significantly correlated at 0.69.

Despite the continued decline in Dominica's banana exports ever since, **Figure 8.4** shows that bananas still account for more than 50 percent of all

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[87] GDP grew by 7.4 percent in 1988 corresponding to Dominica's peak banana production of 74 184 tonnes, then declined by -1.1 percent in 1989 following the passage of Hurricane Hugo, when production fell to nearly 60 000 tonnes.

FIGURE 8.3
Growth of GDP and agriculture GDP in Dominica
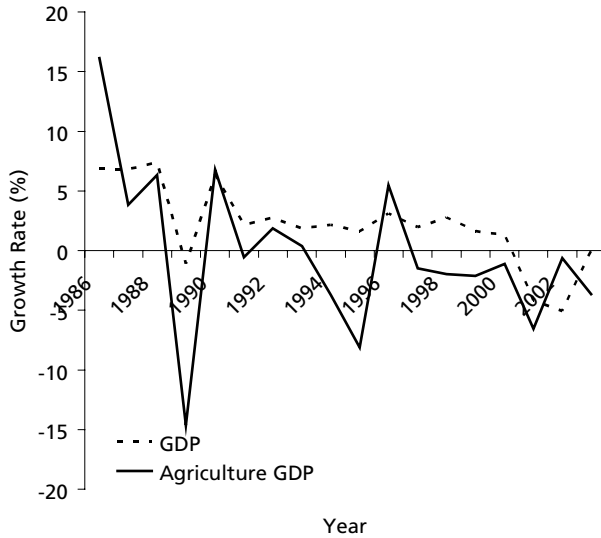
Source: Author's construction based on data from Allport (2005: p.7) in Appendix.

Dominica's agriculture exports by value. In addition, bananas contribute 30 percent of Dominica's national employment.

Figure 8.5 shows the relationship between the growth of GDP, agriculture GDP and banana GDP in Saint Lucia over the period 1990 to 2004. It is clear that the agriculture sector, and primarily bananas, significantly influences the direction of overall economic growth. An estimation of the correlation coefficient between the growth of GDP and agriculture GDP over the period reveals a coefficient of 0.65. In addition, the correlation coefficient between the growth rate of GDP and banana GDP was found to be 0.49. Therefore, it can be concluded that developments in the agriculture sector, particularly the banana industry, impact directly upon the overall economic performance of Saint Lucia.

Although he does not estimate any correlation coefficient between agriculture export production and economic growth, Rawlins (2005) nevertheless makes an important point about the linkages between them. He argues that when Hurricane Alan devastated the banana industry in Saint Lucia in 1980 the contribution of the banana industry to real GDP at factor cost contracted by 32 percent, while overall economic growth contracted by

FIGURE 8.4
Dominica banana export index and percentage of agricultural exports

- - - Banana Exports as % of Agriculture Exports
—— Export Index (1986=100)

Source: Author's construction based on data from Allport (2005) in Appendix.

1.8 percent. Similarly, when production increased significantly in 1986, the banana industry recorded real growth in the magnitude of 50.5 percent while total GDP grew by 15.3 percent, the highest level of growth in total real GDP for Saint Lucia during the period 1978–2003.

The major decline in Saint Lucia's banana industry (which started in earnest around 1994 when Tropical Storm Debbie struck the island) was accompanied by a period of relatively poor economic performance. Between 1994 and 2003, Saint Lucia's highest level of real economic growth was 3.8 percent in 1999, while the country experienced negative growth in 2000 and 2001.

Rawlins (2005) also asserts the importance of the banana industry in Saint Lucia since the early 1950s. He analyses the significant growth in commercial activity over time in the context of the trade preferences that Saint Lucia and the other Caribbean countries enjoyed in the EU market since 1954. Following the rapid expansion experienced between 1954 and 1963, production and exports followed a generally increasing trend during the balance of the 1960s, with exports reaching a decade high of 86 118 tonnes valued at EC$13.87 million in 1969. Subsequently, exports increased from 54 334 tonnes in 1983 to reach an all-time high of 133 777 tonnes

FIGURE 8.5
Growth rates of GDP, agriculture GDP and banana GDP in Saint Lucia
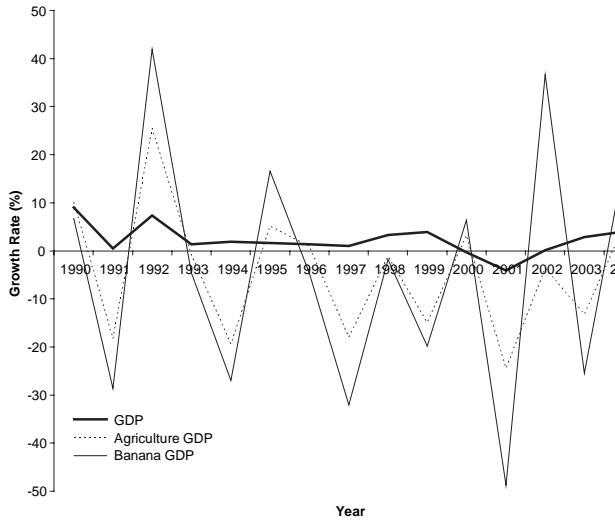
Source: Author's construction based on data from Saint Lucia Statistical Office (2006) in Appendix.

valued at EC$186.9 million in 1990. The preceding analysis by Rawlins is in accordance with the works of several others on the subject, including Nurse and Sandiford (1995) and Clegg (2002).

Since other sectors of the economy would have autonomously contracted during the 1990s, one cannot attribute the declining performance of the economy to the decline in the banana industry alone. Nevertheless, it is clear that the poor performance of the banana industry contributed both directly and indirectly to the decline in performance of the economy.

8.2.3 Direct impacts at the level of the farm enterprise

In Saint Lucia, Rawlins (2005) concludes that preferential access to the United Kingdom market provided a stimulus for increased production and export of bananas. The increase in production was due in large measure to the active involvement of a large number of small farmers, many of whom were subsistence farmers and/or employees in the sugar industry. There was as a consequence the emergence of a new class of producer – the commercial banana farmer – of which there were 10 000 registered by 1963. Given the highly skewed distribution of land in Saint Lucia, as confirmed by Saint

Lucia's Agricultural Census Report (1996), most of these growers would have been small farmers.

During the period 1988–1992, the net earnings of the Saint Lucia banana industry for banana growers were significant. They averaged EC$87.4 million per annum and resulted in an improved standard of living in all banana-producing rural communities. Banana growers received more than 51 cents of every dollar earned from the export of bananas, with the balance being used to cover the cost of providing a range of services offered by the Saint Lucia Banana Growers Association (SLBGA) and the sourcing of inputs. This level of return to the farmer was slightly more than 32 cents per pound from which farmers would have to pay only labour, as inputs were already netted out. In 1992, the average net earnings per farmer would have been EC$10 357 based on net earnings of EC$98.4 million and the participation of 9 500 active farmers. The revenues earned by growers contributed significantly to improving their standard of living and that of their families in many rural communities. Many of the growers were able to purchase farm vehicles, acquire equipment and machinery needed on the farms and undertake farm improvements using income earned from bananas.

Undoubtedly, the preferential arrangements for the export of bananas set the stage for the transformation of the small farming subsector in Saint Lucia. The financial and technical assistance provided by the United Kingdom Government in the 1950s was followed by significant technical and financial assistance from the Government of Saint Lucia, all geared to ensuring that growers were provided with the best possible technical advice and other support services necessary for commercial banana production.

In Dominica the impact of the banana industry at the level of individual farmers has also been significant. Dominica's banana industry comprised approximately 5 063 farms cultivating over 12 000 acres of the crop on farms that averaged two acres in 1986. The industry continued to grow through 1988 when it reached a maximum of 6 922 farmers. Allport (2005) estimates that the Dominican banana industry employed approximately 46 percent of the country's labour force over the period 1986–1993 given that each farmer employed an average of four farm workers.

Additionally, approximately 59 percent of gross banana revenue earned by the Dominica Banana Marketing Corporation (DBMC) was remitted to farmers from which farmers were expected to pay WINCROP insurance premiums and farmers' Input Cess Accounts.[88] However, DBMC continued to cover other costs directly associated with banana production on the farm. Net payments to farmers averaged 43.2 percent of the gross earnings of the DBMC, resulting in a net payment to farmers of approximately EC$280 million during that period.

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[88] In earlier years, farmers were also expected to pay for shrinkages and shut-outs from this gross revenue.

8.2.4 Implications for food security

The deteriorating performance of the region's banana industry, due largely to changes in the external economic environment (primarily in the EU), poses serious implications for these countries with regards to their food security. Most Caribbean countries are small- island states with limited arable lands and in many instances such lands are marginal and hence characterized by low productivity. Consequently, for many of these countries (such as those of the Eastern Caribbean) the previously secure market for bananas in the EU resulted in their over-specialization in production of the commodity for export. It was the banana trade that financed their food imports and on the basis of which rural households earned income that enabled them to access their food needs. The decline in production and exports observed above has led to a severe reduction in registered banana farmers (**Table 8.1**) and associated rural employment opportunities.

Preference erosion in the EU has resulted in precipitous declines in the export revenues from bananas. As farmers gradually exit the industry, production has declined considerably, with significant impacts on economic growth. In order to appreciate the food security dimension of the problem let us briefly analyse the trade patterns for Saint Lucia and Dominica.

Figure 8.6 shows an index of food imports into Saint Lucia over the period 1994 to 2004,[89] along with the share of food[90] in total imports over that same period. While the share of food in total imports has remained fairly stagnant, averaging 21.1 percent over that period, the tendency has been for an increase in the volume of food imports over time, with the food import index having increased by more than 28 percent by 2004, relative to its value in 1994. Therefore, there has been a growing reliance on foreign sources of food for domestic consumption in Saint Lucia since 1994.

Perhaps more importantly, the tendency has been for a decrease in Saint Lucia's food security over the period 1994–2004 (see **Figure 8.7**). One assessment of food security in this chapter is in terms of the ability of Saint Lucia to pay for its food imports from its export revenues, and it is referred to here as the "light" measure of food security. It determines whether food imports can be comfortably paid for by the country's domestic exports, while leaving a significant surplus for financing payments of imports of manufactures. We refer to the "heavy" measure of food security as that which determines whether food imports can be comfortably paid for by the country's total exports (both domestic and re-exports), while leaving a significant surplus for financing its payments of other imports.

Figure 8.7 reveals that while Saint Lucia was capable of financing all of its food imports by export revenue between 1994 and 1996, since 1997 the

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[89] The index was computed using 1994 as the base year, i.e. 1994=100.

[90] Food is defined here as all items classified under Section 0 of the Standard International Trade Classification System (SITC).

TABLE 8.1
Number of registered banana farmers (000)

Countries/Years	1994	1996	1998	2000	2001	2002	2003
Saint Lucia	8.0	6.7	4.5	4.8	3.8	2.0	2.0
Saint Vincent and the Grenadines	7.4	5.7	4.2	3.8	2.2	2.5	2.3
Grenada	0.9	0.2	0.1	0.1	0.1	...	...
Dominica	6.8	5.5	2.9	2.4	1.3	1.0	1.0
Total	**23.1**	**18.1**	**11.7**	**11.1**	**7.3**	**5.5**	**5.3**

FIGURE 8.6
Index of food imports and share of food in total imports
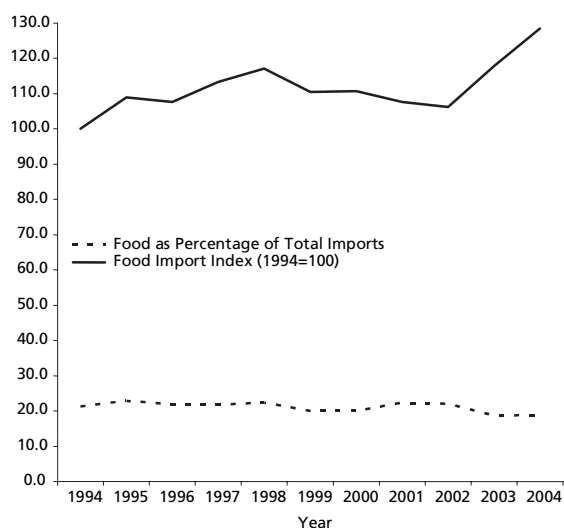
Source: Author's construction based on data from Saint Lucia Statistics Department (2006) in Appendix.

revenue that the country earns from its exports is not sufficient to pay for its food imports, let alone imports of other items. Using the "light" measure of food security, in 1994 76.9 percent of Saint Lucia's export revenue was used to pay for its food imports and this figure had increased to 89.6 percent in 1996. However, since 1997 even when the country used up all of its export revenue to pay for food imports it still needed to find additional financing to pay for food imports – and the food security situation keeps worsening over time. While the country needed approximately 28 percent more financing over its exports to pay for its food imports in 1997, this figure had grown to

FIGURE 8.7
Saint Lucia's food security situation (1994–2004)
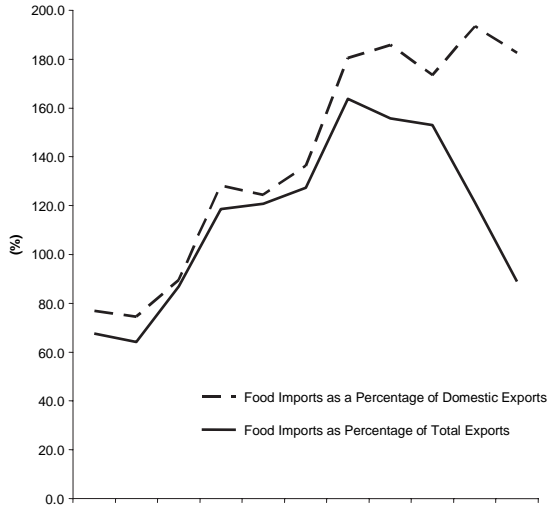
Source: Author's construction based on data from Saint Lucia's
Statistical Office (2006) in Appendix.

93 percent more financing over its exports to pay for food imports in 2003. Using the "heavy" measure of food security does not result in significant enhancement of the results up to the year 2000. However, that measure shows significant differences from 2002, even if Saint Lucia remains highly food-insecure as its export revenues remain insufficient to pay for its food imports.

Obviously, the burden to finance the food security gap falls on the tourism sector, which has become the major foreign exchange earner for Saint Lucia since the mid-1990s. Yet, what the above analysis shows is that this approach to development is simply not sustainable. Saint Lucia cannot continue to make its economy grow by relying exclusively on the tourism sector, at the expense of the agriculture sector, which is allowed to wither away. In such a model of economic growth the export revenue derived from tourism is used to finance imports of food for both domestic consumption and for consumption of tourists in hotels (the foreign sector). Therefore, the tourism sector constitutes a major leakage of foreign exchange through unrealized benefits of economic growth in the domestic agriculture sector.

Figure 8.8 shows an index of food imports into Dominica over the period 1990 to 2004 along with the share of food in total imports over that same

FIGURE 8.8
Dominica's index of food imports and share of food in total imports
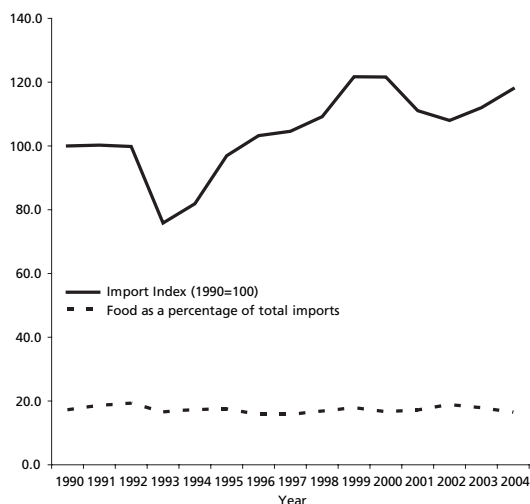
Source: Author's construction based on data from Dominica's Statistical Office (2006) in Appendix.

period. While the share of food in total imports has remained fairly stagnant, averaging 17.3 percent over that period, the tendency has been for an increase in the volume of food imports over time, with the food import index having increased by more than 17 percent by 2004 relative to its value in 1990. Therefore, as in Saint Lucia, there has been a growing reliance on foreign sources of food for domestic consumption in Dominica. However, the extent of reliance on food imports in Dominica is significantly lower than in Saint Lucia over the observed period. Additionally, while the tendency has been for a decrease in Dominica's food security over the period 1990–2004 (see **Figure 8.9**), again the extent of such decline is far less pronounced than for Saint Lucia.

Figure 8.9 reveals that, unlike Saint Lucia, Dominica was capable of financing all of its food imports by export revenue between 1990 and 2004. Although the food security position has deteriorated somewhat over time Dominica can pay for all of its food imports with approximately 60 percent of all its export revenue as at 2004. In addition, these results are essentially the same whether a "light" or "heavy" measure of food security is adopted.

FIGURE 8.9
Dominica's food security situation (1990–2004)
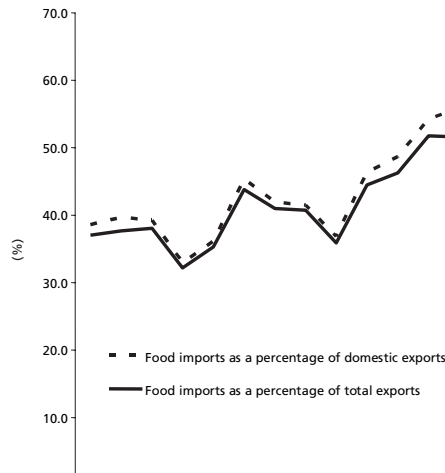
Source: Author's construction based on data from Dominica's Statistical Office (2006) in Appendix.

8.3 Recent changes in the banana trade policy environment

This section reviews the changes taking place (or likely to take place) in the internal and international trading environments, both in terms of policies and trading rules and their likely impact on the banana sector.

Preferential market access in Europe has been the basis for the viability of the banana trade for the Caribbean countries. However, since the formation of the Single European Market (SEM) the EC has sought to reform its common agricultural policy in a manner that is consistent with the objectives of any single market: ensuring that available factors of production are deployed in the most efficient manner, thus maximizing consumer welfare. Hence there have been calls to liberalize the EU market for banana imports both by interest groups within its Member States and by Latin American countries that have a substantial supplying interest but whose bananas are subject to the EC's MFN tariff. The EU has had to reform its banana import policy several times since 1992 and the process continues. Such reforms have had an adverse impact on the major banana-exporting countries of the Caribbean who have responded by undertaking some reforms to their own internal organization of production and trade.

8.3.1 Context of the Caribbean in world banana export trade

Here we provide some background information to situate the Caribbean banana exporting countries in the context of world banana trade and hence the policy debate on the need for regime change.

At the turn of the century, Caribbean countries accounted for the smallest shares of world banana trade, although such shares invariably accounted for the majority of all their banana production (see **Table 8.2**).

No single Caribbean country accounted for 1 percent of world banana exports in 2000, with their market shares ranging from 0.01 in Grenada to 0.68 in the Dominican Republic. By contrast most countries in Latin America account for a significant proportion of world trade: Ecuador accounted for 33.7 percent, Costa Rica for 16.1 percent and Colombia for 13.03 percent in 2000. Even the smaller producers in Latin America typically account for a larger share of the world market than the average Caribbean country. Therefore, while both country groups exhibit significant dependence on banana exports, the Latin American countries clearly command a dominant position in the world market.

Intuitively, any trade policy measure that results in reduction in banana supply from countries in either Latin America or the Caribbean will adversely impact their domestic economies because the majority of production in most cases is for the export market. However, while Caribbean countries are already operating at capacity limit with relatively small market shares, Latin American countries possess capacity reserves and already dominate export markets. When the food security considerations of Caribbean countries are taken into account it would seem that any policy change that adversely impacts their market access will result in further deterioration of their already volatile food security positions.

8.3.2 Challenges to the EU banana import policy

Since the formation of the Single European Market (SEM) in 1993, EU imports of bananas have been governed by the Common Market Organisation for Bananas (CMOB)[91]. The CMOB regulates banana importation through a system of tariff rate quotas (TRQ). In this system, bananas may be imported from third countries under three different tariff quotas. Bananas from all origins may be imported under quotas A and B bananas from ACP countries enter these quotas duty free, while bananas from other origins pay a tariff of €75/tonne. Bananas imported beyond quotas A and B have to pay a much higher out-of-quota tariff of €680/tonne (with a preferential tariff of €380/tonne for ACP bananas). In practice, quotas A and B are managed as if they formed a single quota and are often referred to as "quota A/B". Most of the bananas imported under quota A/B originate from Latin American countries.

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[91] As defined by Council Regulation (EEC) Nr. 404/93 of 13 February 1993

TABLE 8.2
Percent of world exports and export production in 2000

	Caribbean			Latin America	
Country	Percent of world exports in 2000	Percent of production exported in 2000	Country	Percent of world exports in 2000	Percent of production exported in 2000
Jamaica	0.36	32.3	Ecuador	33.70	60.9
Saint Lucia	0.43	67.4	Colombia	13.03	92.3
Saint Vincent/ Grenadines	0.37	99.1	Costa Rica	16.10	83.7
Dominica	0.24	89.4	Guatemala	6.85	95.3
Grenada	0.01	15.1	Panama	4.60	66.6
Dominican Republic	0.68	44.3	Honduras	1.29	32.1
Suriname	0.34	82.1	Nicaragua	0.39	80.1
Belize	0.59	81.6			

Source: UNCTAD (2003: p.62).

These bananas are often referred to as "dollar bananas" because they are traded in US dollars.[92]

A third quota (quota C) is reserved for bananas imported from ACP countries. Bananas imported under this quota enter duty free. In addition, after the enlargement of May 2004 the EU created an Additional Quantity (AQ), open to all exporting countries, to allow for the importation of bananas into the new Member States.[93]

The quotas are administered by a complex system of import licences. Banana import licences for specific quantities within quotas A, B and C are allocated by the European Commission to market operators established in the EU. These operators include specialized importers, multinational banana companies or subsidiaries of banana-producing and/or exporting companies of supplying countries. Most of the licences are reserved for companies that are involved in the production or shipping of bananas in the producing countries (so-called "traditional operators"), with volumes based on their shares of past imports (system of historical reference). Smaller quantities of the quota are also open to newcomers, namely other banana importers that do not qualify as traditional operators ("non-traditional operators", see EC 2004).[94]

There are virtually no imports of bananas outside the quotas due to the very high level of the out-of-quota tariff. In practice, the CMOB has limited total banana supply into the EU by putting a cap on the imports of dollar bananas, which tend to be more competitive than most ACP bananas, even with the €75/tonne tariff. By limiting supply to a level lower than what

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[92] See FAO Technical Note, pp. 4–5.
[93] Ibid.
[94] Ibid.

would exist under free market access, the CMOB has created a quota rent. As a result, banana prices in the EU have been much higher than in most other markets of the world, since they reflect the quota rent and the tariff (for dollar bananas).[95]

Latin American supplying countries challenged the CMOB several times in the GATT and at the WTO because it limits their exports of bananas to the EU. In many cases they were supported by the United States, whose transnational banana marketing companies saw their access to the EU market curtailed by the CMOB in 1993. In 1997, the World Trade Organization (WTO) ruled that the CMOB was incompatible with several articles of GATT and the GATS. The EU implemented a new version in January 1999. However, the second version of CMOB was challenged and again found incompatible with WTO rules. Following the WTO ruling, the EU undertook negotiations with the main parties in the trade dispute to find an agreement on a reform of the CMOB (FAO, 2001). In April 2001, the EU reached two separate agreements with the United States and Ecuador, which led to the third version of the Common Market Organisation for Bananas. Finally, in 2004 the EU had to further amend the CMOB to reflect its enlargement to include ten new Member States of Central and Eastern Europe.[96]

A fundamental aspect of the 2001 agreement with the United States is that the European Commission has committed to changing its import regime from the current tariff rate quota to a tariff-only system no later than 1 January 2006. From 2006 banana imports will no longer be bound by quotas whatever their origin; a single tariff will apply to all banana imports. However, in order to maintain its commitment to ACP countries, the EU intends to give them a tariff preference such that ACP bananas would pay a lower, or no, tariff. Currently, a waiver obtained at the WTO Ministerial Conference of 14 November 2001 in Doha allows ACP bananas to be imported into the EU duty free until 31 December 2007 (WTO 2001).[97]

Tariffication, i.e., the transformation of a TRQ system into a tariff-only system, is governed by Article XXVIII of GATT and stipulates that the country that undertakes tariffication should consult with the supplying countries. If no agreement can be found, the latter may seek arbitration at the WTO. The text of the waiver adopted at the Doha Conference states that should the negotiation go to arbitration:

> *"If the arbitrator determines that the rebinding would not result in at least maintaining total market access for MFN suppliers, the EC shall rectify the matter. If the EC has failed to rectify the matter, this waiver shall cease to apply to bananas upon entry into force of the new EC tariff regime."* (WTO, 2001).[98]

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[95]   Ibid.

[96]   Ibid., pp.5–6.

[97]   Ibid., p.6.

[98]   Ibid., p.6.

As such, on 13 July 2004, the European Council adopted a decision authorizing the Commission to open negotiations on modifications to the bound duties for bananas. On 15 July 2004, the Commission circulated notice to WTO Members of its intention to modify concessions on bananas and its desire to enter consultations and negotiations with Members under Art. XXVIII of GATT 1994. In particular, the EU proposed to open negotiations under GATT 1994,[99] where only trade under MFN tariffs matters,[100] when WTO Members are to identify which Members have a "principal supplying interest" or a "substantial interest". On 27 October 2004, the EU Commissioner for Trade stated that the proposed initial tariff to apply for bananas from the MFN suppliers was €230/tonne. He stressed that it was the level of tariff protection for the expanded EU of 25 Member States and that the figure was a contribution to the negotiations.

The MFN countries were united in their response to the EU's request for Art. XXVIII consultations and negotiations and its initial tariff offer. They argued for a tariff no higher than €75/tonne, citing a study which found that if the €75/tonne ACP tariff preference were increased, and ACP quota restraints lifted, African exports would expand enormously, displacing Latin American banana exports and inflicting severe damage to the fragile economies of the region.[101]

Art. XXVIII negotiations were completed without a mutually satisfactory solution for all Parties and on 31 January 2005 the EC proceeded to officially notify the WTO that the new tariff to be applied in respect of bananas originating from MFN supplying countries was €230/tonne. Under the Doha Ministerial Decision the MFN countries had 60 days to signal their acceptance or rejection of the proposed tariff and in fact they did reject the tariff and called for WTO arbitration in the matter in a communication dated 30 March 2005.[102]

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[99] "Before 1 January 1958 and before the end of any period envisaged in paragraph 1 a contracting party may elect by notifying the CONTRACTING PARTIES to reserve the right, for the duration of the next period, to modify the appropriate Schedule in accordance with the procedures of paragraph 1 to 3. If a contracting party so elects, other contracting parties shall have the right, during the same period, to modify or withdraw, in accordance with the same procedures, concessions initially negotiated with that contracting party." (Para. 5. Art. XXVIII, GATT 1994).

[100] "In such negotiations and agreement, which may include provision for compensatory adjustment with respect to other products, the contracting parties concerned shall endeavour to maintain a general level of reciprocal and mutually advantageous concessions not less favourable to trade than that provided for in this Agreement prior to such negotiations." (Para. 2. Art. XXVIII, GATT 1994)

[101] They further argued that for every €10/tonne increase in the tariff, Latin American market access is likely to decline by 70 000 tonnes. Consequently, should the EU implement a tariff of €300/tonne, Latin American market access will likely decline by at least 1.5 million tonnes per year, and possibly up to 2.6 million tonnes per year, at the expense of increased market access for African banana exports (See Preville (2005a:3) *Status of The Article XXVIII Negotiations for Implementing a Tariff-only Banana Regime in the European Union*, Briefing Note for Caribbean Heads of Government, April.

[102] See WTO document WT/L/607/Add.1-9.

In its first decision the Arbitrator determined that "the European Communities' envisaged rebinding on bananas would not result in at least maintaining total market access for MFN banana suppliers, taking into account all EC WTO market-access commitments relating to bananas".[103] This means that the proposed tariff level is higher than it ought to be if the MFN countries are to continue to enjoy market access no different than they presently do under the existing tariff rate quota (TRQ) system. In arriving at this determination the Arbitrator took two major points into consideration, both of which deal with the underlying data. First, that the price data series used by the EC did not cover the most recently available three-year period, as is customary WTO practice. Secondly, that the data themselves were not accurate, since they were not actual prices paid by traders, but proxies for these data as announced by traders in any given period.

With respect to the methodology that was applied (the price-gap method), the Arbitrator upheld it as representative and relevant for this type of analysis. In the process, the Arbitrator also questioned whether other methods, including economic modelling methods as suggested by some MFN countries, would yield any better results than the price-gap method. On 12 September 2005 the EU responded to the Arbitrator's decision by tabling a new tariff proposal of €187/tonne for replacing the existing TRQ system that applied with respect to MFN banana imports. In addition, the EU proposed that the ACP countries continue to enjoy duty-free market access for a quota of 775 000 tonnes. The EC then proceeded to consult with the MFN countries on whether they found this solution acceptable. Talks broke down, leaving the EU no alternative but to invoke the second arbitration procedure.[104]

The mandate of the Second Arbitration was to determine "whether the EC has rectified the matter", the understanding of *rectification* to be linked to the finding of the Arbitrator in the First Arbitration. The Arbitrator determined that the European Communities' proposed rectification would not result "in at least maintaining total market access for MFN banana suppliers", taking into account "all EC WTO market-access commitments relating to bananas".[105]

However, the outcome of the Second Arbitration was not the end of the EC banana tariff-only process. Honduras formally tabled the banana issue

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[103] See *European Communities – The ACP-EC Partnership Agreement – Recourse to Arbitration Pursuant to The Decision of 14 November 2001: Award of the Arbitrator*, para. 94.

[104] This was communicated to the Arbitrator by the EC on 26 September 2005, in which the EC stated, "There is currently no basis for even seeking a mutually satisfactory solution". See Preville (2005b), *Briefing note on the outcome of the Arbitration process*, Briefing Notes for Caribbean Heads of Government, November.

[105] *European Communities – The ACP-EC Partnership Agreement – Second Recourse to Arbitration Pursuant to the Decision of 14 November 2001: Award of The Arbitrator*, para.127.

for discussion at the Sixth WTO ministerial conference in its communication WT /MIN (05)/2, dated 8 November 2005. In that communication Honduras stated, "If a new EC banana regime is to be installed as of 1 January 2006, the EC must clarify to the MFN supplying interests how it will fully comply with the 14 November 2001 Ministerial Decision, the Arbitration Awards of 1 August and 27 October 2005, GATT Article XIII, GATT Article XXVIII, and all other WTO obligations".[106]

At the Hong Kong Ministerial Conference the EC banana import policy was discussed at length in a plenary session, which went well into the night. The plenary first heard Honduras' argument, which embodied a request for the EC to comply with the various rulings by WTO panels and the recent Arbitration Body. Arguments were then heard from the various MFN banana-exporting countries and the ACP countries. The gist of the MFN countries' arguments was that the proposed EC tariff of €176/tonne would adversely impact their market access and therefore should be revised downwards. ACP countries argued the contrary, that the proposed tariff level was not sufficiently high to guarantee their market access would remain unchanged.

With the assistance of the Norwegian Trade Minister as Facilitator, it was agreed that the EC was to proceed with implementation of its single tariff from 1 January 2006, subject to a monitoring mechanism. The monitoring mechanism would periodically review the performance of the EU banana market to determine whether the single tariff was adversely affecting MFN market access.

The EC has proceeded to implement its single tariff of €176/tonne as was agreed at the Hong Kong Ministerial in December 2005 and has been monitoring the market performance ever since. At this stage the signals emanating from the monitoring mechanism process are mixed. Based on trade data provided by the EC for market performance in the first quarter of 2006, it appears that exports from Latin America have grown relative to the same period in 2005. Additionally, it also appears that exports from the ACP have grown over the same period. Therefore, it would appear that the tariff has not adversely impacted market access for Latin American bananas, the important test that must be fulfilled if it is reasonably equivalent to the previous tariff-quota regime.

Yet, there has been no growth in market share for Caribbean bananas in the EU. All of the growth from the ACP originates from Africa, primarily Cameroon and the Côte D'Ivoire. This has been facilitated by the 775 000 tonne quota that was opened for banana supplies from the ACP.

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[106] See WTO document EC Compliance With all MFN Rights and Interests on Bananas under the Doha Ministerial Decision of 14 November 2001 (WT/MIN (05)/15), The Award of the Arbitrator of 1 August 2005 (WT/L/616), The Award of The Arbitrator of 27 October 2005 (WT/L/625), GATT Article XIII, GATT Article XXVIII and All Other WTO Obligations, Ministerial Conference, Sixth Session Hong Kong, 13–18 December 2005.

Latin America banana-exporting countries have nevertheless continued to complain that the tariff level is too high and have issued calls for the EC to further reduce the tariff even ahead of the completion of the one year period of monitoring agreed to at Hong Kong. While the EC has not yet agreed to reduce the tariff, it seems to be considering binding the tariff at its current level and subjecting that tariff to further reduction within the context of the Doha Round.

While there has been no agreement on modalities for tariff reduction in agriculture, all of the proposals under consideration in the WTO would place such a tariff within a band that would subject it to cuts of up to fifty percent. Therefore, should the EC proceed to bind its tariff at the current level and not designate bananas as a "sensitive product", then by the completion of the Doha Round of negotiations, the tariff on bananas could decline to approximately €88/tonne.

8.3.3 Changes in banana industry structure and trade policy emphasis

The significant changes that have taken place in the EC's regime for banana imports since 1993 have had an impact on domestic banana production and marketing policies in the Caribbean. Such changes manifest themselves in two important ways. Firstly, the state-owned enterprises in Dominica and Saint Lucia were privatized in the late 1990s in the hope of increasing productivity and competitiveness as the levels of protection declined. Secondly, at the regional level emphasis shifted from research and development (which had been the primary objective of the Windward Islands Banana Growers Association (WINBAN)) to commercial marketing and distribution in Europe, which became the focus of the new regional company WIBDECO.[107]

Privatization of the industry in the Windward Islands began in Saint Lucia in 1998 when the Saint Lucia Banana Growers Association (SLBGA) Act of 1967 was repealed and a private company, the Saint Lucia Banana Corporation (SLBC) was created. SLBGA had started out as a private company with the growers as shareholders. After passing of the Act of 1967 it functioned as a statutory organization until 1998. Despite subsequent amendments to the Act to allow first WINBAN and then WIBDECO to become the sole exporters of bananas, throughout its existence the SLBGA had been the subject of many changes and tensions centred primarily on its relationship with the government.

During its existence SLBGA provided a number of inputs and essential services to banana growers. These included providing packaging materials,

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[107] From Rawlins (2005): "WINBAN was engaged in research and development work aimed at ensuring that the best possible agronomic, quality control and management practices were employed on farms. These small farms were effectively transformed from basic subsistence units to commercial farm enterprises which employed labour and adopted recommended husbandry and best management practices."

research and development, field agronomic services, pest and disease control and a banana transportation allowance. The SLBGA was also responsible for managing significant levels of financial resources on behalf of the banana industry.

However, opposition to the SLBC structure resulted in the establishment of Tropical Quality Fruit Company in 1998, while further disenchantment with the SLBC led to the formation of the Banana Salvation Marketing Ltd and the Agricultural Commodities Trading Company Ltd. Under operation as private entities, significantly larger shares of gross returns from banana sales were remitted to the farmers and this was seen as a positive development. However, all the important services previously provided by SLBGA were to be provided by the farmers themselves. Given the generally small size of their operations it became untenable for these farmers to survive in the industry and thus the privatization process claimed many casualties.

In Dominica bananas were traditionally marketed by the Dominica Banana Marketing Corporation (DBMC), a statutory corporation created by an Act of Parliament in 1984. Its specific purpose was to "promote the well-being of the banana growers and to ensure the financial viability of the Banana Industry".[108] Essentially, like its counterpart in Saint Lucia (the SLBGA), it provided all the supporting services to make the banana industry viable in Dominica: purchase of bananas from producers, leafspot control, depot operations and provision of inputs, among other things.

Commercialization of the Dominica banana industry took place in mid-2002 following ten years of significant declines in the profitability of the DBMC, due to its attempt to stabilize incomes paid to farmers.[109] DBMC is reported to have made payments to its farmers that were well in excess of its gross income for several years, in an attempt to keep as many farmers in the industry as possible. However, such a policy was not sustainable and resulted in the rapid deterioration of DBMC's financial position, with tremendous debt equivalent to 150 percent of the company's export earnings and 7 percent of the country's GDP.[110]

As was the case in Saint Lucia, privatization of the Dominican Banana Industry resulted in the creation of a major private firm, the Dominica Banana Producers Limited (DBPL). Farmers received a larger share of the gross returns to the industry but they had to bear the added costs of management of all essential services to ensure both their individual and group viability. The commercialization of Dominica's banana industry heralded the era of Fair Trade production and marketing, an approach introduced to Dominica by the Windward Islands Farmers' Association (WINFA).

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[108] Allport (2005:23).
[109] Most of the decline in gross earnings of the Dominican Banana Industry has been attributed to decrease in both production and exports as opposed to a decline in prices paid to farmers.
[110] Allport, op cit.

Under Fair Trade production and marketing, farmers are paid a price over and beyond that paid for standard commercial bananas provided that they fulfil stringent requirements in the production process. Farmers are also paid a "social premium" that is used for implementation of approved projects in their communities.[111]

8.4 Policy interventions and strategies

Against the background of the current international trading environment, here we propose policy interventions and strategies that would lead to establishment of economic and rural structures that are dynamic and sustainable and result in increased welfare and livelihoods in banana-producing rural areas of the Caribbean. Three fundamental points are made: the importance of both public and private sector investment nationally; the need to target niche and specialty market segments globally; and negotiating within the WTO development measures (such as special products and international financial assistance) through schemes like Aid for Trade.

8.4.1 Private/public sector roles

Most of the Caribbean banana-exporting countries have suffered setbacks since the implementation of the EU's banana regime in July 1993 and the resulting changes. In response they have implemented policies ostensibly geared at enhancing their competitive position and maintaining their access to the EU market. Most of this policy shift has been in the direction of privatization: scaling-back the level of state intervention in the production, marketing and distribution processes and placing these activities in the private domain. While there have been some increases in the efficiency of execution of these activities, from the perspective of farmers the reforms have not been wholly successful. The views of farmers in Saint Lucia, Dominica and Grenada are elaborated below.

Farmers perceive that the increase in the number of private firms (not linked to a cooperative or some other collective production and marketing system) that produce and prepare bananas for marketing has resulted in higher costs of operation as these firms cannot enjoy scale economies individually. Moreover, the management skills that were previously enjoyed by farmers through the former state-owned companies are no longer available at the level of individual firms, even though these private firms are now required to provide all such services to their farmers. None of the firms is large enough to provide these management and technical services in an economically viable

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[111] Dominica is now estimated to have a total of 16 Fair Trade farmer associations with a membership of more than 730 farmers. Each of these associations nominates a representative at the national level to form the National Fair Trade Organisation.

manner. These developments have put in serious doubt the future of the region's banana industry.

Connected to the issue of enhancing productivity is the approach utilized by the various stakeholders in addressing the problems of the industry. The farmers are concerned that there tends to be a conflict of interest between what is best for the industry and what would be best for individual companies. They see that the provision of research, education and extension services remains a critical element of the modernization process and a responsibility of the government.

Farmers also expressed much concern over the costs of inputs and the role of transport costs as a major bottleneck to streamlining efficiency in the internal sector. If inputs are sourced in bulk, farmers believe that they would reduce costs. But adequate infrastructure, particularly roads, is needed in order to avoid damage to vehicles and the related rise in costs of production to free on board (FOB) price at the port of exportation.

Farmers continue to emphasize the important role of government in the areas of education, research, incentives for attracting youth to the agricultural sector and land use management, especially related to the impact of tourism on rural areas.[112]

8.4.2 Niche markets

Caribbean banana-exporting countries face considerable challenges if they are to survive in the EU market. These challenges are linked to their production, marketing and distribution structures and to changes in the global environment in which they will be required to trade. Increasingly, it seems that the market for conventional bananas will become too competitive for these countries. However, there is a growing market for Fair Trade and organically produced bananas, and a significant proportion of bananas being exported from the Windward Islands are marketed under these labels. These countries should invest more resources in those niche markets, given the possibility of securing larger returns than with conventional exports. However, while the opinion of many industry leaders is that bananas exported under Fair Trade and Organic labels will become permanent niche markets, given the positions of major multiples and supermarkets like Wal-Mart, it is not only the Windward Islands that produce such bananas. Competition for these niche markets is fierce and growing, with significant supplies from major MFN exporters like Ecuador. Yet, this is the market segment that the Caribbean region can compete in and promotional campaigns that increasingly target it should be emphasized.

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[112] See also Springer (2004). .

8.4.3 Negotiations in the WTO

Caribbean countries are clear in their position that the issues related to the erosion of long-standing preferences must be addressed in the WTO negotiations. The region supports the need for the multilateral trading system to include disciplines facilitating food security, rural development and livelihood security – such as special products, sensitive products and a special safeguard mechanism. In relation to its longstanding preferences in bananas, the region would like the EU to designate bananas as a sensitive product in its market, thereby excluding that product (or minimizing the level of reduction) from tariff reduction during the Doha Round. The EU has so far been hesitant in designating bananas as a sensitive product arguing that it has other products which it would prefer to designate ahead of bananas; and it would not like to be seen as reneging on the agreement that had been reached with the United States and Ecuador in 2001 to fully liberalize its banana trade in 2006. If bananas are not designated a sensitive product, then it is likely that they will be subjected to tariff cuts of the order of 50 percent depending on the tariff reduction formula finally agreed to by the WTO membership.

However, one thing seems clear with regards to the survival of Caribbean bananas in the EU market. There have to be major reforms in that sector aimed at improving efficiency of the entire supply chain from production to marketing and final distribution. Such major reforms will necessitate not only significant improvements in labour productivity but will also be capital-intensive and technology-intensive. As such, there is the need for an Aid for Trade regime within the context of the Doha negotiations, as a means of improving the efficiency of the banana industry in these countries. It must be stated clearly that such an Aid for Trade regime should not envisage substituting the banana trade of these countries for aid, but providing financial and technical assistance that will transform the sector to higher levels of efficiency.

Caribbean countries embrace this initiative cautiously because it is not new. A looming fear within the region is that the major developed countries in the WTO who will be the donors of this aid money may coerce countries to accept new aid for trade only if they accept modalities for tariff reduction that will significantly open their markets, possibly to their own detriment.

The Aid for Trade Task Force has so far identified areas for implementation of the initiative through which the region may benefit in modernizing its banana sector. These include:

- trade-related infrastructure including physical infrastructure and trade support institutions;
- building productive capacity, including private sector development; and
- trade-related adjustment, including forward-looking support for adjustment associated with changes in international trade regimes.

Policy coherence is of course the next major consideration in implementing

an Aid for Trade package and Caribbean banana-producing countries need to work with their partners to ensure that both their own and the partners' policies support the changes needed for promoting banana sector transformation, agriculture and rural development.

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Appendix 8.1

Windward Islands banana exports

Windward Islands banana export volume (tonnes)				
Year	Grenada	Dominica	Saint Lucia	Saint Vincent and the Grenadines
1985	8 043	33 829	81 929	40 720
1986	7 940	51 284	112 004	38 246
1987	8 130	61 618	85 993	35 306
1988	9 129	71 474	128 091	61 836
1989	8 620	50 313	125 588	65 663
1990	7 486	56 617	133 777	79 561
1991	6 926	55 254	100 600	62 878
1992	6 300	58 024	132 854	77 361
1993	4 688	55 486	120 127	58 371
1994	4 544	42 781	90 119	30 925
1995	4 514	32 324	103 668	49 900
1996	1 850	39 533	104 805	43 986
1997	102	34 902	71 397	31 021
1998	94	28 135	73 039	39 887
1999	583	27 264	65 196	37 376
2000	722	27 157	70 280	42 336
2001	566	17 575	34 044	30 498
2002	507	16 983	48 160	33 243
2003	393	10 379	33 972	22 558
2004	338	12 721	42 326	22 631
2005	0	4 610	12 223	7 327

Source: WIBDECO (2006).

	Windward Islands banana export value (ECD millions*)				
Year	Grenada	Dominica	Saint Lucia	Saint Vincent and the Grenadines	Windward Islands
1985	8.7	36.0	89.5	45.6	179.8
1986	10.1	67.8	150.6	53.3	281.8
1987	10.8	82.8	113.7	47.6	255.0
1988	12.7	99.4	177.4	83.5	373.0
1989	10.9	64.9	158.0	82.2	316.0
1990	10.3	79.6	186.9	110.5	387.3
1991	9.9	80.9	146.4	89.5	326.7
1992	7.8	82.2	184.8	101.4	376.2
1993	4.8	65.1	137.9	62.0	269.8
1994	5.6	55.4	115.7	39.8	216.5
1995	5.2	45.2	128.1	61.3	239.8
1996	1.5	44.5	125.8	52.4	224.2
1997	0.0	41.5	85.9	37.1	164.5
1998	0.1	37.0	91.5	55.5	184.2
1999	0.3	38.4	87.0	51.1	176.8
2000	0.6	28.8	29.9	47.3	106.6
2001	0.5	19.6	41.2	34.1	95.3
2002	0.5	19.7	58.7	38.8	117.7
2003	0.5	12.8	43.6	28.5	85.4
2004	0.4	16.3	53.8	28.8	99.3
2005	0.0	6.2	16.5	9.8	32.4

Source: WIBDECO (2006)
*EC$2.7 = US$1

Rice trade in the Caribbean[*]

Valentina Raimondi, Arthur Zalmijn and Alessandro Olper

Introduction

Rice has long been the main source of food, and in some countries of the region, income and livelihood security. For two countries in particular, Guyana and Suriname, rice trade has been an important source for government funds that are channeled into national development objectives, and they are beneficiaries of Africa, Caribbean and Pacific Group of States (ACP) associated rice trade preferences. However, changes taking place at the bilateral level (European Union (EU) reform of Common Agricultural Policy (CAP)) and the multilateral level (Doha Round of the World Trade Organization (WTO) negotiations) have a strong impact on the significant socio-economic role played by the rice trade and could affect regional food security. This paper focuses on the link between rice production, trade policy and the impact of market changes on rural development and food security in the Caribbean Community (CARICOM) region. It begins with a brief description of the world rice situation and goes on to describe the Caribbean rice market from a trade and food security standpoint. Subsequent sections address the European rice regime and especially its interface with ACP producing countries. The final section presents conclusions on how to assist rice industry development in the Caribbean in a trade policy context.

9.1 World rice situation and Caribbean rice exports

The global rice industry covers the production of paddy rice, processing, marketing and distribution of rice and rice products in local, regional and world markets. The total area planted globally is approximately

155 million hectares; in 2005, 628 million metric tons (tonnes) of paddy was generated from the planted area and a record volume of 29 million tonnes of rice (4 to 5 percent of the total) entered the world market. An estimated 50 percent of the world's population consumes rice, and most production is consumed where it is produced. Rice is of critical importance to developing countries. The world's top consumer is China with a 34 percent share, followed by India (21 percent), Indonesia (9 percent) and Bangladesh (6 percent). The EU ranks nineteenth, with a consumption of 2.1 million tonnes. Although there has been an increase in use of rice for animal feed in recent years, rice remains essentially a staple for human consumption. Global demand for the next decade is expected to expand at slightly less than 1 percent per year, down from 1.7 percent in the 1990s. By 2010 Asian countries are expected to supply 75 percent of the international rice market, with Thailand and Viet Nam accounting for half of the world's exports. Far East countries, along with Argentina and Uruguay, will probably have to venture beyond their traditional markets in South America and compete with the United States to gain a larger portion of the Central American and Caribbean markets. By 2010 world real rice prices are projected to be very close to the 1997–1999 averages, which were substantially higher than those of the 2000–2002 period.

Rice trade in the Caribbean reflects the economic and political relations that ACP nations have had through their colonial ties with Europe. Many ACP countries enjoyed a special relationship with the European Community (EC) (now European Union) since long before the official formation of the ACP Group in 1975. This special relationship was extended through the Association of the Overseas Countries and Territories (OCT), instituted under the Treaty of Rome in 1957, and the two Yaoundé Conventions (1963 and 1969) linking the EC with the African states, Madagascar and Mauritius. In signing the Georgetown Agreement on 6 June 1975, the 46 ACP States further affirmed their common identity based on solidarity, and gave the ACP proper legal status. The recent era of EU–ACP economic arrangements related to rice are summarized in **Table 9.1.**

Guyana and Suriname had benefited from these arrangements in terms of rice trade. However, Suriname's rice exports declined from 88 000 in 1996 to 36 000 tonnes in 2005. Guyana's exports increased in the mid-1990s to 280 000 tonnes but declined to about 180 000 tonnes by 2005. The next section provides a more complete picture of the rice market in the Caribbean.

9.2 Rice production and trade in the Caribbean

The most important rice-producing countries of the forum of the Caribbean ACP States (CARIFORUM) are Suriname, Guyana, Dominican Republic, Haiti and Belize, with a 2005 paddy production of 1 621 593 tonnes. Major exporters

TABLE 9.1
Arrangements between the EU and the ACP on rice

Year	Agreements	ACP countries	European countries	Quota	Rice regulations
1975	Lomé I	46	9	No quota system maintained	The volume traded was based on the total quantity shipped during the previous 3 years plus 5 percent. For these quantities the EC applied a reduced levy.
1980	Lomé II	58	9	No quota system maintained	The volume traded was still based on the quantity shipped during the previous 3 years plus 5 percent. For these quantities the EC applied a reduced levy.
1985	Lomé III	65	10	122 000 tonnes of brown rice and 17 000 tonnes of broken rice	Introduction of quota system with fluctuating levy for the direct ACP route; duty-free access of Netherlands Antilles channeled ACP rice into Europe.
1990	Lomé IV	68	12	125 000 tonnes of brown rice, plus 20 000 tonnes of broken rice	Fluctuating levy system for the direct route; duty-free access of Netherlands Antilles channeled ACP rice into Europe.
1992–1994	Lomé IV	70	12	125 000 tonnes of brown rice, plus 20 000 tonnes of broken rice	Fluctuating levy system for the direct ACP route. Penetration of huge quantities of ACP rice into Europe and channeled via the Netherlands Antilles.
1995	Lomé IV, revised in Mauritius	70	15	160 000 tonnes of brown rice, plus 20 000 tonnes of broken rice	Fluctuating levy system for the direct ACP route; penetration of huge quantities of ACP rice into Europe channeled via the Netherlands Antilles.
1997	Mid-term review	70	15	160 000 tonnes of brown rice, plus 20 000 tonnes of broken rice	Ceiling duty paid price; licensed imports of ACP rice into Europe; introduction of tranche system.[1]
2000	ACP–EU Partnership Agreement (Cotonou)	77	15	160 000 tonnes of brown rice, plus 20 000 tonnes of broken rice	Ceiling duty paid price; licensed imports of ACP rice into Europe; introduction of tranche system.
2000–2007	Preparatory period	77	25	160 000 tonnes brown rice plus 20 000 tonnes of broken rice	Ceiling duty paid price; licensed imports of ACP rice into Europe; introduction of tranche system.

are Guyana and Suriname, while major importers are Dominican Republic, Haiti, Cuba and Jamaica. **Table 9.2** shows rice imports for 1996–2000.

As shown in **Table 9.3** the demand for rice in the Caribbean exceeds production. Regional milled production is approximately 568 000 tonnes.

TABLE 9.2
Rice imports to the Caribbean region, 1996–2000, in tonnes

Country	1996	1997	1998	1999	2000
Antigua and Barbuda	650	680	650	650	650
Bahamas	5 600	7 410	7 260	12 926	8 620
Barbados	10 284	7 738	5 605	5 058	8 080
Cuba	338 021	290 564	310 060	448 787	392 549
Dominica	1 019	1 260	1 003	1 003	1 003
Dominican Republic	3 400	68 500	66 000	82 100	53 600
Grenada	3 715	1 581	1 910	1 776	2 056
Guyana	–	–	–	–	–
Haiti	210 600	248 000	216 100	249 000	252 600
Jamaica	78 705	100 900	68 100	69 800	47 200
Montserrat	100	100	25	30	30
Netherlands Antilles	64 500	34 700	3 000	2 500	5 400
Saint Kitts and Nevis	921	1 140	4 100	1 000	1 000
Saint Lucia	2 759	2 812	3 203	3 624	3 624
Saint Vincent and the Grenadines	8 861	13 866	15 312	14 658	6 400
Suriname	–	–	–	–	–
Trinidad and Tobago	59 963	29 473	37 327	39 215	25 031
Caribbean Region	791 828	811 074	743 194	935 586	811 301

Source: CARICOM Secretariat

With 2005 total imports of 856 762 tonnes and exports of 224 193 tonnes, the net available quantity for domestic use that year was about 1 200 000 tonnes. The Dominican Republic is the largest producer, while Cuba, Haiti and the Dominican Republic have the largest imports due mostly to population size. Guyana and Suriname have the highest consumption levels per capita, more than twice the region's average.

According to the Caribbean Rice Association, the main sources of rice imports for CARICOM Member States are regional (52 percent), followed by the United States (40 percent), and Far East and South American countries (8 percent).

9.2.1 Rice-exporting Caribbean countries
Suriname
The rice industry is the most important agricultural activity overall in Suriname, covering approximately a half of the total area under agriculture. Rice acreage grew considerably after 1970: almost doubling in the period between 1975 and 1986, with area planted and paddy production generated reaching 74 900 hectares/325 900 tonnes in 1985. However as a result of worsening macroeconomic conditions, the area decreased more than 25 percent between 1987 and 1994. Cropping intensity (number of times per year area is planted) dropped from 1.5 in 1986 to 1.1 in 1994, indicating the problems farmers face in maintaining a twice-yearly crop.

TABLE 9.3

Caribbean rice: production, imports, exports and net quantities (tonnes) for domestic use (2005)

Country	Calculated milled rice production	Imports	Total	Exports	Quantities for domestic use
Antigua Barbuda	–	650	650	–	650
Bahamas	–	8 620	8 620	–	8 620
Barbados	–	6 253	6 253	–	6 253
Belize	3 500	502	4 002	–	4 002
Cuba	105 000	392 549	497 549	–	497 548
Dominica	–	604	604	–	604
Dominican Republic	210 000	53 600	263 600	–	263 600
Grenada	–	2 056	2 056	–	2 056
Guyana	147 110	10 778	157 888	182 175	24 2872[1]
Haiti	35 000	252 600	287 600	–	287 600
Jamaica	–	46 358	46 358	–	46 358
Saint Lucia	–	9 740	9 740	–	9 740
Saint Kitts and Nevis	–	498	498	–	498
Saint Vincent and the Grenadines	–	35 508	35 508	4 547	30 961
Suriname	64 845	116	64 961	35 877	29 084
Trinidad and Tobago	2 100	36 330	38 430	1 594	36 836
Total Cariforum + Cuba	**567 555**	**856 762**	**1 424 317**	**224 193**	**1 200 124**

Source: CARICOM Secretariat and consultant calculations

[1] The data on production of paddy and milled rice in Guyana does not justify the quantity available for domestic use. Use was probably made of stocks originating from the previous year (2004).

In 1994 the rice sector's share of total agricultural output was 51 percent, or US$36 million. High export prices between 1994 and 1997 led entrepreneurs to undertake investment programmes in both Suriname and Guyana. After 1997 volumes traded and export prices dropped considerably, resulting in erosion of the profitability of farming and processing operations. In 2005 rice accounted for just 16 percent of the total value of agricultural output of almost US$55.4 million. At the macro level the country suffered a decrease in foreign exchange earnings, resulting in loss of jobs and a reduced basis for income generation through the rice industry. Industry organizations in Suriname were weak and unable to mobilize the support necessary to assist the sector as it faced the crisis. **Table 9.4** presents planted area, production and exports in the period 1985 to 2005.

Guyana

In Guyana the rice industry meets local demand, is a major source of income and employment in rural areas and an important foreign exchange earner. There are 10 000 rice-farming households with production processed in 125 rice mills. Guyana rice producers are highly organized; the Guyana Rice

TABLE 9.4
Suriname rice: planted area, paddy production and exports, 1985–2005

Year	Area planted (000 ha)	Paddy production (000 tonne)	Quantity exported (000 tonne)	Export value (million US$)	Average price (US$/tonne)
1985	74.9	325.9	131.1	37.8	288
1994	60.0	218.0	80.3	30.5	379
1995	61.4	216.0	87.2	35.8	410
1996	61.8	229.0	86.7	35.2	405
1997	53.5	213.0	87.1	28.9	331
1998	50.1	188.0	65.5	19.6	299
1999	48.5	180.0	53.7	14.2	264
2000	42.0	164.0	47.3	13.7	289
2001	50.8	191.0	53.1	11.1	208
2002	40.5	157.1	71.8	14.2	197
2003	52.4	193.7	41.9	9.1	217
2004	50.9	197.2	51.8	11.9	229
2005	47.2	185.3	35.9	8.9	248

Source: Ministry of Agriculture, Suriname

Producers' Association (RPA), established in 1946, has 6 000 members and is active at the national level. Two members represent the RPA on the Guyana Rice Development Board (GRDB), which is the umbrella organization for the rice industry in Guyana. Its main objective is to facilitate rice industry development through research, extension work and technical and marketing assistance.

The European market accounts for approximately 60 percent of Guyana rice exports, while Caribbean region markets absorb most of the remainder. The domestic marketing chain is a very short one. Producers are forced to get rid of their paddy immediately after harvest due to lack of post-harvest facilities and paddy's high perishability. Farmers deliver their paddy, wet or dry, to millers who process it and either export the products or sell them on the domestic market, sometimes through brokers. Production and exports peaked in 1997, and investment in the rice industry expanded. Prices collapsed, however, from US$381 in 1995 to US$226/tonne in 2003. **Table 9.5** summarizes the Guyana rice market from 1985 to 2005.

9.2.2 Importance of the rice industry for rural development and food security

The rice industry plays a crucial role in the socio-economic development of Guyana and Suriname, and any contraction of the industry would have a negative impact on their economies and societies. In Guyana, rice accounts for 12.9 percent of total agricultural gross domestic product (GDP), 4.2 percent of total GDP and 13.7 percent of export earnings (National Bureau of Statistics, 2000). In Suriname rice accounted for 10 percent of total GDP,

TABLE 9.5:

Guyana rice: paddy production, export quantities and earnings, 1985–2005

Year	Area harvested (000 ha)	Paddy production (000 tonnes)	Quantity exported (000 tonnes)	Value (million US$)	Average price (US$/tonne)
1985	76.8	260.2	29.3	5.7	193
1994	96.5	378.4	182.6	55.5	303
1995	130.8	525.5	200.3	76.4	381
1996	213.8	543.4	262.2	93.7	357
1997	141.1	568.2	285.0	84.2	295
1998	127.9	522.9	249.7	73.3	293
1999	145.3	562.3	251.5	71.0	282
2000	114.7	448.9	207.6	51.8	249
2001	123.0	495.9	209.0	50.0	239
2002	106.7	443.7	193.4	45.5	235
2003	129.2	546.2	200.4	45.3	226
2004	115.7	500.9	243.0	55.0	227
2005	106.6	420.4	182.2	46.2	253

Source: Guyana Rice Development Board Annual Reports

12 percent of employment and 27 percent of export earnings in 1996. Rice is also crucial for social development. Small, family-operated farms with between 10 and 20 acres of land dominate rice farming in both countries; with approximately 70 percent of Guyana's and 60 percent of Suriname's rice production being exported they are extremely vulnerable to international market forces.

The rice policy goals for the region pursue the development of an integrated and sustainable rice industry. Overall objectives formulated in the regional rice plan include:

- ensuring better nutrition for vulnerable groups;
- generating income for 85 000 farm families and a further 80 000 persons in support services; and
- increasing foreign exchange earnings from rice exports by US$250–300.

Given the declines in price it is not surprising that both the number of farmers and overall production have diminished considerably. In both Suriname and Guyana rice farming has also become concentrated in fewer hands; the number of small farm in Suriname decreased from 4300 before 1990 to 3440 in 2005. Continued erosion of the profitability of small and medium farms will undoubtedly further increase food insecurity and vulnerability.

The decline in the rice industry affects not only the welfare of rice producers but also businesses that supply machines, spare parts and floating inputs (such as fertilizers and other chemicals), contractors and labourers who prepare land, sow, treat crops, harvest and process. All of these linkages make the rice industry critical to livelihood and food security. Small

landholders living near subsistence level have few reliable alternative sources of income and are in the most vulnerable position; they are most dependent on supportive public policies and interventions.

The future of rice trade for the Caribbean is highly dependent on global policies affecting rice markets. The next section of this paper addresses the EU import regime, undoubtedly the most important policy regime for the Caribbean rice market.

9.3 European Union trade policy for rice

The EU trade policy for rice has changed considerably over the past decade and this has affected ACP rice exporters in important ways. This section outlines EU rice duties, quotas and licences and goes on to discuss their implications for ACP countries.

9.3.1 Duties on rice imports

During the 1995–2000 implementation period of the WTO Uruguay Round, all variable levies were converted into fixed tariffs and reduced by 36 percent. The EU rice bound rate for paddy, husked and milled rice was set at €211, €264 and €416/tonne, respectively. However, under WTO Head Note 7, the duty-paid import price could not exceed a ceiling price, fixed at 180 percent (188 percent) of the intervention price for husked Indica (Japonica) rice and at 263 percent (267 percent) of the intervention price for milled Indica (Japonica). This import regime is summarized in **Box 9.1**.

These duties were subject to revision following the 2003 reform of the EU rice regime. In August 2004, Regulation (EC) No 1549/2004[113] introduced new import duties of €65/tonne for husked/brown rice, €175/tonne for milled rice and zero duty on India and Pakistan basmati rice (and other hybrid varieties of basmati). Basmati is a form of rice that has certain physical characteristics in terms of the length and width of the grains and a characteristic aroma that is evident when the rice has been milled. The agreement introduced a control system based on DNA testing and defined the varieties of Pakistan and Indian rice considered to be basmati for purposes of the zero tariff[114]. The agreement also defined that certain basmati varieties had to be grown in specified geographical areas.

In June 2005, EC regulations[115] fixed the introduction (from 1 March 2005) of variable duties for husked rice depending on the level of rice imports into

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[113] Derogating the Council Regulation (EC) No 1785/2003
[114] Pakistan rice varieties are: Kernel (Basmati), Basmati 370, Pusa Basmati, Super Basmati. Indian rice varieties are: Basmati 370, Basmati 386, Type-3 (Dehradun), Tarari Basmati (HBC-19), Basmati 217, Ranbir Basmati, Super Basmati.
[115] Commission Regulation (EC) No 1006/2005; Commission Regulation (EC) No 1007/2005

BOX 9.1
The old rice import regime

Euro/t

P_{W1} + 264

537.00 — Ceiling P. (1.8*I.P.)
P_{W2} + Duty (264)

Effective
Tariff

Effective
Tariff

P_{W1}

298.35 — Intervention P.
P_{W2}

Protection of Indica husked rice

Euro/t

796.59 — Ceiling Price (2.67*I.P.)

P_W + Duty (416)

Effective
Tariff

298.35 — Intervention P.
P_W

Protection of Indica milled rice
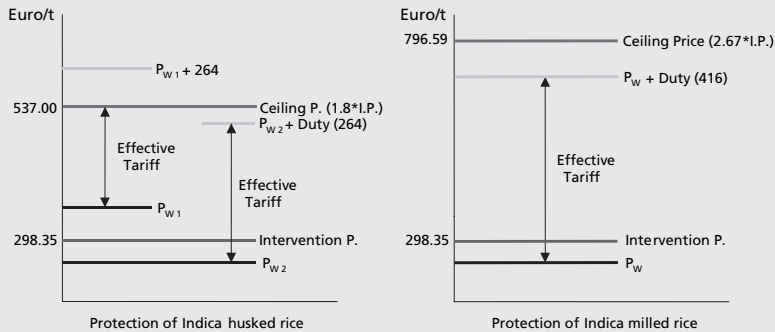
During the 1995–2000 implementation period of the Uruguay Round negotiations, all variable levies were converted into fixed tariffs and reduced by a total of 36 percent. The EU rice bound rate (maximum tariff) was set at €211, €264 and €416/tonne for paddy, brown and milled rice, respectively. WTO Head Note 7 established that the duty-paid import price should not exceed a *ceiling price*, fixed at 180 percent (188 percent) of the *intervention price* for husked indica (japonica), 188 percent for husked japonica and 263 percent (267 percent) for milled indica (japonica). In practice, the import price plus the tariff paid should not exceed the ceiling. The results were that imported husked rice was normally competitive with EU rice, whereas milled rice was not (EC, 2002). The system created a community preference because it guaranteed that EU suppliers would always have a price advantage over imports (unless market prices were above those foreseen under the CAP).

The graphs above summarize the combined effects of the bound rate and application of the ceiling. For husked rice [graph at left], at "normal" world price levels (P_{W1}), the ceiling was generally applied. This was because the import price plus the bound rate (P_{W1} + €264/tonnes) would have been higher than the ceiling. However, with recent lower world prices (P_{W2}) the conventional tariff of €264 /tonnes (black arrow) was the effective rate applied because the import price (inclusive of this tariff) was lower than the ceiling.

In the case of milled rice [graph at right], due to the higher level of the ceiling price, the conventional tariff [black arrow] has always been applied.

TABLE 9.6
Import licence volumes of husked rice and consequent tariffs

Import tariff	Tariffs applied			Previous import licences	
	€30	€42.5	€65		*Ref.volume*
	if import licence volume has been				*(tonnes)*
Period	*less than*	*between*	*more than*	*Period*	
from Mar 2005	183 463	> <	248 215	*1 Sept 2004 to 28 Feb 2005*	*215 839*
from Sept 2005	366 926	> <	496 430	*1 Sept 2004 to 31 Aug 2005*	*431 678*
from Mar 2006	186 013	> <	251 665	*1 Sept 2005 to 28 Feb 2006*	*218 839*
from Sept 2006	372 026	> <	503 330	*1 Sept 2005 to 31 Aug 2006*	*437 678*
from Mar 2007	188 563	> <	255 115	*1 Sept 2006 to 28 Feb 2007*	*221 839*
from Sept 2007	377 126	> <	510 230	*1 Sept 2006 to 31 Aug 2007*	*443 678*
from Mar 2008	191 113	> <	258 565	*1 Sept 2007 to 28 Feb 2008*	*224 839*

the EU-25 Member States[116]. The duties are set twice a year, in September based on the previous year's import volume, and in March based on the preceding six months of imports. The EU tariff applied per tonne is then:

- €30 if the import licence volume is 15 percent less than the base;
- €42.50 if the volume is the same as during the base period (plus or minus 15 percent);
- €65 if the import volume is 15 percent more than the base.

The reference level for the first marketing year of the agreement (1 September 2004 to 31 August 2005) was the average volume of EU imports of husked rice (excluding basmati) for the three marketing years beginning 1999/2000 plus 10 percent, i.e. 431 678 tonnes. To take into account the growth in the EU rice market, that base volume is increased by 6 000 tonnes per year for the three marketing years 2005–2008 (see **Table 9.6**). The reference level for each six-month period would be 50 percent of this figure. Before the end of the 2007/08 market year, the parties were to determine new annual increases.

The Agreement with the United States influenced the subsequent "Agreement in the form of an exchange of letters" between the European Community and Thailand (December 2005), which fixed the import duties applicable to semi-milled or wholly milled rice from Thailand beginning 1 September 2005[117]. That Agreement provides for a EU bound tariff of €175/tonne on milled and semi-milled rice and €128/tonne for broken rice, but it allows a six-monthly adjustment of the tariff based on the previous period's import volumes. The annual reference import level is calculated as

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[116] Rice import licences are used as a proxy for rice imports because the data is available sooner. By measuring import licences instead of actual imports, EU imports of rice under inward processing schemes are excluded from the tariff calculation.
[117] Commission Regulation (EC) No 2152/2005.

the average volume of total semi-milled and milled rice imports entering the EC-25 from all origin in the marketing years 2001–2004, plus 10 percent (i.e. 337 168 tonnes). The six-month reference import level is calculated as 47 percent of the annual level. The applied tariff per tonne then became:

- €145 if the volume is less than reference import level plus 15 percent;
- €175 if the volume is more than reference import level plus 15 percent.

In addition, the EU would open a new annual semi-milled and milled rice import quota of 13 500 tonnes at zero duty, of which 4 313 tonnes would be allocated to Thailand. In the same period, for broken rice the EU would apply a rate of €65/tonne and would increase the current broken rice quota to 100 000 tonnes at a rate of €65/tonne less 30.77 percent (i.e. €45/tonnes).

One scenario is that if the Doha Round is completed and the EC's proposal accepted,[118] and if rice is not treated as a sensitive product, there would be a further reduction of the tariff on husked rice from €65/tonne to a range between €52 to €35.75/tonne[119], remaining in the range envisaged in the recent agreement with the United States. The €175/tonne tariff on semi-milled rice would be cut to €96.25/tonne[120], reducing the tariff below the €145/tonne level envisaged in the agreement with Thailand.

9.3.2 Quotas on rice imports

One of the main accomplishments of the 1994 Uruguay Round Agreement on Agriculture (URAA) was so-called tariffication, the replacement of quantitative restrictions and other non-tariff barriers (NTBs) with tariffs. To prevent the conversion of NTBs to extremely high tariffs ("dirty" tariffication), tariff rate quotas (TRQs) were introduced (Carter and Li, 2005). Under the negotiations conducted pursuant to GATT Article XXIV(6) in the wake of the accession of Austria, Finland and Sweden to the European Community, it was agreed[121] to open (from 1 January 1996) annual import quotas for 63 000 tonnes of semi-milled and wholly milled rice at zero duty and for 20 000 tonnes of husked rice at a fixed duty of ECU88/tonne. These quotas were included in the European Community list provided for in Article II(1)(a) of GATT 1994. Moreover, under the consultations with

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[118] During the sixth WTO Ministerial Conference in Hong Kong in December 2005, the European Commission suggested four tiers for tariff reduction, depending on *ad valorem* equivalent level:

1) if within 0–30 percent, the tariff cut applied would be a minimum of 20 percent and a maximum of 45 percent;

2) if within 30–60 percent, the tariff cuts would be 45 percent;

3) if within 60–90 percent, the tariff cuts would be 50 percent;

4) if over 90 percent, the tariff cuts would be 60 percent or greater if needed to bring the tariff down to the highest permissible tariff of 100 percent.

[119] Because the husked rice tariff *ad valorem* equivalent (AVE) is lower than 20 percent, the consequent tariff cut is between 20 percent and 45 percent.

[120] The semi-milled rice tariff AVE is within the range 40–50 percent; the tariff cuts would be 45 percent.

[121] Commission Regulation (EC) No 327/98

TABLE 9.7
EU rice quotas as of June 2006 (EC Regulation No 965/2006)

Type of rice	Quota (tonnes)	Duty
Wholly milled or semi-milled	103 216	zero
Broken	100 000	30.77% reduction (from €65 to €45/tonne)
Broken	31 788	zero
Husked	1 634	*ad valorem* fixed at 15%

Thailand pursuant to GATT Article XXIII, it was agreed to open an annual quota for 80 000 tonnes of broken rice at an import duty reduced by ECU28/tonne. The volume, distribution and tariff reduction of the import quotas defined in 1998 varied little in the following years, with the exception of the opening of a new import quota of 13 500 tonnes of semi-milled and wholly-milled rice at zero duty and the increase in the import quota for the broken rice to 100 000 tonnes[122].

However, the quotas were revised at the end of June 2006[123], due to the accession of ten new member countries to the European Union[124] (see **Table 9.7**). The revision provides for a further increase of 26 716 tonnes (of which 1 200 tonnes for Thailand) in the annual global tariff quota at zero duty for wholly milled and semi-milled rice, while it opens a new zero-duty tariff quota for broken rice of any origin. [The quota of 20 000 tonnes of husked rice at a duty of €88 became obsolete due to the lower duty applicable from 2004.]

These quotas are allocated to producer countries as reported in **Table 9.8**. The quotas are divided into two or three tranches during the year and import licences are issued for the quota quantities allowed under the tranche. When import licence applications are submitted for rice originating in Thailand or Australia, "export certificates" are also requested. The quotas are administered by applying one of three possible methods, generally considered not explicitly discriminating among exporting countries (OECD, 1999):

1) first come, first served principle (the chronological order of the applications);
2) simultaneous examination method (distribution in proportion of the quantities requested); or
3) traditional/new arrival method (taking traditional trade patterns into account).

Tariff quotas have undesirable features, such as generating quota rents, legitimizing a role for state trading agencies or discriminating among exporting

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[122] Commission Regulation (EC) No 2152/2005
[123] (EC) No 965/2006
[124] The accession is been approved by Council Decision 2006/324/EC.

TABLE 9.8
Country quotas on rice imports, in tonnes

Rice	Milled (1) zero duty	Milled (2) zero duty	Husked 15% ad valorem	Broken €45/tonne	Broken zero duty
United States of America	38 721	2 388		9 000	
Thailand	21 455	5 513		52 000	
Australia	1 019			16 000	
Guyana				11 000	
India		1 769			
Pakistan		1 595			
Other origins	1 805	3 435		12 000	
All countries		25 516	1 634		31 788
Total	63 000	40 216	1 634	100 000	31 788

Source: European Commission
(1) The quotas are divided in three tranches and allocated to producer countries following EC Regulation No 327/98
(2) The quotas are divided in one or two tranches and allocated to producer countries following EC Regulations No 2152/05 and No 965/06.

countries. These aspects make it unclear if the introduction of TRQs truly improves economic welfare (Carter and Li, 2005). The administration of quotas may involve costs such as rent-seeking (i.e. lobbying government officials, bribery, etc.), carrying out complex administrative application processes and negotiating the politics behind the choice of foreign producers (which might not be competitive under normal commercial conditions[125]). However, in the EU increasing quota volumes would likely result in greater welfare gains than would tariff reductions (Bureau and Tangermann, 2000).

9.3.3 EU–ACP Agreement
The Agreement
The EU established preferential trade agreements for imports of rice from ACP countries through Declaration XXII of the Cotonou Agreement (June 2000). While legally it applies to rice originating in any ACP country, in practice only Guyana and Suriname make use of it. It established a quota of 125 000 tonnes for husked rice[126] exports to the EU and a quota of 20 000 tonnes for broken rice. On these quotas a 65 percent reduction in the duty charged was granted, plus a further reduction of €4.34/tonne for paddy and husked rice and €3.62/tonne for broken rice. Milled rice duty is first reduced by €16.78/tonne, then by 65 percent and then by €6.52/tonne. These quotas and their duty reductions are summarized in **Table 9.9**.

The quotas are administered through an import licensing system, with the European Commission issuing licences to European rice importers. Licences

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[125] For example, Japan's rice TRQs are allocated in a non-commercial way (Carter and Li, 2005).
[126] This covered paddy, husked and milled rice.

TABLE 9.9

Cotonou Agreement preferential trade agreements for rice imports from ACP to EU

Type of rice	Quota (tonnes)	First reduction in duty charged	Further reduction
Paddy, husked, milled	125 000	paddy, husked: 65% milled: €16.78/tonne, then 65%	€4.34 (paddy, husked) €6.52 (milled)
Broken	20 000	65%	€3.62

for the husked rice quota are issued in January, May and September each year, while the broken rice quota is allocated in two tranches (January and May). In order to receive an import licence European rice importers must apply at the beginning of each tranche. Import licences are issued by the competent authorities of the relevant Member State after a security has been lodged; the security is returned to importers only after their obligations have been fulfilled. The EU rice import market is dominated by a few very large companies – for example, the vast majority of Guyana's rice is imported by just two importers – and there are rules governing how large a quota any single importer can receive.

In some cases, fill rates are below 100 percent. A possible explanation is the complicated and costly administrative procedure for accessing imports under quotas; as a consequence, importers could prefer simpler administrative procedures to a lower tariff (Bureau and Tangermann, 2000).

In the EU system of quota administration, the three tranches system does not coincide with the two cropping seasons of Suriname and Guyana, where harvesting takes place in March/April and September/October. Under the current system, the January–April tranche is the most difficult to supply and this quota is often not met. Because an importer who does not fill a licence within the tranche period in which it was issued has to pay a second security deposit in order to utilize the licence in the next tranche, ACP millers are often subject to a penalty from European importers for the January–April quota. Moreover, millers often offer higher prices for paddy in the period towards the end of April, but when the new tranche begins in May the prices offered for paddy decline, leading to instability in the domestic paddy price. Thus, the three tranches system does not adequately serve the interests of ACP rice producers.

It is not clear how the rent generated by the ACP agreement is allocated. It has been suggested[127] that rice importers earn only a portion of the quota rent, relevant to the duty reduction of 65 percent, while the exporters, selling the rice at ACP prices (which are higher than other international prices),

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[127] Personal communication with an Italian rice sector operator

TABLE 9.10
Implications of the changed tariff rate for ACP preference margins, in €/tonne

	Husked rice		Milled rice		Broken rice	
	URAA bound	*Current applied*	*URAA bound*	*Current applied*	*URAA bound*	*Current applied*
MFN tariff	€264.00	€42.50	€416.00	€145.00	€128.00	€65.00
ACP tariff	€88.06	€10.54	€133.21	€38.36	€41.18	€19.13
Level of ACP preference	€175.94	€31.96	€282.79	€106.64	€86.82	€45.87
Loss in preferences		€143.98		€176.15		€40.95

Source: Author estimates

earn the other part of the rent. An importer who obtains a licence to import under quota aims to get a duty-paid price that is lower than the cost of a full-duty import. The exporter in turn hopes to be the one to get the difference between EU domestic prices and the preferential tariff price. The final rent allocation is determined by the relative bargaining power of the importer and exporter.

Implication of EU policy reform for ACP countries
Table 9.10 shows estimated ACP preferences granted within quota, comparing the old and the new EU rice tariffs. Husked rice represents 95 percent of rice exported from ACP. Before 2004 duty on husked rice was €264/tonnes; the ACP tariff within quota was equal €88.06/tonne[128], the ACP preference rate was €175.94/tonne (264 – 88.06). The ACP preference is granted within a quota and €175.94/tonne represents, in effect, an estimate of the quota rent. The current applied tariff for husked rice is €42.50/tonne; the current level of ACP tariff on husked rice is €10.54/tonne[129]. The new level of ACP preference being €31.96. On this basis, the ACP exporter countries have lost a quota rent on husked rice equal to €143.98/tonne (175.94 – 31.96). Assuming that the whole ACP quota is exported in the form of husked rice, the total loss due to the EU tariff reduction would be €18 million[130]. Moreover, the ACP exporters of broken rice, with the new reduced tariff, lose an overall quota rent of €819 000[131].

 With only two ACP exporting countries (Guyana and Suriname) and few exporting companies, it is unlikely that an importer would be able to obtain all of the ACP quota rent. Before the tariff reduction, both importers and

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[128] 264 times 0.35 – 4.34
[129] 42.50 times 0.35 – 4.34 = 10.54; 42.50 – 10.54 = 31.96.
[130] €143.98 times 125 000 tonnes
[131] €40.95 times 20 000 tonnes

exporters probably obtained some of the quota rent. However, with husked rice rent now down to €31.96/tonne in the EU, non-traditional markets such as Brazil appear more rewarding to ACP exporters, as reported by the Guyana Rice Development Board. Although ACP exporters could obtain a bigger *share* of the rents from heavily-reduced quotas, the reduction of the rent makes the EU less attractive.

9.3.4 Association of the Overseas Countries and Territories

The EU allows duty-free imports from the Association of Overseas Countries and Territories (OCTs), a group of microstates scattered around the globe and linked in a special way to one of several European countries.[132] The agreement used to include imports of products processed in the OCTs using imported raw materials ("cumulation of origin"). This opportunity encouraged Caribbean exporters to pass their rice exports through OCT countries and thereby avoid any duties. As a consequence, increasing quantities of rice grown in the ACP countries and then processed in the OCTs were imported into the EU market, thereby avoiding the EU tariff on direct export into EU. By 1996, total rice exports from Guyana to the EU had reached 260 000 tonnes, 90 percent of which was arriving via the OCTs.

In 1997,[133] as a result of a safeguard request from EC rice producer interests, the ACP's indirect access to the EU market became subject to the limit of 35 000 tonnes expressed as husked rice equivalent. In 2001, when the 1997 Council Decision expired, the EU adopted a new agreement on relations with the OCTs that, applied until 2011, provides an updated cooperation framework for relations between EU and OCTs.[134] This limits the amount of rice that can be imported under the cumulation provision to 35 000 tonnes, 10 000 tonnes of which is reserved for the least-developed OCTs. The figure of 35 000 tonnes can be exceeded if total imports from the ACP (including imports under the cumulation provisions from the OCT) fall below a total of 160 000 tonnes (i.e. 125 000 tonnes under the ACP arrangements and 35 000 tonnes under the OCT agreement).

9.3.5 Generalized System of Preferences and Everything But Arms

The 1996 WTO Ministerial Conference in Singapore resulted in a commitment to improve access for products originating in the least-developed countries (LDCs). In 1998 EU Regulation 602/98 granted preferences equivalent to

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[132] Usually listed as the United Kingdom, France, Netherlands and Denmark, but sometimes including Belgium and Italy.

[133] 97/803/EC: Council Decision of 24 November 1997 amending at mid-term, Decision 91/482/EEC on the association of the overseas countries and territories with the European Economic Community

[134] The current legal basis is contained in Decision 2001/822 and implementing provisions are in Commission regulation 638/2003.

TABLE 9.11
EBA tariff quotas for rice imports from LDCs

	2001/02	*2002/03*	*2003/04*	*2004/05*	*2005/06*	*2006/07*	*2007/08*	*2008/09*
Rice (tonnes)	2 517	2 895	3 329	3 829	4 403	5 064	5 823	6 697

Source: European Commission

ACP preferences to the nine non-ACP LDC countries and, in the medium term, duty-free access for essentially all products from the LDCs. In 2000 the Commission proposed duty-free access for all LDC products other than arms and ammunition; it was granted immediately, with a short transitional period (three years) for highly sensitive products (sugar, rice and bananas). The Everything But Arms (EBA) proposal was controversial and the Commission had to make amendments to these transitional provisions. In 2001 the General Affairs Council adopted the Everything But Arms (EBA)[135] amendment to the EU's Generalized System of Preferences (GSP)[136], where zero tariff rate quotas were defined for sugar, rice and bananas.[137]

For rice,[138] full liberalization is phased with tariffs reduced on 1 September each year, by 20 percent in 2006, by 50 percent in 2007, by 80 percent in 2008 and entirely suspended as of 2009. In order to provide effective market access until full liberalization, from 2001 LDC rice could enter duty free within the limits of a tariff quota. The initial global tariff quotas for LDCs were based on their best export levels to EU in the recent past, plus 15 percent; the quota grows by 15 percent every year. It started at 2 517 tonnes (husked rice equivalent) in 2001/2002, growing to 6 696 tonnes in 2008/2009 (see **Table 9.11**). The level of imports from the LDCs prior to the granting of this concession was just 2 517 tonnes.

The large potential availability of rice from the LDCs, and the EU prices significantly above world prices, meant the agreement was incompatible with the rice scheme of the first CAP reform, and motivated CAP changes in the context of the mid-term review.

Indeed, an impact analysis published by the Agriculture Directorate of the Commission in 2002 reported that, by the end of the decade, gradual implementation of the tariff reduction for LDC imports would have led to dramatic deterioration in the rice market. From 2006/07 onwards, the significant reduction in tariff for LDC imports could cause imports to the EU to surge to 1.7 million tonnes in 2009/10, replacing a very large part of EU rice production. Moreover, medium-term perspectives for the EU rice

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[135] Council Regulation 416/2001 of 28 February 2001.
[136] Council Regulation 2820/98 of 21 December 1998.
[137] For a detailed discussion on the impact of EU preferences for LDCs under EBA see Brenton(2003)
[138] All products of tariff heading 1006: paddy, husked, milled and broken rice.

FIGURE 9.1
LDC and ACP countries involved in EU trade policy

LDC COUNTRIES   ACP COUNTRIES

	Kiribati	Antigua and Barbuda	
	Lesotho	Bahamas, The	
Angola	Liberia	Barbados	Namibia
Benin	Madagascar	Belize	Nauru
Burkina Faso	Malawi	Botswana	Nigeria
Burundi	Mali	Cameroon	Niue
Cape Verde	Mauritania	Congo	Palau
Cent. African Rep.	Mozambique	Cook Islands	Papua
Chad	Niger	Cote d'Ivoire	Saint Kitts and Nevis
Comoros	Rwanda	Cuba	Saint Lucia
Congo, Dem. Rep.	Samoa	Dominica	Saint Vincent and the Grenadines
Djibouti	São Tomé and Principe	Dominican Republic	Seychelles
Timor-Lesté	Senegal	Fiji	South Africa
Equatorial Guinea	Sierra Leone	Gabon	Swaziland
Eritrea	Solomon Islands	Ghana	Tonga
Ethiopia	Somalia	Grenada	Trinidad and Tobago
Gambia	Sudan	**Guyana**	Zimbabwe
Guinea	Tanzania	Jamaica	
Guinea-Bissau	Togo	Kenya	
Haiti	Tuvalu	Marshall Islands	
	Uganda	Mauritius	
	Vanuatu	Micronesia, Federated States of	
	Zambia		

Afghanistan
Bangladesh
Bhutan
Cambodia
Lao People's Dem.Rep.
Maldives
Myanmar
Nepal
Yemen

Suriname

market indicate that, by 2009/10, total rice stocks in the EU would stand at the unsustainable level of 2.8 million tonnes, of which 50 percent would be Indica rice.

The EBA agreement considerably weakens the ACP competitive position in the rice market: while all but nine LDCs are ACP countries, only 52 percent of ACPs are included in the EBA agreement (see **Figure 9.1**). Guyana and Suriname are not within the ACP/LDC countries and the expected import growth from LDCs (although limited by subsequent EU policy reform and intervention price reduction) will probably hurt them considerably.

9.4 Conclusions on future rice trade policy for the Caribbean

The regional objectives for the Caribbean rice industry are to develop an integrated and sustainable rice industry in the CARIFORUM states in order to maximize food security and regional self-sufficiency, improve nutrition of vulnerable groups, increase foreign exchange earnings from rice exports and establish a competitive and sustainable rice industry. Among the first markets targeted should be the intra-Caricom and Caribbean markets, as Haiti and Cuba separately imports more rice than Guyana and Suriname together has to export.

There is a lot of work to be done within the Caribbean to increase rice productivity all along the supply chain and it is essential that at both a national and regional level there be increased efforts to address constraints

on the supply side. Domestic policy actions affect trade outcomes. The link can be seen in the need for Caribbean negotiators in multilateral trade talks to stay vigilant of how domestic rice policy arrangements in other countries might result in unfair competition in rice markets – so that they can propose legitimate countervailing measures to avoid unfair competition. Indications are that if producing and exporting countries agree to reduce domestic support and eliminate export subsidies, Caribbean producers could benefit. Europe and the United States could face decreases in production, importing countries could very well increase their demand, even though changes in the world price are expected to be small.

There could be more attention paid to accessing and managing CARICOM markets for regional rice interests. It is critical that there be more consistent implementation of the agreed Common External Tariff. Arrangements should be made to better facilitate development of intra-regional trade.

The situation with the EU will continue to be challenging. The recent evolution of EU rice support policy – reduction in the most-favoured nation duty, favourable tariff treatment to basmati rice, duty-free access for LDC countries by 2009 and changes in support to its own producers – have all affected the ACP competitive position. Yet the EU remains committed to assisting the development of ACP states, and a number of policy interventions could be made to help Caribbean countries. One would be the removal of the ACP duty, which would generate extra revenue for rice exporters in Guyana and Suriname and redress to some degree the imbalance on rice exports market faced by ACP countries (which do not subsidize rice production) in relation to highly subsidized farming systems.

Another measure would address the mismatch between the current EU import licensing tranche system and the cropping seasons of Guyana and Suriname, which increases costs for ACP exporters and leads to greater instability in domestic paddy prices. Converting the system to a two-tranche system (March–August and September–February) would also reduce transaction costs, especially those related to administration of the marketing system. Given the other forms of support existing in the EU it is still unlikely that a cut in the ACP duty will make an important difference.

The above measures are unlikely to adequately compensate for the EU price reduction, and the removal of remaining quantitative restrictions would help to alleviate the severe impact on the ACPs that the free entry of LDCs could impose from 2009. Unlimited duty-free access for the LDCs will be a more important challenge to ACP exporters of rice than the erosion of preferences deriving from recent tariff reduction and future further cuts that might arise from the Doha Round.

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Competitiveness, investment and Caribbean agriculture

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Introduction

In an era of globalization and in the post-Uruguay Round international economic order that is committed to increased trade liberalization, the ability of small countries generally – and island states in particular – to compete economically in the world market has become critical to the survival of their agricultural sectors and rural communities. It is thus crucial to understand the peculiar characteristics of small countries in relation to concepts of and approaches to achieving increased competitiveness so that their agricultural sectors can continue to contribute to the food security of their populations. Increased market access provides an opportunity, but it is investment to develop supply-side capacity, enterprises and entrepreneurship that will enable the achievement of competitiveness and sustainability. This chapter focuses on competitiveness issues in the countries that comprise the Caribbean Community (CARICOM[139]).

In addressing the current challenges it is important to understand CARICOM economies within the context of the particular characteristics of specific countries and as each country fits into the regional context. The regional context is important because CARICOM and each of its individual Member States are party to an intra-CARICOM free trade agreement and a CARICOM Single Market and Economy (CSME) commitment. The individual country context is important because the countries are very different from one another, with some being tourism centres (e.g. Barbados and the Bahamas), others sources of agricultural raw materials (e.g. Suriname,

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[139] The Caribbean Community (CARICOM) is comprised of 15 member states: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago. The Bahamas is not a member of the CARICOM Common Market.

Belize and Guyana) and still others potential agro-industrial processing points (e.g. Trinidad and Tobago, Jamaica and Barbados). The area and population of each country varies: 7 of the 15 countries have land areas of between 100 and 610 km²; 8 have arable land areas of less than 9 000 ha; 5 have populations of fewer than 85 000 people. All but two of the countries (Guyana and Belize) are net food importers and most are faced with loss of markets for one or more traditional export crops due to erosion of preference margins.

Given the importance of increasing the competitiveness of CARICOM agriculture there have been efforts to understand the determinants of competitiveness and address these in order to facilitate the transition of agricultural sectors from dependence on a few crops to greater diversification and to becoming dynamic growth centres. This chapter provides an introduction to conceptual aspects and determinants of competitiveness. It then assesses the competitiveness of several commodities using both a qualitative assessment approach and a commonly-used quantitative measure. The last section makes recommendations for increasing competitiveness.

10.1 Concepts and measurement of competitiveness

Achieving competitiveness is a complex process as it results from an interface of many factors at several levels. The search for greater competitiveness has focused attention on: evaluating the competitiveness and investment environment; understanding factors directly related to the competitiveness of a firm or enterprise; and measuring the competitiveness of commodities. These three aspects are addressed below.

Competitiveness and investment environment
The competitiveness and investment environment is closely related to the character of the economy. The competitiveness environment has considerable overlap with considerations related to the investment climate and therefore these dimensions are addressed together here. A wide variety of considerations come into play, especially those relating to management by the public sector, such as:
- a stable policy and economic environment (good governance, efficient regulatory systems and institutions, stable monetary and fiscal policy);
- adequate physical infrastructure (communication, energy); and
- effective health and educational systems (for healthy, skilled workers and to allow for technology development).

The essential dimension here is the entrepreneur's perception of the enabling environment from a political, administrative and infrastructural standpoint. It depends on the effective provision of public goods. In terms of governance, the key aspects are the existence of law and order and hence peace and stability in the country. Efficient regulatory systems provide transparent, predictable

and enforceable laws affecting such areas as enterprise establishment, business contracts and property rights. A stable monetary and fiscal policy environment is generally expected to promote low inflation, lead to a realistic and stable exchange rate and a tax system that promotes investment.

The quality and availability of physical infrastructure services is one of the most basic and visible dimensions for encouraging investment and enabling competitiveness. Transport infrastructure, especially ports and roads, are critical factors that determine trading opportunities. The cost of telecommunications, power and water are often determined by the level of government investment and commitment to making these services widely available and accessible.

The quality of the work force is another significant dimension of the investment and competitiveness environment that is relatively more influenced by the public sector. It requires the existence of an effective health and education system that makes available a healthy and skilled workforce. The existence of both formal and informal education and training opportunities at all levels, readily available to a large cross-section of the population, evidences itself through the achievement of high literacy levels. Policies that promote continued learning and provision of opportunities through both the public and private sectors allows the workforce to upgrade.

The investment climate is very much related to the degree of risk that exists and the extent to which these risks have been mitigated by public sector interventions. It is a question of the character of the economy, of how the private and public sectors interface and trade off – in terms of activities carried out by one or the other, the amount of security and services the private sector requires before it invests, and the extent to which it invests in particular sectors. The greater the risks the more limited will be the range of services and products provided by the private sector. The adverse impact of risks on investment and enterprise development is due to the fact that risks increase firms' transaction costs, thereby undermining their potential competitiveness.

Independent rankings can be used to compare economies in the Caribbean in terms of both their competitiveness (Global Competitiveness Index, GCI) and food security (*State of food insecurity in the world*). Six Caribbean countries were included in the GCI 2006 rankings of 125 countries' economies. Among the six countries, the two extremes are Barbados, ranked at 31st, and Guyana, at 111th. The four countries in between are Jamaica (60th), Trinidad and Tobago (67th), Dominican Republic (83rd), and Suriname (100th). The nine factors in the index are grouped into the three categories of basic requirements, efficiency and innovation factors. The basic requirements data is used here to emphasize what we describe as the character of the economy. The specific ranking for each factor by country is shown in **Table 10.1**.

Generally, the overall GCI ranking holds for the individual indicators, in that Barbados is ranked highest in each category and Guyana is ranked lowest in all but one. The health and primary education ranking of the Dominican

TABLE 10.1
Global Competitiveness Index (GCI): basic requirements

	GCI rank	Basic requirements rank	Institutions rank	Infrastructure rank	Macroeconomy, rank	Health/primary education rank	Undernourished, population %
Barbados	31	32	23	28	61	28	2
Jamaica	60	79	76	53	118	65	10
Trinidad and Tobago	67	63	85	70	38	64	11
Dominican Republic	83	89	93	80	85	89	27
Suriname	100	91	89	100	94	51	10
Guyana	111	108	115	104	121	75	9

Source: World Economic Forum (2006); FAO (2006).

Republic compared to Guyana is reinforced by the Food and Agriculture Organization of the United Nations (FAO) finding that the undernourished population in the former is three times that in the latter. The rankings usually correspond to scores on the individual indicators; in Suriname and Guyana the health and primary education rankings help their overall scores and in the case of Suriname prevents it from ranking with the bottom 25 countries. While Jamaica and Trinidad and Tobago have similar overall rankings and food security performances, their ratings are very different for infrastructure (Jamaica is superior) and macroeconomic management (Trinidad and Tobago is superior). The differences between infrastructure and macroeconomic management can also be contrasted for Barbados and Trinidad and Tobago: Barbados is superior in terms of infrastructure, while Trinidad and Tobago is relatively superior in terms of macroeconomic outcomes.

Enterprise competitiveness
Enterprise competitiveness is more a question of the character of the firm. In terms of individual firms and enterprises two categories of factors have come to dominate considerations of competitiveness: those factors considered to be associated with the supply side and to affect efficiency, specifically the cost of production; and those determined more by the demand and marketing side, which have more to do with the sophistication of the firm, its marketing efficiency, innovation and differentiation of the outputs of the enterprises. Clearly, as the literature on competitiveness reveals, both the environment and the behaviour of the firms determine the competitiveness outcomes.

The literature continues to expand on what it means to have a comparative advantage or to be competitive and have the ability to consistently market a product profitably. It highlights the importance of the public sector services mentioned above, and supply-side cost and differentiation. The latter two aspects, more related to technical production and marketing efficiencies, are elaborated here.

We draw on the work of one of the most respected contributors to the literature on competitive advantage, competitive strategy and the competitive advantage of nations. Michael E Porter (Porter, 1990) emphasizes two basic types of competitive advantage: lower cost and differentiation. *Lower cost* is the ability of a firm to design, produce and market a comparable buyer value (products) more efficiently (at a lower cost) than its competitors. *Differentiation* is the ability to provide unique and superior buyer value (products) to the buyer in terms of product quality, special features or after-sale service and as a result commands a premium price.

In the context of the Caribbean two traditional exports can be identified to bring out this distinction: bananas and coffee. Central American bananas are produced at a lower cost than Caribbean bananas. Several factors related to scale, labour costs and technological practices account for the ability to market a comparable product at a much lower cost. On the other hand, Caribbean coffee producers, particularly in the case of Blue Mountain coffee from Jamaica, are able to differentiate their product and are more competitive because they produce and market what is considered a superior product and thus can command a higher price (which offsets higher production costs).

Higher operational productivity than the competition is fundamental to both types of competitive advantage. It is unusual for a firm to have the competitive advantage in both respects for a single product. The firm that seeks to differentiate its product (as opposed to offering a product comparable to that of its competitors) will very likely incur increased costs. However, it is important that firms pursue both types of competitive advantage while being relatively more committed to one. It is not enough to consider only the cost of production of a commodity but also distribution strategies and targeted market characteristics before concluding an assessment of competitive advantage. In the long run firms producing and marketing products succeed if they possess sustainable competitive advantage.

Very importantly, Porter also helps us to understand how to pursue this competitive advantage in the context of globalization and its implications for the changing role of the state. Five factors influencing competitiveness are identified:

1. *Industry structure factors*: the competitive structure of the industry, firm size and concentration and ownership structure.
2. *Product market demand factors*: market access, marketing infrastructure and product characteristics.
3. *Input market factors*: sources of raw materials and intermediate inputs, human resources, technology and credit.
4. *Infrastructure and support industries factors*: transportation and marketing linkages, information systems, education and entrepreneurial training systems. These are generally shared across industries.

TABLE 10.2
Global Competitiveness Index (GCI): efficiency and innovation factors

	GCI rank	Efficiency factors, rank	Higher education and training rank	Market efficiency rank	Techno-logical readiness rank	Innova-tion factors rank	Business sophisti-cation rank	Innova-tion rank	Under-nourished population %
Barbados	31	29	24	49	34	54	58	49	2
Jamaica	60	53	67	61	40	56	56	54	10
Trinidad and Tobago	67	64	65	69	60	63	64	67	11
Dominican Republic	83	76	91	82	58	91	79	99	27
Suriname	100	107	99	117	107	114	111	113	10
Guyana	111	114	114	106	101	106	97	116	9

Source: World Economic Forum (2006); FAO (2006).

5. *Government factors:* the general policy and regulatory environment, government support agencies and organizations, agricultural sectoral policies and programmes.

There is also always the factor of uncertainty (chance events) that falls outside the control of firms and, often, governments.

In this section we emphasize aspects of efficiency, specifically market and technological efficiency. Key factors include transaction costs (reflected in the procedures and time it takes to complete business practices); the quality of management schools and availability of specialized research and training services; firm-level technology absorption; and the extent and nature of marketing strategies. In terms of innovation the areas measured include company spending on research, the extent of university/industry research collaboration, and producer sense of value-chains. **Table 10.2** uses data from the World Economic Forum's Global Competitiveness Index (GCI) to present differences in these areas across Caribbean countries.

The column "efficiency factors rank" is an integrated ranking of the three columns that follow it, while the column for the innovation factors rank is an integrated ranking of the two columns that follow it. A striking result is the extent to which the efficiency factors of Barbados are relatively superior to the innovation factors across the countries. This implies that the quality of the work force is better, transaction costs are lower and technology availability and use is more common in Barbados relative to the other countries. In terms of innovation the difference between these countries is much less pronounced, implying that networks and supporting industries and sophistication of a firm's operations and strategies are relatively similar, especially across Barbados, Jamaica and Trinidad and Tobago. Guyana and Suriname are particularly weak in this regard.

Table 10.3 presents Porter's business competitiveness index (BCI) results for the same countries. This index emphasizes microeconomic underpinnings

TABLE 10.3
Business competitiveness index (BCI)

	GCI rank	BCI rank	Busines environment quality rank	Company operations and strategy rank	Under-nourished population %
Barbados	31	42	41	60	2
Jamaica	60	54	55	52	10
Trinidad and Tobago	67	63	64	65	11
Dominican Republic	83	84	86	79	27
Suriname	100	109	108	115	10
Guyana	111	114	115	111	9

Source: World Economic Forum (2006); FAO (2006).

of competitiveness related to improving economic efficiency and productivity. It is interesting that Jamaica and Trinidad and Tobago improve their ranking compared to the GCI, while Barbados moves down considerably. The relatively more established breadth and vibrancy of the private sector in the former two countries may be one reason for this.

It is important to recognize the dynamic aspects of all of the above factors and the fact that changes in conditions that characterize them and innovations can very quickly shift a country's competitive advantage ranking. Among typical innovations that shift competitive advantage are new technologies, new or shifting buyer needs, the emergence of a new industry segment, shifting input costs or availability and changes in government regulations. If firms within nations and regions are to establish and maintain a competitive advantage it is critical that the important role of the government be recognized. In the words of Porter (1990):

> *"Competitive advantage is created and sustained through a highly localized process. Differences in national economic structures, values, cultures, institutions, and histories contribute profoundly to competitive success. The role of the home nation seems to be as strong as or stronger than ever. While globalization of competition might appear to make the home nation less important, instead it seems to make it more so. With fewer impediments to trade to shelter uncompetitive domestic firms and industries, the home nation takes on growing significance because it is the source of the skills and the technology that underpin competitive advantage."*

10.2 Measuring competitiveness of commodities

The need for Caribbean countries to pay attention to improving productivity and competitiveness increased sharply from 1995, when the agriculture sector formally entered into multilateral trade negotiations. Essentially, the commitment to trade liberalization in the agricultural sector, the tariffication of barriers to trade and the lowering of those tariffs has meant the erosion of tariff margins formerly enjoyed by these countries. Thus, their agricultural sectors must be more competitive in order to survive.

Arguably the most comprehensive approach to measuring competitiveness of commodities, and the one used in this chapter, is through the policy analysis matrix (PAM) (Monke and Pearson, 1989), which is based on the computation of a number of price distortions, cost and profit indicators of competitiveness such as the nominal protection coefficient (NPC), the effective protection coefficient (EPC), the domestic resource cost (DRC) coefficient, producer subsidy equivalent (PSE), private profitability and social profitability. The section reports the application of this methodology to the Caribbean countries.

As the importance of enterprise management and value chains in global trade gains recognition, productivity performance indicators comparable across firms and countries are becoming increasingly popular as measures of competitiveness. Obviously, as trade becomes more liberalized and at the same time creates regional and world trade groups, the need arises for comparative indicators. In this context it is useful to have benchmarks for comparing data on supply chains in an industry context.

It is crucial that the concept and measurement of productivity adopted be the one reflected in the broader approach pioneered by Porter; it extends beyond *physical output* per unit of input to represent *consumer value* per unit of output. Factor productivity is important but is only a part of the competitiveness picture; becoming and remaining competitive requires several sets of conditions essential to creating consumer value. To improve and maintain competitiveness it is necessary to identify benchmark indicators of current levels of performance, impediments to growth and opportunities to be pursued in different industries. In the third section of this paper the Porter framework is used to evaluate subsectors in different countries as a strategy toward increased competitiveness.

There are other measures of competitiveness related more closely to market participation. Examples of these are the revealed comparative advantage (RCA) measure, which compares a commodity's share in a country's exports to the commodity's share in world exports; the rate of exposure to competition, which compares exports plus imports to production; and relative trade balance, which measures exports less imports of a commodity, divided by exports plus imports. These measures are not considered useful in a framework where the effort is on increasing competitiveness, making decisions on continuation and/or expansion of an industry, because they can be affected by factors that are not necessarily determinants of competitiveness such as supplies currently available and marketing procedures.

The intention here is to combine indicators that measure the competitiveness climate with indicators more directly related to a particular commodity or industry. Both dimensions are critical. In the Caribbean there are variables in both areas. For example in Jamaica lagging competitiveness is due more to macroeconomic reasons (high interest rates, depreciation of the

foreign exchange rate and praedial larceny), while in Guyana increasing competitiveness would require upgrading agricultural technology and doing better international marketing.

Competitiveness of Caribbean non-traditional commodities: the PAM approach

This section of the paper presents the results of an assessment of the competitiveness and comparative advantage of a number of non-traditional agricultural products in several CARICOM Member States, based on the computation of a policy analysis matrix (PAM). The PAM is an analytical framework aimed at examining the impact of policies based on two enterprise budgets: one valued at market prices, and the other valued at economic or social prices. The divergence between the market and economic values indicates the static impact of the policy setting, and constitutes a convenient way to shed light on the competitiveness of the economic sector(s), and their comparative advantage.

The PAM methodology is presented and discussed extensively in Chapter 12.[140] The following section reports on the specificity of the present application to the Caribbean countries, particularly for what concerns the calculation of the economic prices which are compared with the market prices.

Procedure for economic/social pricing of imports and exports

Our work on Caribbean commodities required amending the standard procedures of economic pricing for determining farm-level values for the traded inputs and outputs because of lack of data.

The procedure of constructing the PAM involves reassessing the initial budget constructed in market prices into a budget valued in economic/social prices. Economic pricing techniques vary depending on if the item is a tradable item or non-tradable item. For tradable items (exports, imports and import substitutes) farm-level export or import parity prices are calculated. The standard procedure for calculating import parity prices begins with the cost insurance freight (CIF) price for the item and then adjusts for the market charges involved in moving the item from the hold of the ship to the level of the farmgate. The CIF price is usually quoted in a foreign currency (US dollars) and this must be converted to domestic dollars using a real (undistorted) as opposed to the nominal exchange rate. In the case of the export parity price the standard social pricing procedure starts with the free on board (FOB) price which is converted to an FOB price in domestic dollars using the real exchange rate before it is adjusted back to the farm-gate level by deducting all marketing and transport charges. Importantly in calculating

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[140] Those readers unfamiliar with the Policy Analysis Matrix (PAM) methodology may want to read Section 12.2 of Chapter 12 at this point.

import/export parity prices, taxes and subsidies are omitted. Taxes may be levied in the form of customs charges, environmental levy, customs service charge, VAT, sales tax, consumption tax.

With exception of commodities in Trinidad and Tobago, the social/ economic pricing procedures utilized in this study for calculating the import and export parity prices were amended to take account of missing data. In particular, three pieces of data were missing: the real effective exchange rate (REER); CIF prices; and the mark-up charged by intermediaries. In all cases information was available on (i) final (market) price paid/received by farmers, and (ii) the customs charges and other taxes and subsidies in effect.

The amended procedure aimed to obtain an estimate of the value of distortionary taxes and subsidies contained in the market price of the imported/exported item. The social/economic price was then obtained by adjusting the market price to remove the value of the distortions. It also used the nominal exchange rate instead of the REER. However, Trinidad and Tobago and Jamaica have floating exchange rate systems and thus the nominal exchange rate can be considered equal to the REER. In the case of Saint Vincent and the Grenadines, Saint Kitts and Nevis and Dominica, countries that belong to the East Caribbean Currency Union, the International Monetary Fund (IMF) data indicate very little change in the real effective exchange rate (REER based on changes in relative consumer prices with 2000 base year) between 1995 and 2004 – Dominica: 88.1 vs 89.3; Saint Kitts and Nevis: 85.0 vs 88.8; Saint Vincent: 87.8 vs 86.2. In all countries the REER appreciated from 1995 and then depreciated (stimulated by movements in the US dollar exchange rate) in the last 3-4 years. The immediate point here is that conclusions from comparing REER values are highly influenced by the beginning and end points of the time series used. A second point is that for the countries other than Trinidad and Tobago and Jamaica the results should be interpreted with some caution that the social/economic pricing have not fully isolated the effects of macro-economic distortions.

In cases where only the CIF data were missing (as in the case of carrots in Jamaica) a spreadsheet was used to set up a schematic of the social pricing process. For carrots it was determined that the value of the tariff was 52 percent of the value of the final (market) price. In cases where the CIF and one other piece of data were missing (this was the case in most situations) a simple rule was applied to come up with the value of distorting customs charges. It was assumed that the CIF price was 50 percent of the final price. The implication of this rule is that a percentage tax on CIF prices could be modelled as a tax of half that rate on the market price.

Results
Table 10.4 provides results of 28 PAMs for non-traditional commodities in six Caribbean countries, with the country in the first column and the

commodities assessed in the second column. For Belize six commodities were assessed (white potato, hot peppers, papaya, cabbage, onion, tomatoes); for Trinidad and Tobago three commodities were assessed (but it presents four farming systems for rice and three for cocoa). The final column of the table shows whether the commodity is exported or imported.

All commodities were competitive (using the indicator of private profits), with the exception of dairy and two of the rice farming systems in Trinidad and Tobago. All commodities had comparative advantage (using indicators of the DRC and social profits), with the exception of dairy and the four rice farming systems in Trinidad and Tobago. In many cases exported commodities had higher levels of comparative advantage (exceptions were Belize and Saint Vincent and the Grenadines). Generally, levels of return on investment (profit/total cost) were strongly correlated with values for comparative advantage (DRC); specifically, return on investment (ROI) was higher the greater the level of comparative advantage. However, among commodities within countries the relationship between ROI and competitive advantage (private profitability) was obscure.

We found that imported items received more policy support and protection than exported items. Within countries the PSE (which measures the percentage contribution of policies to gross revenue) for imported items were generally higher than those for exported items. The NPCs (which measures the level of policy-induced protection provided to the output) on exported commodities tend to be 1.00 (or close), while that for imported items showed a greater range of variation, with values often higher than 1.00. The NPCs of value 1.00 indicate zero policy-induced protection. NPCs of values greater than 1.00 on the imports indicate that much higher levels of protection are provided to commodity imports rather than to exports, as would be expected.

The results indicate good opportunities for improving food security in CARICOM countries. The strong results for root crops (white potatoes in Belize; sweet potatoes and yams in Jamaica peanuts and sweet potatoes in Saint Kitts and Nevis) provide reasons for further investment in these areas to improve food availability of staple food items. All the root crops have strong levels of competitiveness and comparative advantage and receive very low levels of support from governments. The major constraint to improving the output of these commodities and their significance in food security is if there is a swing in consumption patterns away from them. The strong results in terms of ROI and profit as a percentage of revenue indicate that root crops and vegetables (such as pumpkin, cabbage, tomatoes, carrots, hot peppers, sweet peppers) can make a contribution to increasing farm household-level food accessibility by providing the cash income required to secure other commodities.

The potential impact of these commodities on farm household income must take account of farm sizes. While per hectare returns may be quite attractive, the commodity may not be attractive to farmers (and contribute

TABLE 10.4
Summary results of the 28 PAMs for Caribbean non-traditional commodities*

Country	Commodity	Land unit	POLICY INDICATORS				Social profit $	Private profit $	Total cost $	Total $ revenue	Return on inv (%)	Profit as % of TR	Remarks
			NPC	EPC	PSE	DRC							
Belize	White Potato	Acre	1.25	1.33	0.18	0.13	4 732	6 542	3 458	10 000	189.2	65.4	Import
Belize	Hot Peppers	Acre	1.00	0.98	-0.02	0.31	7 526	7 270	5 930	13 200	122.6	55.1	Exp
Belize	Papaya	Acre	1.00	0.96	-0.04	0.32	16 700	15 391	18 609	34 000	82.7	45.3	Exp
Belize	Cabbage	Acre	1.50	1.54	0.33	0.04	8 779	13 686	1 314	15 000	1041.6	91.2	Import
Belize	Onion	Acre	1.11	1.12	0.08	0.08	6 556	7 412	3 588	11 000	206.6	67.4	Import
Belize	Tomatoes	Acre	1.25	1.34	0.19	0.08	5 842	7 981	3 269	11 250	244.1	70.9	Import
Dominica	Pumpkin	Acre	1.00	1.00	-0.02	0.06	27 798	27 125	3 115	30 240	870.8	89.7	Export
Dominica	Hot Pepper	Acre	1.00	0.99	-0.01	0.43	6 115	6 009	6 791	12 800	88.5	46.9	Export
Dominica	Sweet Pepper	Acre	1.00	0.95	-0.04	0.54	3 935	3 507	7 393	10 900	47.4	32.2	Export
Jamaica	Carrots	Ha	2.08	2.35	0.53	0.86	32 731	367 684	262 666	630 350	140.0	58.3	Import
Jamaica	Escallion	Acre	1.00	0.99	0.00	0.28	321 437	321 300	146 580	467 880	219.2	68.7	Export
Jamaica	Sweet Potato	Acre	1.00	0.99	0.00	0.27	134 730	135 597	60 775	196 372	223.1	69.1	Export
Jamaica	Hot Pepper	Ha	1.00	1.00	0.03	0.64	271 398	301 153	658 847	960 000	45.7	31.4	Export
Jamaica	Yellow Yam	Ha	1.03	1.03	0.07	0.41	438 113	494 672	298 735	793 408	165.6	62.3	Export
Saint Kitts/Nevis	Pumpkin	Acre	1.00	1.00	0.01	0.09	17 668	17 545	2 333	20 000	757.5	88.3	Export
Saint Kitts/Nevis	Peanut	Acre	1.06	1.07	0.05	0.33	3 671	3 298	3 829	7 500	95.9	48.9	Import
Saint Kitts/Nevis	Sweet Potato	Acre	1.00	1.00	0.00	0.15	12 120	12 068	2 880	15 000	420.8	80.8	Export
Saint Kitts/Nevis	Onion	Acre	1.11	1.13	0.09	0.27	10 690	9 097	6 910	17 600	154.7	60.7	Import
Saint Vincent	Carrots	Acre	1.43	1.49	0.34	0.40	5 318	10 171	4 229	14 400	240.5	70.6	Import
Saint Vincent	Hot Peppers	Acre	1.00	1.01	0.08	0.51	13 011	15 487	15 113	30 600	102.5	50.6	Export

Country	Commodity	Land unit	POLICY INDICATORS				Social profit $	Private profit $	Total cost $	Total $ revenue	Return on inv (%)	Profit as % of TR	Remarks
			NPC	EPC	PSE	DRC							
Trinidad/Tobago	Rice (Small Farm-Transplanted)	Acre	1.75	2.38	0.66	4.51	-3 610	-1 406	4 737	3 330	-30.0	-42.2	Import
Trinidad/Tobago	Rice (Small Farm Broadcast)	Acre	1.75	2.73	0.60	4.62	-2 954	-948	4 278	3 330	-22.2	-28.5	Import
Trinidad/Tobago	Rice (Medium Farm)	Acre	1.76	4.56	0.43	2.47	-528	781	2 231	3 012	35.0	25.9	Import
Trinidad/Tobago	Rice (Large Farm)	Acre	1.79	3.68	0.39	2.45	-645	443	2 316	2 759	19.1	16.1	Import
Trinidad/Tobago	Dairy	kg	1.74	1.95	0.29	3.34	-2.51	-1.68	4.54	2.86	-37.0	-58.6	Import
Trinidad/Tobago	Cocoa–Small Farm	Ha	0.91	0.91	0.06	0.52	2 117	2 380	1 780	4 160	133.7	57.2	Export
Trinidad/Tobago	Cocoa–Large Farm	Ha	1.00	0.95	0.05	0.58	3 425	3 929	6 411	10 340	61.3	38.0	Export
Trinidad/Tobago	Cocoa-6x6 sys	Ha	1.00	0.99	0.06	0.47	13 998	15 837	16 581	32 418	95.5	48.9	Export

sufficiently to income) if production methods and/or market size means that farmers plant small parcels of land.

10.3 Increasing Caribbean commodity competitiveness

It is urgent to improve the competitiveness of the agricultural sector in the Caribbean, both to alleviate poverty and food insecurity in depressed areas of Caribbean countries and to seize income-earning opportunities that promote overall development. Given the results of several studies[141] of the traditional sectors (sugar, bananas, citrus, rice) it is clear that some producers will have to give up producing some crops or increase productivity significantly very soon. Some producers who have increased their efficiency are well-positioned to compete in both regional and global markets. For example, DRCs for rice in Belize, Guyana and Suriname are between .66 and .75 (FAO, 1998), in contrast with the DRCs for rice in Trinidad and Tobago.

Table 10.5 provides a summary of factors affecting competitiveness of rice in Belize, Guyana and Suriname and areas where improvements can be made. The ability to supply quality (rice) products on a reliable basis can make the difference in whether producers in CARICOM are able to supply the region and beyond it. At the field level irrigation facilities maintenance and improvement will increase yields and contribute greatly to enhancing competitiveness.

The challenges to making the two main traditional products competitive are immense because competition is based mainly on price. For countries that remain sugar producers one of the most important ways to increase productivity is by increasing the efficiency of the transport system. More banana producers in the region will go out of business, as has already happened with sugar producers. In the case of bananas, lower-cost producers (e.g. Ecuador) are able to drive the price down and still produce very profitably. To sustain banana trade some degree of product differentiation, especially promoted at a regional level, and higher-income market segments globally, could make a difference to the survival of CARICOM banana producers.

There is increased recognition that to promote growth and development in the agricultural sector it is necessary to have a strategy of diversification and expanded value-added, paying more attention to efficiency and competitiveness all along the value chain. Two subsectors with potential are non-traditional agricultural products (see DRCs in Table 10.4) and livestock products (especially Belize, Guyana and Suriname, where estimated DRCs are consistently less than 1). **Tables 10.6 and 10.7** present factors influencing competitiveness in these subsectors that need to be addressed. Livestock

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[141] FAO. 1998. *Assessment of the impact and implications for policy of trade liberalization on the agricultural sector of CARICOM countries*. Rome.

TABLE 10.5

Summary of factors influencing the competitiveness of rice in selected CARICOM countries

	Belize	Guyana	Suriname
Product market factors			
Market access	Produced primarily for domestic market	Preferential access to EU but attractiveness of market reduced substantially and potentially unstable	Preferential access to EU but attractiveness of market reduced substantially and potentially unstable
Marketing infrastructure	Inefficient in the small farm sector; Belize Marketing Board management needs improving	Guyana Rice Exporters and Marketers Development Association strong	Weak producer and marketing association, government regulations increase transaction costs
Product characteristics		Variable quality of exported rice	High-quality rice could provide some scope for differentiation
Input market factors			
Intermediate input access	High input costs, especially energy and transportation	Adequate	Adequate
Labour/human resources	Generally very low productivity on small farms	Quantity and quality has declined with political instability	Minimally adequate; difficulty attracting reliable labour
Technology and productivity	Milpa system; low technology; low input on small southern area farms	Overcapitalized processing capacity, technical viability	Moderate productivity and technology on small farms
Irrigation infrastructure	Poor to non-existent on small farms	Lack of sufficient investment in maintenance of irrigation and drainage facilities	In need of major rehabilitation. and investment
Access to credit	Limited	Needs to be improved	Needs to be improved
Industry structure			
Size distribution	Mix of milpa systems and large mechanized commercial farms	Large small-farming sector; some large producers	Bimodal (few large farms; many small farms)
Ownership structure	Private, but small-farm product marketing dependent on BMB*	Private farms	Predominantly private farms
Infrastructure			
Transportation	Improved greatly recently	Shipping charges high relative to competitors	Needs to be improved
Information systems	Needs improving	Needs improving	Needs coordination and improving
Government			
Regulatory environment	Government interventions	Guyana Rice Dev. Board oversees sector	Burdensome export procedures
Support agencies	Assistance from regional support institutions	Research moved under GRDB**; farmer organizations strengthened	Inadequate support capacity of public sector
Trade and support policies	Import duties contribute to high input costs; tariffs protect domestic sector	Licensing requirements removed; domestic and export market liberalized	Some aspects liberalized

*Belize Marketing Board
**Guyana Rice Development Board

Table 10.6
Summary of factors influencing the competitiveness of non-traditional crops in selected CARICOM countries

	Barbados	Grenada	Jamaica	Saint Lucia	Suriname	Trinidad/Tobago
Product market factors						
Market access*	Access via CBERA and CARIBCAN; some linkages with tourism	Limited exports; access via CBERA and CARIBCAN	Access via CBERA and CARIBCAN	Access via CBERA and CARIBCAN	Primarily produced for domestic market	Domestic market; negligible exports
Marketing infrastructure	Informal; inefficient; export infrastructure lacking	Very inadequate	Improving; informal domestic market	Informal; more attention to grade and size standards; no cold storage facilities	Poor; informal; inadequate export infrastructure	Improving with strengthened marketing board
Product characteristics	Inadequate grade and size standards	Potential for differentiation	Potential for differentiation	Potential for differentiation	Good quality	Potential for differentiation
Input market factors						
Intermediate input access	Adequate; some import duty concessions	Adequate though dependent on imports	High cost	Some dependence on imports	Normally available	Normally available
Labour/human resources	High cost; need improved mgmt and entrepreneurial skills	Inadequate expertise; need entrepreneurial capacity	Need improved mgmt and entrepreneurial capacity	High cost; poor mgmt and entrepreneurial capabilities	Foreign labourers; need improved mgmt and entrepreneurial skills	High cost; need improved entrepreneurial capabilities
Technology and productivity	Technology and productivity increasing	Low productivity	Low productivity and tech. with exceptions (peppers, papayas)	Low technology and productivity	Low technology with exceptions	Technology and productivity increasing
Irrigation infrastructure	Limited	Limited	Increasing	Limited	Some	Some
Access to credit	Barely adequate	Limited	Limited and high cost for small producers	Limited	Difficult to access	Available
Industry structure						
Size distribution	Small farms; significant production tied to sugar crop rotations	Small farms, many part-time	Mainly small farms; few medium and large-scale producers	Mainly small farms	Mainly small part-time farmers; a few medium-scale parastatals	Small farms, part time
Ownership structure	Private	Private	Private	Private	Predominately private	Private; Caroni

	Barbados	Grenada	Jamaica	Saint Lucia	Suriname	Trinidad/Tobago
Infrastructure						
Transportation	Domestic adequate; international linkages limited to air	Maintenance problems with domestic road transport; int'l linkages poor (air only)	Domestic inefficient; int'l linkages improved	Domestic minimally adequate; export mainly air	Domestic adequate but road repairs needed; int'l limited and unreliable	Improved
Information systems	market information systems inadequate	inadequate and almost absent	improving with RADA systems	inadequate	Needs improving	improving with NAMDEVCO
Government						
Regulatory environment	Needs improved regulations	Needs improved regulations	Needs improved regulations	Needs improved regulations	Limited and not applied generally	Needs improving
Support agencies	Numerous support organizations	Minimal	Public sector support strengthened	Minimal beyond targeted projects	Needs improving	Considerable support from MALMR** and other gov't initiatives
Trade and support policies	Producers protected	Protection could be strengthened	Producers protected	Import licensing protection; some duty concessions on inputs	Some protection of producers from imports	Gov't support and protection from imports

*CBERA = Caribbean Basin Economic Recovery Act; CARIBCAN = Caribbean–Canada Trade Agreement. MALMR = Ministry of Agriculture, Land and Marine Resources

TABLE 10.7

Summary of factors influencing the competitiveness of livestock products in selected CARICOM countries

	Suriname	Belize	Guyana	Jamaica	Trinidad/Tobago
Product market factors					
Market access	Produced mainly for the domestic market	Domestic market for milk and poultry; beef exports	Mainly domestic market	Mainly domestic, targeting tourist & fast food market	Mainly domestic
Marketing infrastructure	Poultry – adequate; beef and small ruminants – inadequate	Poultry – adequate; beef, milk and small ruminants – need improving	Milk has collapsed; beef and small ruminants poor, poultry being rehabilitated	Very good in poultry and milk; less so for beef and small ruminants	Good for milk and poultry; less so for beef and small ruminants
Product characteristics	Minimal product differentiation	Limited product differentiation	Almost no product differentiation	Some forms of product differentiation; good quality product	Some product differentiation; adequate quality product
Input market factors					
Intermediate input access	Adequate	Limited supplies	Adequate	Adequate	Adequate
Labour/human resources	Limited for dairy farms	Scarce; mainly immigrant labour	Adequate	Adequate	Shortages for dairy operations
Technology and productivity	Poultry – modern; beef, milk and small ruminants – low productivity	Poultry – modernizing; beef & milk –, improving	Poultry – modernizing; beef & milk system related to rice – declining	First rate for poultry; declining productivity for milk and beef	Modern for poultry; low productivity for milk & beef
Irrigation infrastructure	inadequate				
Access to credit	Limited for small producers	Difficult to access	Needs to be strengthened	Difficult to access	Improving recently – Agricultural, Development Bank (ADB)

	Suriname	Belize	Guyana	Jamaica	Trinidad/Tobago
Industry structure					
Size distribution	Small farms – beef & dairy, few large poultry	Small & large beef; small dairy; Mennonite poultry	Small beef and dairy; poultry sector being rebuilt	Poultry – contract growers; some large beef and dairy; many small farmers	Poultry – contract growers; dairy projects in specific areas Small farmers beef
Ownership structure	Private	Private	Private now – Livestock Company divested	Private	Private mainly
Infrastructure					
Transportation	Adequate; buyers provide/control	Adequate	Adequate – improving	Adequate	Adequate
Information systems	Limited; non-existent	Weak	Very weak	Weak	Framework in place, needs improving
Government					
Regulatory environment	Health regulations mainly	Health regulations mainly	Health regulations– need strengthening	Health regulations mainly	Health regulations mainly
Support agencies	Limited	Belize Livestock Producers Association being rebuilt	Weak	Declined; needs rehabilitating	Needs strengthening
Trade and support policies	Poultry – some level of protection	Some level of protection	Some level of protection	Some level of protection	Some level of protection dairy farmer support

products are receiving consumer attention from health food and animal welfare standpoints. Marketing the humaneness of the livestock production system and improved health to the consumer, and the direct linkages to increased income and welfare domestically, may be one way to help maintain a livestock sector in some parts of the region.

Identifying specialized markets and promoting particular characteristics of the CARICOM agricultural product is an important part of converting systems with higher costs of production into competitive systems. This may be the only viable option for sustaining competitiveness of many of the non-traditional exports from the region over the longer run. More attention should be paid to the needs of the market at every point in the commodity system. The agricultural sector should be made more knowledge-based, with comprehensive integrated policy support that provides incentives for upgrading technology systems and implementing innovative management systems linked to such productivity measuring tools as scorecarding and benchmarking.

The competitiveness of agricultural products in the CARICOM region will depend as much on product differentiation as on production costs. It will not be individual commodities or firms that determine competitiveness but rather a partnership between the public and the private sector that ensures that factors influencing competitiveness are addressed adequately. The analysis in this chapter has shown that there is certainly the potential for many agricultural products from the Caribbean to have a competitive advantage in the regional market and beyond. However, competitiveness factors at both the macro-economic and microeconomic levels need to be improved to enable firms to better seize opportunities that arise in the changing international environment.

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