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A Quantitative Assessment**

Hervé GUYOMARD and Chantal LE MOUËL

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# **The New Banana Import Regime in the European Union: A Quantitative Assessment**

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## **Abstract**

The new banana import regime in the European Union (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 ACP (Africa, Caribbean and Pacific) countries, mainly the Caribbean states, would suffer from the new regulation unless they receive direct aids to make their banana production more competitive.

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

**JEL classification:** Q17, Q18, C53

## **Résumé**

Le nouveau régime d'importation de la banane dans l'Union Européenne (UE) est un processus en deux étapes vers un système de droit de douane unique qui devrait entrer en vigueur au plus tard le 1<sup>er</sup> janvier 2006. Pendant la phase de transition 2001-2005, les importations communautaires de bananes continueront d'être régies par un système de contingents tarifaires. Cet article fournit une évaluation quantitative de ce nouveau régime d'importation. L'analyse met l'accent sur l'évolution de la structure des importations communautaires entre origines préférentielles et non-préférentielles pendant la phase de transition. Puis le droit de douane équivalent qui devrait être appliqué en 2006 aux importations communautaires en provenance des origines non-préférentielles est calculé. Les résultats suggèrent que les pays ACP (Afrique, Caraïbes et Pacifique) les plus vulnérables, en particulier les Etats des Caraïbes, devraient pâtir de cette nouvelle régulation sauf dans le cas où ils recevraient les compensations, sous forme d'aides directes, leur permettant d'améliorer la compétitivité de leur production de bananes.

**Mots clé:** banane, Union Européenne, droit de douane, contingent tarifaire, Organisation Mondiale du Commerce

**Classification JEL:** Q17, Q18, C53

# **The New Banana Import Regime in the European Union: A Quantitative Assessment**

Hervé GUYOMARD and Chantal LE MOUËL

## **1. Introduction**

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 (US) 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 licenses 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 (Thagesen and Matthews, 1997; Guyomard *et al.*, 1999a; Herrmann *et al.*, 2000; FAO, 2001b; Read, 2001). But it is 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 US 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 African, Caribbean and Pacific (ACP) banana producers. Furthermore, the story is not over. The tariff-only system would 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 General Agreement on Tariffs and Trade (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 *et al.*, 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 receive direct aids to make their banana production more competitive.

## **2. 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.<sup>1</sup>

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<sup>1</sup> 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 tons in phase 1 and 453,000 tons in phase 2) and of the tariff-rate quota C (850,000 tons in phase 1 and 750,000 tons in phase 2).

## 2.1. The transitional tariff-rate quota regime

Each year from 1 January 2002, three tariff-rate quotas will be open, *i.e.*, a bound tariff-rate quota of 2,200,000 tons net weight (quota A), an autonomous tariff-rate quota of 453,000 tons net weight (quota B) and an additional tariff-rate quota of 750,000 tons 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 ton with a tariff preference of 75 Euros per ton 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.<sup>2</sup>

The import license system will still be managed on the basis of historical references. For the quota A/B, 83 percent of licenses will be allocated to traditional operators and 17 percent to non-traditional operators. For the quota C, 89 percent of licenses 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 tons) 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.<sup>3</sup> 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,

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<sup>2</sup> 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).

<sup>3</sup> The original CMOB of 1993 defined two tariff-rate quotas. The ACP quota was reserved to ACP countries which were traditional suppliers of EU countries before 1993. The quantities which could enter the EU tariff-free were fixed at 857,700 tons (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 tons).

import licenses are allocated on the basis of historical references. For a traditional operator A/B for example, licenses 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 licenses will be allocated based on usage of licenses issued since 1 January 2002.

## **2.2. 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)

## **3. 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.<sup>4</sup>

### **3.1. 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 it 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)

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<sup>4</sup> The model is detailed in Guyomard *et al.* (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.



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 fifteen 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).

### 3.2. Simulation results

Analysis with the model shows that both the quota A/B of 2.653 million tons and the quota C of 750,000 tons would be constraining in 2005. It also shows that the tariff preference of 75 Euros per ton 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.<sup>5</sup>

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 tons). This represents an increase of 239,400 tons (9.9 percent) with respect to 1996-98 (2.414 million tons). The fill rate of the quota C would be 100 percent. EU imports from ACP countries would be equal to 760,523 tons, an increase of 59,052 tons (8.4 percent) with respect to 1996-98 (701,471 tons).<sup>6</sup> Supplies of EU territories would be equal to 797,090 tons, an increase of 6.2 percent relative to 1996-98 (750,671 tons). ACP country exports to the EU would represent 18.1 percent of EU consumption in

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<sup>5</sup> 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 ton applied on non-ACP bananas would be too high to allow non-ACP banana imports within the quota C.

<sup>6</sup> ACP country exports to the EU would be slightly greater than the quota C level of 750,000 tons in 2005 (10,500 tons). There is no significant change in the results if ACP country exports are constrained to be strictly equal to the quota C level.

2005, the same share than 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 tons to 4.210 million tons) would mainly benefit non-preferred country suppliers. Their exports would increase by 125,000 tons over the five-year period 2000-2005.

(Table 2)

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 tons in 1996-98 to 205,466 tons in 2005) and 17.0 percent (from 146,490 tons in 1996-98 to 171,374 tons in 2005), respectively. By contrast, exports from the Windward Islands and Jamaica to the EU would decrease by 5.7 percent (from 230,953 tons in 1996-98 to 217,802 tons in 2005). Table 3 also shows distribution of world export changes among LA countries. Ecuador would export 4.841 million tons in 2005, *i.e.*, about 793,000 tons (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 tons as well as an increased demand in ROW markets, in particular in the US. Exports from other Central American (CA) countries would increase by about 7.6 percent for Costa Rica and Guatemala, and 12 percent for Panama and Honduras (with respect to 1996-98).

(Table 3)

#### **4. 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 ton, 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 20 US Dollars per ton, from 292 US Dollars in 1996-98 to 272 US Dollars in 2005. As a result, the quota rent on EU banana imports from the dollar zone would decrease by about 57 Euros per ton, from 239 Euros in 1996-98 to 182 Euros in 2005.<sup>7</sup>

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<sup>7</sup> 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.

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 which results 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 ton 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 = 1 US Dollar) to a parity of 1 in 2005 (1 Euro = 1 US Dollar). 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 ton and the quota rent decrease would thus be limited to about 12 Euros per ton 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 ton 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 are increased by 2 points in dollar zone countries, the quota rent would increase by about 12 Euros per ton, other things being equal).

According to Table 4, a tariff of about 182 Euros per ton 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 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 weakens vis-à-vis the US Dollar, if productivity gains are larger in dollar zone countries and if demand shifters are 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.<sup>8</sup> 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)

## **5. Final comments**

From a country point a view, the transitional import regime in the EU may largely be viewed 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

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<sup>8</sup> 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 (McCorrison, 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).

Chiquita Brands International a significant advantage by allocating it a “fixed” EU market share much greater than its current share.

(Table 5)

Since the original CMOB in 1993, EU producing regions have benefited from income support in the form of direct aids. 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.<sup>9</sup> Lack of reliable data does not allow evaluation of the extent EU producing regions have used the income support scheme to reduce unit production costs and improve their cost competitiveness. Simulation results conclude that EU territory supply would expand during the transitional tariff-rate quota regime (Table 2). EU territories would supply 729,000 tons in 2005, about 46,000 tons 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 ton plus direct aid per ton) 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 ton of bananas.<sup>10</sup> On the other hand, EU producers would lose from the suppression of the category B of operators.<sup>11</sup>

ACP exports to the EU remained below 857,000 tons, 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 tons in 1992 to 131,000 tons in 1999. This decline has had devastating effects on the banana

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<sup>9</sup> However, it is worth noting that quantities supplied in 1991-92 (about 703,000 tons) were significantly higher than volumes marketed in the four first years of the CMOB (1993 to 1996).

<sup>10</sup> In 1996-98, the unit direct aid granted to EU producers was around 260 Euros per ton (three-year weighted average). It increased significantly in 1999 (297 Euros per ton) and 2000 (383 Euros per ton). This increase is essentially due to the increase in historical reference earnings used for compensation calculation (from 592.9 Euros per ton for the years 1993 to 1997 to 622.5 Euros per ton in 1998 and 640.3 Euros per ton in 1999 and 2000). Preliminary estimates suggest that the unit direct aid should be substantially lower in 2001, between 230 and 280 Euros per ton (FruiTrop, March 2002), due to banana price increase on the EU market.

<sup>11</sup> The 1993 CMOB defined three categories of operators, *i.e.*, 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 MNF quota was divided between these three categories. Traditional operators of EU and ACP bananas were allocated with MNF quota import licenses with the clear intent that the extra profit they could earn by shipping dollar zone bananas, more likely by selling their import licenses to dollar zone shippers, should be used to cross-subsidize their EU or ACP operations.

industry in these countries with a decrease in the number of active banana growers by 26 percent between 1992 and 1998. Since the modification of the CMOB in 1999, the traditional ACP quota was no longer allocated between 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 agreement reached in April 2001, both the EU and the US 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 import banana 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, licenses 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 licenses within the preferred suppliers' quota. It reduces distortionary impacts and eliminates the quota rent problem. The acute dependence of many ACP countries upon the 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 Kastele (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 will 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 EU imports from ACP countries. However, the increase in EU imports from

ACP countries will 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 difficulties to improve 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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Table 1: The new banana trade regime in the European Union

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*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 tons net weight
- An autonomous TRQ B of 453,000 tons net weight
- An additional TRQ C of 750,000 tons 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 licenses to traditional operators and 17 percent to non-traditional operators
- Quota C: 89 percent of licenses to traditional operators and 11 percent to non-traditional operators

Tariffs:

- Quota A/B: 75 Euros per ton for non-ACP countries and 0 for ACP countries
- Quota C: 0 for ACP countries
- Over-quotas: 680 Euros per ton for non-ACP countries and 380 Euros per ton for ACP countries (tariff preference of 300 Euros per ton for ACP countries)

*Tariff-only system (from 1 January 2006)*

Tariff rate still to be negotiated

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WTO, WT/DS27/58, 2 July 2001 (WTO, 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.

Table 2: The structure of the European Union banana import market in 2005  
(quantities in tons)

	1996-98 <sup>1</sup>	1999 <sup>2</sup>	2000 <sup>3</sup>	2005 <sup>4</sup>
EU territories	750,671 [19.4]	730,000 [18.6]	782,176 [19.2]	797,090 [18.9]
ACP countries <sup>5</sup>	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]

<sup>1</sup> Base period data.

<sup>2</sup> Source: ODEADOM (2001) and FAO (2001a).

<sup>3</sup> Source: FruiTrop, October 2001.

<sup>4</sup> Simulation results.

<sup>5</sup> In 2005, ACP country exports to the EU are slightly greater than the quota C level of 750,000 tons (10,500 tons). 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: World banana exports of ACP and LA countries in 2005 (quantities in tons)

	1996-98 <sup>1</sup>	2005 <sup>2</sup>
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

<sup>1</sup> Base period data.

<sup>2</sup> Simulation results.

Table 4: Sensitivity of the quota A/B rent to policy parameters and/or exogenous variables

	Quota A/B rent in 2005 (Euros per ton)
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 autonomous 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 1996-96 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.

Table 5: World and EU market shares of banana companies

	Market shares (in percent)							
	World				European Union			
	1992 <sup>1</sup>	1992 <sup>2</sup>	1998 <sup>1</sup>	1997 <sup>2</sup>	1992 <sup>1</sup>	1992 <sup>2</sup>	1998 <sup>1</sup>	1997 <sup>2</sup>
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

<sup>1</sup> Ledemé F. quoted in FruiTrop, October 1999.

<sup>2</sup> Van de Kastele A., February 1998, from various sources.

Na: Not available.

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