Volume 4 Number 2 2003/p.143-161 esteyjournal.com

The Estey Centre Journal of
International Law and Trade Policy

The New Banana Import Regime in the European Union: A Quantitative Assessment[1]

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The new banana import regime in the EU is a two-step process towards a tariff-only system that should enter into force no later than 1 January 2006. During the transitional period, 2001-2005, bananas will continue to be imported into the EU under a tariff-rate quota system. This paper provides an empirical evaluation of the new EU banana import policy. It focuses on the structure of EU imports from preferred and non-preferred suppliers in the transitional period, and it evaluates the tariff equivalent that should be applied in 2006 on EU imports from non-preferred suppliers. The most vulnerable African, Caribbean and Pacific (ACP) countries, mainly the Caribbean states, would suffer from the new regulation unless they were to receive direct aid to make their banana production more competitive.

Keywords: banana; European Union; tariff; tariff-rate quota; World Trade Organization

In May 2001, the European Union (EU) adopted a regulation to implement a new banana import regime in line with understandings arrived at with both the United States, on 11 April 2001, and Ecuador, on 30 April 2001. The mutually agreed solution to the long-standing international dispute over bananas is a two-step process towards a tariff-only system that should enter into force no later than 1 January 2006. During the transitional period, 2001-2005, bananas will continue to be imported into the EU under a tariff-rate quota system through import licences distributed on the basis of past trade.

Numerous complaints to the World Trade Organization (WTO) have necessitated successive reforms of the EU banana trade regime since the establishment of the Common Market Organization for Bananas (CMOB) in July 1993.

Before that date, EU countries pursued their own trade regimes: Germany imported bananas duty free; six other countries (France, Greece, Italy, Portugal, Spain and the United Kingdom) gave preferential access to EU and African, Caribbean and Pacific (ACP) countries; five countries only (Belgium, Denmark, Ireland, Luxembourg and The Netherlands) applied the standard regime of the common external tariff of 20 percent on imports, EU and ACP exporters being exempt from this duty. Protective provisions applied; in the case of France to the French Caribbean islands of Guadeloupe and Martinique as well as to Cameroon and Ivory Coast, two ACP states of the CFA Franc zone; in the case of Greece to Crete; in the case of Italy to the ACP state of Somalia; in the case of Portugal to Madeira; in the case of Spain to the Canary Islands; and in the case of the United Kingdom to the ACP states of Belize, Jamaica, Surinam and the Windward Islands. The European countries with little or no intervention in the market typically imported their bananas from Latin American countries, the so-called dollar-zone producing countries, mainly Colombia, Costa Rica, Guatemala, Honduras, Panama, Ecuador and Brazil. For more details, see, for example, Read (1994) or Tangermann (2003).

The Single European Market of 1992 provided the impetus to eliminate internal EU border restrictions since it would be no longer possible to enforce Article 115 of the Treaty of Rome to prevent intracommunity trade. The solution adopted by the EU in 1993 consisted then of a combination of tariffs and quotas: EU producers were guaranteed a minimum income through a deficiency payment up to 854,000 tonnes, ACP bananas continued to enter the EU market duty free up to 857,000 tonnes, while dollar bananas were subject to a two-tier tariff. The CMOB was disputed heavily from

the very beginning. A first General Agreement on Tariffs and Trade (GATT) panel initiated by Colombia, Costa Rica, Guatemala, Nicaragua and Venezuela concluded in January 1994 that the original CMOB was inconsistent with various GATT rules and led to first changes in December 1994 (laid down in the so-called Framework Agreement on Bananas). A new dispute settlement procedure was initiated by the United States, Guatemala, Honduras and Mexico in 1995 (Ecuador joined them in February 1996) and led to the 1998 reform of the CMOB. Although the import licensing system was significantly simplified, the regime remained under heavy scrutiny. A new banana panel was initiated by the WTO Dispute Settlement Body in January 1999 and concluded that the modified EU policy was still not fully compatible with WTO rules. The EU presented new reform proposals on 10 November 1999 and 4 October 2000. It finally adopted a regulation on 2 May 2001 to implement a new import regime in line with understandings arrived at with the United States and Ecuador. For more details on the "banana trade war", see, for example, Thagesen and Matthews (1997), Guyomard, Laroche and Le Mouël (1999a), Herrmann, Kramb and Mönnich (2000), Read (2001), FAO (2001b) or Josling (2003).

It is thus only very recently that the EU officially considered the possibility of a move towards a tariff-only system. In November 1999, the European Commission (EC) proposed for the first time to follow a two-step approach by defining a transitional tariff-rate quota system that would be replaced by a tariff-only regime by 1 January 2006. As important issues remained to be clarified, the EC invited all interested parties to examine its proposal in order to continue consultations, resulting in a satisfactory compromise (EC, 1999). On 4 October 2000, the EC proposed to manage access to tariff-rate quotas on a first-come, first-served (FCFS) basis (EC, 2000). The United States and some Latin American (LA) countries opposed the FCFS rule arguing that it was not WTO consistent. The final agreement reached in spring 2001 follows the main thrust of earlier proposals except that it supersedes the October 2000 approach for the management of tariff-rate quotas on a FCFS basis. As in the past, tariff-rate quotas in the transitional phase will continue to be managed on the basis of historical references (*Official Journal of the European Communities,* 2001a, 2001b, 2002).

Squaring the circle was not easy. The EU clearly faced competing obligations and objectives: to reach agreement on a WTO-compliant system, to ensure satisfactory access to the European market for bananas of all origins and all operators, to preserve the interests of banana producers within the EU, and to protect the very vulnerable ACP banana producers. Furthermore, the story is not over. The tariff-only system is to

automatically enter into force on 1 January 2006. But the WTO compromise and the corresponding EC regulations do not define the level of the flat tariff that has still to be negotiated under Article XXVIII of the GATT.

Read (2001) provides a comprehensive overview of the international trade dispute over bananas (see also FAO, 2001a). This paper extends the analysis of Read in two respects. First, it provides an empirical evaluation of the transitional tariff-rate quota system. To that end, we use an updated version of a single-commodity, multi-country, partial equilibrium model of the world banana market (Guyomard, Laroche and Le Mouël, 1999a, 1999b). Attention is focused on the structure of EU imports from LA countries, ACP states and EU regional suppliers for the last year of the transitional period, 2005. Second, it provides an evaluation of the tariff equivalent that should be applied in 2006 on EU imports from non-preferred suppliers. The level of the tariff equivalent closely depends on the Euro/US dollar parity that will prevail in 2006. Analysis shows that the most vulnerable ACP countries, mainly the Caribbean states, would suffer from the new regulation unless they were to receive direct aid to make their banana production more competitive.

The New Banana Import Regime in the European Union

The new banana import regime in the EU became effective on 1 July 2001. It is laid down in Commission Regulation (EC) n° 896/2001 of 7 May 2001, Council Regulation (EC) n° 2587/2001 of 19 December 2001 and Commission Regulation (EC) n° 349/2002 of 25 February 2002. Table 1 gives an overview of the new policy.[2]

The Transitional Tariff-Rate Quota Regime

Each year from 1 January 2002, three tariff-rate quotas will be open: a bound tariff-rate quota of 2,200,000 tonnes net weight (quota A); an autonomous tariff-rate quota of 453,000 tonnes net weight (quota B); and an additional tariff-rate quota of 750,000 tonnes net weight (quota C). The tariff-rate quotas A and B will be managed as one (quota A/B) and will be open for imports of bananas originating in all third countries. The tariff applied to imports within the quota A/B will be 75 Euros per tonne, with a tariff preference of 75 Euros per tonne granted to ACP bananas. The tariff-rate quota C will be open for imports of bananas originating in ACP countries. Imports under the quota C will enter the EU market at a zero duty.[3]

The import licence system will still be managed on the basis of historical references. For the quota A/B, 83 percent of licences will be allocated to traditional operators and 17 percent to non-traditional operators. For the quota C, 89 percent of licences will be allocated to traditional operators and 11 percent to non-traditional operators (*Official Journal of the European Communities,* 2002). However the definition of traditional and non-traditional operators has changed relative to previous regulations.

Traditional operators are now economic agents established in the EU who have purchased a minimum quantity of bananas (250 tonnes) originating in third countries. Traditional operators A/B are traditional operators who have carried out the minimum quantity of imports of third-country and/or non-traditional ACP bananas, while traditional operators C are traditional operators who have carried out the minimum quantity of imports of traditional ACP bananas.[4] Non-traditional operators are economic agents established in the EU who have been engaged in the commercial activity of importing bananas into the EU for a declared customs value of at least 1.2 million Euros, and who do not have a reference quantity as a traditional operator under the tariff quota for which they are applying for registration. For each category of operators, import licences are allocated on the basis of historical references. For a traditional operator A/B for example, licences will be distributed through 31 December 2003 on the basis of the average of imports during 1994, 1995 and 1996 taken into account in 1998 for the purposes of administering the tariff quota for imports of third-country and non-traditional ACP bananas. Thereafter, the share of import licences will be allocated based on usage of licences issued since 1 January 2002.

The Tariff-Only Regime

The tariff-only regime will replace the transitional tariff-rate quota system from 1 January 2006. The rate of the tariff has still to be negotiated. It will be defined to provide a level of protection and trade as close as possible to the system of tariff-rate quotas of the transitional period.

Table 1 The New Banana Trade Regime in the European Union

Transitional tariff-rate quota regime (phase 2 from 1 January 2002)
Tariff-rate quota (TRQ) system with three quotas:
-A bound TRQ A of 2,200,000 tonnes net weight
-An autonomous TRQ B of 453,000 tonnes net weight
-An additional TRQ C of 750,000 tonnes net weight
TRQ management:
-Quotas A and B managed as one (quota A/B) and open to all suppliers
-Quota C reserved to ACP suppliers
-Historical references (1994-96 through 31 December 2003)
-Quota A/B: 83 percent of licences to traditional operators and 17 percent to non-traditional operators
-Quota C: 89 percent of licences to traditional operators and 11 percent to non-traditional operators
Tariffs:
-Quota A/B: 75 Euros per tonne for non-ACP countries and 0 for ACP countries
-Quota C: 0 for ACP countries
-Over-quotas: 680 Euros per tonne for non-ACP countries and 380 Euros per tonne for ACP countries (tariff preference of 300 Euros per tonne for ACP countries)
Tariff-only system (from 1 January 2006)
Tariff rate still to be negotiated

Sources: WTO, WT/DS27/58, 2 July 2001; Commission Regulation (EC) 896/2001 of 7 May 2001; Council Regulation (EC) 2587/2001 of 19 December 2001; Commission Regulation (EC) 349/2002 of 25 February 2002; *FruiTrop,* various issues.

A Quantitative Assessment of the Transitional Tariff-Rate Quota System

The effects of the tariff-rate quota system are analyzed on the basis of simulations carried out with a partial equilibrium model of the world banana market. We briefly present the model and then simulation results.[5]

Model Outline

The model consists of constant-elasticity demand (import) and supply (export) equations. Transportation costs and constant-margin equations link CIF import prices in importing zones and FOB export prices in exporting zones. Market-clearing equations guarantee the supply-demand equilibrium in "relevant" markets. The number of market-clearing equations closely depends on the EU import policy. If EU imports from non-preferred suppliers are constrained, as will be the case in the transitional tariff-rate quota regime (see below), two market-clearing equations have to be specified, one equation for the EU market to determine CIF prices in the EU as well as FOB prices in EU territories and ACP countries, and one equation for the rest of the world (ROW) to determine CIF and FOB prices on ROW import and export markets. Volume and value of bilateral trade flows (i.e., imports of purchaser *i* from exporter *j* and exports of supplier *j* to importer *i*) are based on EUROSTAT (COMEXT) and FAO (FAOSTAT) data. CIF and FOB unit values are derived from volume and value data. Base period data used for model initialization and calibration correspond to the 1996-98 average.

Supply (export) and demand (import) functions include time shifters. Growth trends of supply and demand were estimated from data over the past 15 years. These growth trends were then separated from price-trend impacts assuming independence of price and time effects. This assumption implies that policy changes have no effect on the magnitude of supply and demand shifters. This is certainly restrictive, in particular because technical change in supply equations is then constrained to be purely deterministic without taking into account the possibility of price-induced innovations. A similar procedure was adopted in the "Newcastle" (Thompson, 1984) and MISS (Guyomard et al., 1991) models of the Common Agricultural Policy (CAP).

Simulation Results

Analysis with the model shows that both the quota A/B of 2.653 million tonnes and the quota C of 750,000 tonnes would be constraining in 2005. It also shows that the tariff preference of 75 Euros per tonne would be insufficient to allow ACP bananas to compete with non-ACP bananas within the quota A/B. As a result, the quota A/B would be filled with non-ACP banana imports only. Over-quota tariffs would be prohibitive and over-quota imports would be zero. Once the quota A/B is

filled, it would be more profitable for non-ACP country suppliers to export to ROW markets than to incur the over-quota tariff applied on non-ACP banana imports.[6]

Table 2 presents the structure of the EU banana import market in 2005. EU imports from non-ACP countries would be equal to the binding level of the quota A/B (2.653 million tonnes). This represents an increase of 239,400 tonnes (9.9 percent) with respect to 1996-98 (2.414 million tonnes). The fill rate of the quota C would be 100 percent. EU imports from ACP countries would be equal to 760,523 tonnes, an increase of 59,052 tonnes (8.4 percent) with respect to 1996-98 (701,471 tonnes).[7] Supplies of EU territories would be equal to 797,090 tonnes, an increase of 6.2 percent relative to 1996-98 (750,671 tonnes). ACP-country exports to the EU would represent 18.1 percent of EU consumption in 2005, the same share as in 1996-98. Exports of non-ACP countries and EU territories would represent 63.0 and 18.9 percent, respectively, of EU consumption in 2005. Table 2 shows that EU imports from ACP countries and EU territories would be close to import levels observed in 2000. As a result, the increase in EU consumption between 2000 and 2005 (from 4.067 million tonnes to 4.210 million tonnes) would mainly benefit non-preferred-country suppliers. Their exports would increase by 125,000 tonnes over the five-year period 2000-2005.

Table 2 The Structure of the EU Banana Import Market in 2005 (Quantities in Tonnes)

	1996-98 (1)	1999 (2)	2000 (3)	2005 (4)
EU territories	750,671 [19.4]	730,000 [18.6]	782,176 [19.2]	797,090 [18.9]
ACP countries (5)	701,471 [18.1]	678,000 [17.3]	756,808 [18.6]	760,523 [18.1]
Other countries	2,413,603 [62.4]	2,513,000 [64.1]	2,528,172 [62.2]	2,653,000 [63.0]
Total	3,865,745 [100]	3,921,00 [100]	4,067,156 [100]	4,210,613 [100]

(1) Base period data. (2) Source: ODEADOM (2001) and FAO (2001a). (3) Source: *FruiTrop,* October 2001. (4) Simulation results. (5) In 2005, ACP-country exports to the EU are slightly greater than the quota C level of 750,000 tonnes (10,500 tonnes). There is no significant change in the results if ACP-country exports to the EU are constrained to be strictly equal to the quota C level.

Table 3 shows that distribution of export changes would vary significantly among ACP countries. Exports from Ivory Coast and Cameroon to the EU would increase by 22.0 percent (from 168,410 tonnes in 1996-98 to 205,466 tonnes in 2005) and 17.0 percent (from 146,490 tonnes in 1996-98 to 171,374 tonnes in 2005), respectively. By contrast, exports from the Windward Islands and Jamaica to the EU would decrease by 5.7 percent (from 230,953 tonnes in 1996-98 to 217,802 tonnes in 2005). Table 3 also shows distribution of world export changes among LA countries. Ecuador would export 4.841 million tonnes in 2005, i.e., about 793,000 tonnes (19.6 percent) more than in the base period 1996-98. The world's largest exporter would profit from an increased access to the EU market thanks to a quota A/B level set at 2.653 million tonnes as well as an increased demand in ROW markets, in particular in the United States. Exports from other Central American countries would increase by about 7.6 percent for Costa Rica and Guatemala, and 12.0 percent for Panama and Honduras (with respect to 1996-98).

Table 3 World Banana Exports of ACP and LA Countries in 2005 (Quantities in Tonnes)

	1996-98 (1)	2005 (2)
Total ACP countries	701,471	760,523
- Ivory Coast	168,410	205,466
- Cameroon	146,490	171,374
- Windward Islands and Jamaica	230,953	217,802
- Other traditional ACP countries	96,956	100,717
- Non-traditional ACP countries	58,662	65,165
Total LA countries	10,081,782	11,566,320
- Ecuador	4,048,000	4,840,573
- Costa Rica	1,956,000	2,104,571
- Colombia	1,451,000	1,623,884
- Panama	566,000	633,438
- Guatemala	688,000	740,258
- Honduras	545,000	609,936
- Other LA countries	827,782	1,013,660

(1) Base period data. (2) Simulation results.

Quota A/B Rent and Tariff Equivalent

The transitional tariff-rate quota regime would lead the average CIF price in the EU to decrease by about 33 Euros per tonne, from 593 Euros in 1996-98 to 560 Euros in 2005. It would lead the average FOB price in dollar-zone countries to decrease by about US $20 per tonne, from US $292 in 1996-98 to US $272 in 2005. As a result, the quota rent on EU banana imports from the dollar zone would decrease by about 57 Euros per tonne, from 239 Euros in 1996-98 to 182 Euros in 2005.[8]

Table 4 illustrates the sensitivity of the quota A/B rent to policy parameters and/or exogenous variables. The benchmark experiment corresponds to the simulation of the transitional tariff-rate quota system, results of which have been described previously. Experiment 1 aims at illustrating the sensitivity of the rent to the Euro/US dollar exchange rate. Results of this experiment suggest that the quota rent decrease of 57 Euros per tonne observed in the benchmark experiment is mainly due to the change in the Euro/US dollar exchange rate that was assumed to occur between 1996-98 and 2005. In the benchmark simulation, the Euro is assumed to strengthen vis-à-vis the US dollar over the medium term, from a parity of 0.85 in 1996-98 (0.85 Euro = US $1) to a parity of 1 in 2005 (1 Euro = US $1). In experiment 1, the Euro/US dollar exchange rate is assumed unchanged at the 1996-98 parity. In that case, the quota rent in 2005 would be equal to 227.4 Euros per tonne and the quota rent decrease would thus be limited to about 12 Euros per tonne relative to 1996-98. Starting from experiment 1, experiment 2 shows that an exogenous increase (i.e., not induced by price effects) in EU demand would lead the quota rent to increase (a doubling of EU demand shifters would increase the rent by about 31 Euros per tonne in 2005, other things being equal). In the same way, starting from experiment 2, experiment 3 shows that an exogenous increase in dollar-zone supply would lead the quota rent to increase (if annual supply shifters in percent were increased by 2 points in dollar-zone countries, the quota rent would increase by about 12 Euros per tonne, other things being equal).

According to table 4, a tariff of about 182 Euros per tonne with a tariff preference of the same amount granted to ACP bananas would be “equivalent” to the transitional tariff-rate quota system in 2006. A tariff equivalent of that order of magnitude would keep the average CIF price in the EU at its 2005 level, and it would leave dollar-zone exports to the EU as well as those from ACP countries largely unaffected in 2006 (relative to 2005). Of course, this result is contingent upon parameter choice and policy assumptions adopted in the simulation exercise. In particular, a tariff of that order of magnitude would be underestimated (i.e., less than “equivalent”) if the Euro were to weaken vis-à-vis the US dollar, if productivity gains were larger in dollar-

zone countries and if demand shifters were higher in EU member states. Furthermore, the "equivalence" applies strictly for the year 2006 alone. As autonomous productivity and production increases are likely to be greater in the dollar zone than in ACP countries, in particular the Windward Islands and Jamaica, the tariff equivalent would have to be gradually increased to permit ACP-country suppliers to maintain a long-term EU market share comparable to that of 2005 (other things being equal, in particular without reflux of tariff revenues to ACP producers).

The analysis incorporates certain simplifying assumptions and the empirical results are subject to several caveats. In particular, a pertinent and complete analysis of the quota A/B rent issue does need careful modeling of all the operators involved in the banana industry and of all the aspects of the market structure, including operator strategies and expectations. These aspects have to be correctly represented and modeled to obtain consistent estimates of the rent sharing.[9] Unfortunately no data are available to perform such a modeling exercise since only country data exist. This is a particularly important point because the new licensing import scheme in the transitional tariff-rate quota regime remains, to a large extent, a system of company quotas.

Table 4 Sensitivity of the Quota A/B Rent to Policy Parameters and/or Exogenous Variables

	Quota A/B rent in 2005 (Euros per tonne)
Benchmark experiment	182.1
Sensitivity experiments:	
Experiment 1: Euro/US dollar exchange rate unchanged at 0.85	227.4
Experiment 2: (1) + increase in EU exogenous demand shifters	258.3
Experiment 3: (2) + increase in dollar-zone exogenous supply shifters	270.0

The benchmark experiment assumes that the Euro/US dollar exchange rate increases from 0.85 in 1996-98 to 1 in 2005. Experiment 1 assumes this exchange rate remains unchanged over the simulation period. Experiment 2 assumes, in addition to 1, that demand shifters (in percent) in the EU are multiplied by 2. Experiment 3 assumes, in addition to 2, that annual supply shifters (in percent) in the dollar zone are increased by 2 points.

Final Comments

From a country point of view, the transitional import regime in the EU may be viewed largely as a continuation of a managed market with two tariff-rate quotas and an import licensing system based on past trade. The choice of the 1994-96 reference period does not take into account the dynamic changes and investments that have taken place since that period by many operators. From table 5 and despite many uncertainties about data, it clearly appears that the EU and world market shares of one multinational company, Chiquita Brands International, have substantially decreased since 1992 while Dole Food Company has significantly increased its EU and world market shares. Causes of market share changes are difficult to evaluate. They may reflect variations in investment activities but may also be attributed to other factors, e.g., outbreaks of banana disease, bad weather, strikes by workers and shipping and operating disruptions. Furthermore, taking 1992 as a reference point may be somewhat misleading insofar as banana exporters from the dollar zone began to increase their shipments to the EU in the years immediately preceding the original 1993 CMOB, in anticipation of the new trade regime to come. The fact remains that the transitional tariff-rate quota regime gives Chiquita Brands International a significant advantage by allocating it a "fixed" EU market share much greater than its current share.

Table 5 World and EU Market Shares of Banana Companies

	Market shares (in percentages)							
	World				European Union			
	1992 (1)	1992 (2)	1998 (1)	1997 (2)	1992 (1)	1992 (2)	1998 (1)	1997 (2)
Chiquita	34	34	26	24-25	> 30	> 30	< 20	15-16
Dole	20	20	25	25-26	12	12	16	18-19
Del Monte	3	15	8	16	5	7-8	16	10-11
Fyffes	NA	2-3	8	6-7	NA	4-5	18	16-17
Noboa	7-8	NA	7-8	13	7-8	NA	7-8	NA

NA = not available.

Sources: (1) Ledemé, F., quoted in *FruiTrop,* October 1999. (2) Van de Kasteele A., February 1998, from various sources.

Since the original CMOB in 1993, EU producing regions have benefited from income support in the form of direct aid. The growth rate of EU territory supply was positive over the eight-year period 1993-2000, and it is likely that this favorable trend is a consequence of the income support scheme.[10] Lack of reliable data does not allow evaluation of the extent to which EU producing regions have used the income support scheme to reduce unit production costs and improve their cost competitiveness. Simulation results concluded that EU territory supply would expand during the transitional tariff-rate quota regime (table 2). EU territories would supply 797,000 tonnes in 2005, about 46,000 tonnes more than in 1996-98, at a price 33 Euros lower than the 1996-98 average. Since we assumed that the effective price (FOB price per tonne plus direct aid per tonne) considered by EU producers remained unchanged at its 1996-98 level, this implies extra compensation of 24 million Euros in 2005 relative to 1996-98. This corresponds to an extra compensation of 30 Euros per tonne of bananas.[11] On the other hand, EU producers would lose from the suppression of the category B of operators.[12]

ACP exports to the EU remained below 857,000 tonnes, the size of the traditional ACP quota, over the eight-year period 1993-2000. However, distribution of changes varied substantially among ACP countries. While Cameroon and the Ivory Coast increased their production and exports, supply from the Caribbean producing countries decreased. In the case of the Windward Islands for example, exports decreased from 280,000 tonnes in 1992 to 131,000 tonnes in 1999. This decline has had devastating effects on the banana industry in these countries, with a decrease of 26 percent in the number of active banana growers between 1992 and 1998. Since the modification of the CMOB in 1999, the traditional ACP quota has been no longer allocated among ACP countries. This is still the case in the transitional tariff-rate quota regime. Our simulation results suggest that Caribbean-country exports to the EU would continue to decline in the transitional tariff-rate regime (table 3). Welcoming the agreement reached in April 2001, both the EU and the United States recognized that they had shared objectives, notably to protect the vulnerable ACP producers. It appears that it would be very difficult to reach this objective for the Caribbean-country producers. By contrast, the transitional tariff-rate quota regime could benefit West African countries, where production costs are lower and where some multinationals (Dole and Del Monte) now run large plantations. West African countries have welcomed the new EU banana import regime. However, the quota C level could limit their future exports to the EU. Furthermore, as their historical import

rights are smaller than expected exports, licences would have to be purchased to export additional bananas.

There are no certainties that the tariff-only regime will enter into force on 1 January 2006. The setting of the appropriate tariff is likely to be a point of considerable discussion until the deadline. The banana industry in ACP countries, notably in Caribbean states, is clearly at a competitive disadvantage with respect to LA suppliers. An EU policy that combines a simple tariff on dollar banana imports with direct aid to preferred suppliers presents several advantages relative to a multiple tariff-rate quota regime with cross-subsidization of non-preferred suppliers through allocation of import licences within the preferred suppliers' quota. It reduces distortionary impacts and eliminates the quota rent problem. The acute dependence of many ACP countries upon exports of bananas to the EU means that any change of the European policy is of crucial importance to these economies. However, as noted by van de Kasteele (1998) in the case of the Windward Islands, "the need for diversification is repeatedly mentioned but given the conditions on the Islands, it is far from an easy task to find alternatives [to banana production] which guarantee reasonable income and employment levels."

Our simulation results show that many ACP producers would need some form of support in both the transitional tariff-rate quota system and the tariff-only regime to obtain viable returns. The higher the dollar-zone import tariff in the tariff-only regime, the higher the level of EU imports from ACP countries. However, the increase in EU imports from ACP countries would be more than offset by the decrease in EU imports from non-preferred-country suppliers. As a result, the higher the dollar-zone import tariff in the tariff-only regime, the higher the EU banana price and the lower total EU imports and consumption. This implies that the tariff should be set at a level sufficiently low to ensure supplying of the EU market at a reasonable price for EU consumers. This is in the interest of EU consumers and, obviously, non-preferred suppliers. EU territory producers would require extra compensation (in the form of increased direct aid) to maintain their returns. In the same way, ACP producers would need direct aid. The reflux of tariff revenues to ACP producers does pose legal problems, but they are likely not insurmountable. Part of the aid program should be targeted to modernize ACP-country banana industries. However, it is more than likely that many ACP countries would have difficulty improving significantly their cost competitiveness. This means that modernization and investment aid programs should

be complemented by long-term income support schemes to maintain returns of ACP banana producers. This income support program should be differentiated among ACP countries and producers to take into account differences in production costs and conditions.

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Endnotes

1. Support from the European Commission (EC) and the Food and Agriculture Organization (FAO) of the United Nations is gratefully acknowledged. The views expressed herein are the authors' and do not necessarily represent the views of the EC or the FAO. The authors thank Céline Lemasson and Muriel Nicolas for valuable research assistance. They thank Norbert Wilson for helpful comments.

2. We do not describe phase 1 of the transitional regime, which applied from 1 July 2001 to 1 January 2002. Relative to phase 2, main differences concerned the sizes of the tariff-rate quota B (353,000 tonnes in phase 1 and 453,000 tonnes in phase 2) and of the tariff-rate quota C (850,000 tonnes in phase 1 and 750,000 tonnes in phase 2).

3. At the Fourth Ministerial Meeting in Doha in November 2001, waivers were granted regarding obligations under GATT Article I (permitting continued tariff

preference for ACP imports) and Article XII (permitting the reservation of the quota C to ACP producers).

4. The original CMOB of 1993 defined two tariff-rate quotas. The ACP quota was reserved to ACP countries that were traditional suppliers of EU countries before 1993. The quantities that could enter the EU tariff free were fixed at 857,700 tonnes (traditional ACP bananas). The Most Favored Nation (MFN) quota covered any other imports of bananas, i.e., dollar bananas (bananas from LA countries) and non-traditional ACP bananas (any amount of ACP bananas exceeding 857,700 tonnes).
5. The model is detailed in Guyomard, Laroche and Le Mouël (1999a, 1999b). The current version of the model includes a larger number of exporting zones (decomposition of LA and ACP zones), as well as time shifters in supply and demand equations.
6. The quota C was open to all suppliers in phase 1 of the transitional tariff-rate quota regime. This is no longer the case in phase 2 where it is reserved to ACP suppliers. But even in phase 1, the quota C tariff of 300 Euros per tonne applied on non-ACP bananas would be too high to allow non-ACP banana imports within the quota C.
7. ACP-country exports to the EU would be slightly greater than the quota C level of 750,000 tonnes in 2005 (10,500 tonnes). There is no significant change in the results if ACP-country exports are constrained to be strictly equal to the quota C level.
8. The quota rent on EU banana imports from the dollar zone is calculated as follows: average CIF price in the EU, minus transportation costs between the EU import market and the dollar-export zone, minus average commercial margins, minus average FOB price in the dollar zone. It is worthwhile to remember that the EU import market clears in Euros while the ROW market clears (to a large extent) in US dollars.
9. Three multinational firms account for about 70 percent of the world import-export banana market and most national markets in the EU are dominated by a small number of firms/operators, including these three multinational firms. This suggests that the perfect competition assumption is questionable (McCorriston, 2000). However, this does not imply automatically that the world banana import-export market is not competitive. Hermann and Sexton (1999) have shown that the German banana market cannot be characterized by the exercise of market power despite the very low number of firms that compete in that market (the four-firm concentration ratio is greater than 80 percent for Germany).
10. However, it is worth noting that quantities supplied in 1991-92 (about 703,000 tonnes) were significantly higher than volumes marketed in the four first years of the CMOB (1993 to 1996).
11. In 1996-98, the unit direct aid granted to EU producers was around 260 Euros per tonne (three-year weighted average). It increased significantly in 1999 (297 Euros per tonne) and 2000 (383 Euros per tonne). This increase is essentially due to the

increase in historical reference earnings used for compensation calculation (from 592.9 Euros per tonne for the years 1993 to 1997 to 622.5 Euros per tonne in 1998 and 640.3 Euros per tonne in 1999 and 2000). Preliminary estimates suggest that the unit direct aid should be substantially lower in 2001, between 230 and 280 Euros per tonne (*FruiTrop,* March 2002), due to the banana price increase on the EU market.

12. The 1993 CMOB defined three categories of operators: operators who marketed third-country and non-traditional ACP-country bananas before 1993 (category A); operators who marketed EU or traditional ACP bananas (category B); and newcomers (category C). The MFN quota was divided among these three categories. Traditional operators dealing in EU and ACP bananas were allocated with MFN quota import licences with the clear intent that the extra profit they could earn by shipping dollar-zone bananas, most likely by selling their import licences to dollar-zone shippers, should be used to cross-subsidize their EU or ACP operations.